



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that **Unmesh Shivajirao Patil**, Associate Professor of **P V P Institute of Technology Budhgaon Sangli** participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Innovation Management**" from **06/09/2021** to **10/09/2021** at **Dr. Babasaheb Ambedkar Technological University Lonere Mangaon Raigad**.

Advisor-I, ATAL Academy
Mamta Rani Agarwal



Coordinator



BHARATI VIDYAPEETH

COLLEGE OF ENGINEERING, NAVI MUMBAI

(Permanently affiliated to Mumbai University, Approved by AICTE, New Delhi and NBA Accredited)
Sector-7, CBD, Belapur, Near Kharghar Railway Station, Navi Mumbai-400614. www.bvcoenm.edu.in



DEPARTMENT OF CHEMICAL ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that

Unmesh Shivajirao Patil

has participated in online webinar on “*Design of Shell And Tube Heat Exchanger*”

on May 31st 2020 organized by

Department of Chemical Engineering.

CERTIFICATE ID:ISTA0W-CE000314

Dr. Manisha V. Bagal
(Program Co-ordinator)

Prof. M.B. Mandake
(Co-ordinator)

Dr. S.P. Shingare
(Head, Chemical Department)

Dr. Sandhya Jadhav
(Principal)



BHARATI VIDYAPEETH

COLLEGE OF ENGINEERING, NAVI MUMBAI

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Sector-7, CBD, Belapur, Near Kharghar Railway Station, Navi Mumbai-400614. www.bvcoenm.edu.in



DEPARTMENT OF CHEMICAL ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that

Unmesh Shivajirao Patil

has participated in online webinar on “*Zero Liquid Discharge System - A Paradigm Shift in Waste Management*” on 29th May 2020
organized by *Department of Chemical Engineering*.

CERTIFICATE ID:ISTA0W-CE000165

Dr. Manisha V. Bagal
(Program Co-ordinator)

Prof. M.B. Mandake
(Co-ordinator)

Dr. S.P. Shingare
(Head, Chemical Department)

Dr. Sandhya Jadhav
(Principal)



Sethu Institute of Technology

(An Autonomous Institution | Accredited with 'A' Grade by NAAC)
(Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)
Pulloor, Kariapatti - 626 115, Virudhunagar District. Ph: 04566- 308001.



This certificate is awarded to

Ummesh Shivajirao Patil

*for the active participation in the webinar titled, "Thermo-Chemical Conversion of Plastics"
organised by the Department of Chemical Engineering on 13th June, 2020.*

Thank you for your dedication and heartfelt appreciation

Head of the Department

Principal



Dr. V.P.S.S.M. S

Padmabhooshan Vasanttraodada Patil Institute of Technology Budhgaon Dist-Sangli
(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)



Department of Chemical Engineering
(NBA accredited)

Technical Education Quality Improvement Programme

TEQIP-3

One Week Workshop - 16th – 20th March, 2021

MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS

CERTIFICATE

This is to certify that **Dr Sanjay Laxman Bhagat** of **PVPIT, Budhgaon** has participated and successfully completed the one-week workshop on “**MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS**” organized by Chemical Engineering Department of Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon, Sangli, Maharashtra.

Prof. U. S. Patil

Head, Chemical Engineering department,
P.V.P.I.T., Budhgaon

Dr. D. V. Ghewade

Principal
P.V.P.I.T., Budhgaon

Dr. S. B. Deosarkar

Coordinator, TEQIP-III
Dr. B.A.T.U., Lonere

No:ATAL/2020/1606484717



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Sanjay Laxman Bhagat, Associate Professor** of **Padmabhooshan Vasantrao Patil Institute of Technol** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator

No:ATAL/2021/1611825411



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Sanjay Laxman Bhagat, Associate Professor** of **Padmabhooshan Vasantrao Patil Institute of Technol** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Modern Pedagogical Techniques for Effective Teaching & Learning**" from **2021-2-8** to **2021-2-12** at **NRI Institute Of Technology**.

Director ATAL Academies



Coordinator

Shanti Education Society's

A. G. Patil Polytechnic Institute, Solapur

Opp. SRP Camp, Vijapur road, Solapur-413 008 (Maharashtra)

(All Programs NBA Accredited)



Certificate of Completion

This is to certify that

Mr. Prashant Dhanke

(PVPIT Sangli)

has successfully completed one week online STTP on "Teaching Learning Pedagogies"

Approved & Funded by **All India Council for Technical Education, New Delhi**

- **Quality Improvement Scheme (AQIS)**, conducted by

Department of Mechanical Engineering from 7th Sept to 12th Sept 2020.

AICTE Approval No.34-65/12/RIFD/STTP/Policy-1/2018-19 dated 01 June 2020

Mr. S. K. Mohite
Coordinator-STTP

Mr. J. M. Jaketia
Vice Principal

Dr. M. A. Chougule
Principal

No:ATAL/2020/1605168910



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Prashant Dhanke**, Assistant Professor of **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "**Modern Pedagogical Techniques for Effective Teaching & Learning**" from **2021-2-8** to **2021-2-12** at **NRI Institute Of Technology**.

Director ATAL Academies



Coordinator

No:ATAL/2020/1605168816



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Prashant Dhanke**, Assistant Professor of **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



LAXMINARAYAN INSTITUTE OF TECHNOLOGY

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Two week Online AICTE sponsored

Faculty Development Programme on Catalysis and Reaction Engineering


(22nd February - 06th March 2021)


CERTIFICATE OF PARTICIPATION

This is to certify that,

Prashant B. Dhanke

has participated in two-week online AICTE sponsored Faculty Development Programme on Catalysis and Reaction Engineering during 22nd February - 06th March 2021 at Laxminarayan Institute of Technology, Nagpur.


Dr. R. B. Mankar
Director


Dr. Girish M. Deshmukh
Co-ordinator



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Vivek Sadashiv Kore** from **Padmabhooshan Vasantryadada Patil Institute of Technology, Sangli** has participated and successfully completed the **5-day online FDP** on the theme **“Inculcating Universal Human Values in Technical Education”** organized by **All India Council for Technical Education(AICTE)** from **8 February, 2021 to 12 February, 2021.**

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

Sponsored by AICTE, New Delhi & TEQIP III

CERTIFICATE

This is to certify that **Vivek Sadashiv Kore** of **Padmabhooshan Vasatraodada Patil Institute of Technology, Budhgaon, Sangli**

has attended One Week National Level Workshop on "Digital Transformation & Pedagogies" organized during August 10-14, 2020, by Government College of Engineering, Karad & Walchand College of Engineering, Sangli, Sponsored by AICTE, New Delhi & TEQIP III



TEQIP III

Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
Principal, GCE

Shanti Education Society's

A. G. Patil Polytechnic Institute, Solapur

Opp. SRP Camp, Vijapur road, Solapur-413 008 (Maharashtra)

(All Programs NBA Accredited)



Certificate of Completion

This is to certify that

Mr. KORE VIVEK SADASHIV

(Padmabhooshan Vasanttraodada Patil Institute of Technology,
Sangli)

has successfully completed one week online STTP on "Teaching Learning Pedagogies"

Approved & Funded by **All India Council for Technical Education, New Delhi**

- **Quality Improvement Scheme (AQIS)**, conducted by

Department of Mechanical Engineering from 7th Sept to 12th Sept 2020.

AICTE Approval No.34-65/12/RIFD/STTP/Policy-1/2018-19 dated 01 June 2020

Mr. S. K. Mohite
Coordinator-STTP

Mr. J. M. Jaketia
Vice Principal

Dr. M. A. Chougule
Principal

No:ATAL/2020/1606307603



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Vivek Sadashiv Kore, Assistant Professor** of **Padmabhooshan Vasantraodada Patil Institute of Technology** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology Budhgaon Dist-Sangli
(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)



Department of Chemical Engineering
(NBA accredited)

Technical Education Quality Improvement Programme

TEQIP-3

One Week Workshop - 16th – 20th March, 2021

MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS

CERTIFICATE

This is to certify that **Mr Vivek Sadashiv Kore** of **PVPIT, Budhgaon** has participated and successfully completed the one-week workshop on “**MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS**” organized by Chemical Engineering Department of Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon, Sangli, Maharashtra.

Prof. U. S. Patil

Head, Chemical Engineering department,
P.V.P.I.T., Budhgaon

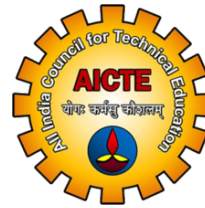
Dr. D. V. Ghewade

Principal
P.V.P.I.T., Budhgaon

Dr. S. B. Deosarkar

Coordinator, TEQIP-III
Dr. B.A.T.U., Lonere

No:ATAL/2021/1611797082



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Abhijeet Patil, Assistant Professor** of **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "**Modern Pedagogical Techniques for Effective Teaching & Learning**" from **2021-2-8** to **2021-2-12** at **NRI Institute Of Technology**.

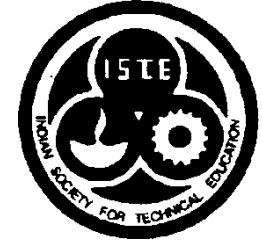
Director ATAL Academies



Coordinator



Certificate



This is to certify that **PROF ABHIJEET D PATIL** has successfully completed the AICTE-ISTE approved Orientation/Refresher Programme on “**Computer Aided Software for Process Intensification**” held during **22.02.2021** to **27.02.2021** organized by **Gharda Institute of Technology, Lavel, Khed, Maharashtra.**

Director (FDC)
AICTE, ND

Executive Secretary
ISTE, ND

Program Coordinator
GIT, Khed

Principal
GIT, Khed

No:ATAL/2020/1605171397



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Abhijeet Patil, Assistant Professor** of **Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasanttraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that Prof. Pallavi Chandrakant Kale from PVPIT Budhgaon, Sangli has participated and successfully completed the 5-day online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education(AICTE) from 8 February, 2021 to 12 February, 2021.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



Dr. V.P.S.S.M. S

Padmabhooshan Vasanttraodada Patil Institute of Technology Budhgaon Dist-Sangli
(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)



Department of Chemical Engineering
(NBA accredited)

Technical Education Quality Improvement Programme

TEQIP-3

One Week Workshop - 16th – 20th March, 2021

MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS

CERTIFICATE

This is to certify that Miss Pallavi Chandrakant Kale of PVPIT, Budhgaon has participated and successfully completed the one-week workshop on “MODELING AND SIMULATION OF HEAT TRANSFER EQUIPMENTS USING ASPEN PLUS” organized by Chemical Engineering Department of Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon, Sangli, Maharashtra.

Prof. U. S. Patil

Head, Chemical Engineering department,
P.V.P.I.T., Budhgaon

Dr. D. V. Ghewade

Principal
P.V.P.I.T., Budhgaon

Dr. S. B. Deosarkar

Coordinator, TEQIP-III
Dr. B.A.T.U., Lonere



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanthaodada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.

Certificate

This is to certify that,

Pallavi Chandrakant Kale

has attended a National Webinar On

"Teachers' Role in NEP -2020 Implementation"

Organized in association with

Bharatiy Shikshan Mandal

And

NITI Aayog

Held on 19th June 2021



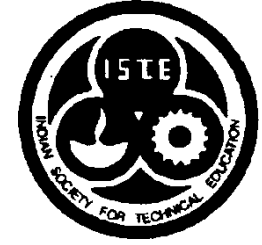
Mr. P.T. Patil
IQAC Coordinator

Dr. D.V. Ghewade
Principal

Hon. Mr. Amit V. Patil
Trustee, Dr.V.P.S.S.M.'s



Certificate



This is to certify that **PALLAVI CHANDRAKANT KALE** has successfully completed the AICTE-ISTE approved Orientation/Refresher Programme on “**Computer Aided Software for Process Intensification**” held during **22.02.2021** to **27.02.2021** organized by **Gharda Institute of Technology, Lavel, Khed, Maharashtra.**

Director (FDC)
AICTE, ND

Executive Secretary
ISTE, ND

Program Coordinator
GIT, Khed

Principal
GIT, Khed



THIS CERTIFICATE IS AWARDED TO
Asst. Prof. Pallavi Kale
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021





Dr. V.P.S.S.M.'s
Padmabhooshan Vasantryadada Patil Institute of Technology,
Budhgaon Dist-Sangli

Three Days Online Workshop on

"UNIVERSAL HUMAN VALUES (UHV)"

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Vijaykumar Govind Sawant

PVPIT, Budhgaon, Sangli

has successfully participated in the Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)" during 26th - 28th October, 2020 organized by First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that
Vijaykumar Govind Sawant

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the One Week Online Faculty Development Program (FDP) on the theme "*Communication Skills in English for Teacher (Train the Trainer)*" during 14th-19th September, 2020 organized by First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.
One Week Online Faculty Development Program



On
"Role of Civil Engineering in mitigating Post Covid-19 Challenges"
Organized by

Civil Engineering Department
Sponsored By

The Institution of Engineers (India) Kolhapur Local Centre

Certificate

This is to certify that,

VIJAYKUMAR GOVIND SAWANT

Has successfully attended One Week Online Faculty Development Program on, "Role of Civil Engineering in mitigating Post Covid-19 Challenges", from 20th July to 24th July 2020.

Prof. N.P. Phadtare

Prof. V.T. Gaikwad
Head Civil Engg. Dept.

Dr. D.V. Ghewade
Principal

Hon. Mr. Amit V. Patil
Trustee, Dr. V.P.S.S.M.'s

Certificate No.: PVP201
Verify: shorturl.at/efuP8

CVVWGE-CE000257

**Sandip Foundation's
Sandip Polytechnic, Nashik.**

Approved by AICTE Affiliated to MSBTE

Tel. No 0253-222571 Trimbak Road, P.O.: Mahiravani, Tal & Dist: Nashik.-422213

Email: principal@sandippolytechnic.org Website: sandipfoundation.org



e Certificate of Participation

This is to certify that Mr./Ms. Vijaykumar Govind Sawant has participated in the online one week certificate course on "Design of RCC Structure" organized by Department of Civil Engineering, Sandip Polytechnic, Nashik in association with Indian Society of Structural Engineers, Mumbai from 7th July to 12th July 2020.

Mr. Shantilal Jain
President- ISSE

Prof. Prashant N. Patil
Principal

Prof. Vilas N. Nikam
HOD-CE

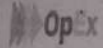


7/13/2020

* This is computerized generated certificate; No signature required.



Co Organizer



Startup Incubation & Support by Government of India | StartupIndia

Powered By



Certificate OF PARTICIPATION

PRESENTED TO

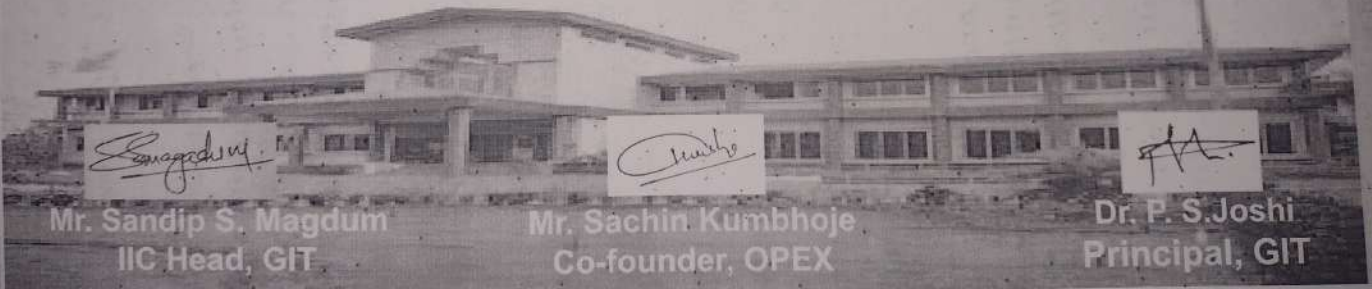
Vijaykumar Govind Sawant

of PVPIT BUDHGAON SANGLI MAHARASHTRA PIN 416416

for attending 5 days Mentor Connect Program on

" Building StartUps from Scratch"

held during 26-30 June 2020.



Sandip S. Magdum

Mr. Sandip S. Magdum
IIC Head, GIT

Sachin Kumbhoje

Mr. Sachin Kumbhoje
Co-founder, OPEX

P. S. Joshi

Dr. P. S. Joshi
Principal, GIT

TEQIP-3



**Veermata Jijabai Technological Institute (VJTI), Mumbai
and
Engineering College Ajmer, Rajasthan**



This is to certify that

Vijaykumar Govind Sawant

has participated and successfully completed TEQIP-III Sponsored One week Online FDP on "Recent Advances in Civil Engineering" organized by **Civil & Environmental Engineering Department, VJTI Mumbai** under twinning activity with **Civil Engineering Department, Engineering College Ajmer, Rajasthan** during June 02nd to 07th 2020.

Mr. Dhruv Saxena
FDP Co-ordinator,
Civil Engg. Deptt.,
Engg. College Ajmer,
Rajasthan

Dr. Vikas B. Varekar
FDP Co-ordinator,
Civil & Env. Engg. Deptt.,
VJTI, Mumbai

Dr. Ganpat Singh
HOD,
Civil Engg. Deptt.,
Engg. College Ajmer, Rajasthan

Dr. Sumedh Y. Mhaske
HOD,
Civil & Env. Engg. Deptt.,
VJTI, Mumbai

Dr. H. S. Mewara
TEQIP Co-ordinator,
Engg. College Ajmer, Rajasthan

Dr. R. N. Awale
TEQIP Co-ordinator,
VJTI, Mumbai

This is an electronically generated Certificate and doesn't require signatures.

GBDRQG-CE000

DON BOSCO COLLEGE OF ENGINEERING

FATORDA - GOA



Department of Civil Engineering

In association with Spoken Tutorial Project, IITB



organized

One week online Faculty Development Program
on

Quantum Geographic Information System (QGIS)

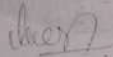
Certificate

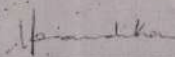
This is to certify that Mr. Vijaykumar Govind Sawant
from Padmabhooshan Vasanturadada Patil Institute of technology Budhgaon Sangli

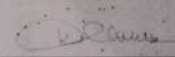
has participated in One week online Faculty Development Program
on Quantum Geographic Information System (QGIS)

in association with Spoken Tutorial Project,

Indian Institute of Technology, Bombay funded by National Mission on Education through ICT, MHRD,
Government of India from 1st June 2020 to 5th June 2020.


Dr. Shwetha Prasanna
Convener & HOD (Civil Dept.)


Dr. Neena S Panandikar
(Principal)


Rev. Fr. Kinley D'Cruz
(Director)



DR. D. Y. PATIL PRATISHTHAN'S
D. Y. PATIL COLLEGE OF ENGINEERING,
AKURDI, PUNE- 411044



Certificate of Participation

This is to certify that **Mr. Vijaykumar Govind Sawant** has Participated in Edu-CM 4.0-Three Days E-Expert talk series on "Construction Management Aspects" Organized by Department of Civil Engineering, D. Y. Patil College of Engineering, Akurdi, Pune in association with Savitribai Phule Pune University (SPPU) from 29th May 2020 to 31st May 2020.

Dr. Ashok B. More
Convener & HoD

Dr. Mrs. P. Malathi
Vice Principal

Dr. Vijay M. Wadhai
Principal

Dr. Shreenivas Londhe
BOS Chairman, Civil,
SPPU

Dr. Manohar Chaskar
Dean, Faculty of science,
SPPU

**Sinhgad Technical Education Society's
Sinhgad Academy of Engineering, Kondhwa (Bk), Pune.
Department of Civil Engineering**



CERTIFICATE OF PARTICIPATION
This is to certify that

Vijaykumar Govind Sawant

who has participated in webinar (Online expert talk) on "How to build your career in current state of civil industry" dated 26th to 30th May, 2020 organised by Department of Civil Engineering, Sinhgad Academy of Engineering, Kondhwa (Bk), Pune

Mr. Shivmurti B. K.
Co-ordinator

Mr. R. B. Bajare
HOD, Civil Dept, SAE

Dr. K. M. Gaikwad
Vice Principal, SAE

Dr. K. P. Patil
Principal, SAE



Padmabhooshan V. Antraodada Patil Institute of Technology,
Budhgaon (Sangli)
A/P: Budhgaon, Tal: Miraj, Dist: Sangli, 416304



Department Of Civil Engineering

“Post-Covid Challenges in Civil Engineering Industry”

Certificate of Appreciation

This is certify that *Vijaykumar Govind Sawant* has successfully completed webinar series on “Post-Covid challenges in Civil Engineering Industry” organized by department of Civil Engineering during

25th -29th May 2020.

Coordinator

Prof.M.V.Nagendra

HOD

Prof.V.T.Gaikwad

Principal

Dr.D.V.Ghewade

Trustee

Hon.Shri.Amitdada V.Patil



Government College of Engineering, Karad
(An Autonomous Institute of Government of Maharashtra)
Vidyanagar Karad Dist.-Satara Maharashtra, PIN- 415 124.
Website: www.gcekarad.ac.in Email: principal@gcekarad.ac.in



AICTE-MARGDARSHAN SCHEME

CERTIFICATE

This is to certify that Mr./ Ms. / Dr. *Vijaykumar Govind Sawant* of *PVPIT BUDHGAON SANGLI* has attended one week online Faculty Development Program on "**OUTCOME BASED EDUCATION: A STEP TOWARDS EXCELLENCE**" from 11-15 May 2020 under Margdarshan Scheme of AICTE, New Delhi.



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Mr. K. K. Mate
Coordinator,
PCCOER, Pune

Dr. S. S. Mulik
Coordinator,
RMDSSOE, Pune.

Dr. U. V. Patil
Coordinator,
GCE, Karad.

Dr. S. P. Deshmukh
Convener,
GCE, Karad.

Dr. P.M. Joshi
Convener,
GCE, Karad.

Dr. A. T. Pise
Principal,
GCE, Karad.

Your Certificate No is:OBEGCEK-03187



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Pune Centre
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CERTIFICATE OF PARTICIPATION

This is to certify that **Vijaykumar Govind Sawant** has successfully completed One Week Webinar Series on "Metro Rail Technology-Practices & Issues" during 11-15, May 2020 organized by Department of Civil Engineering, Rajarambapu Institute of Technology, Rajaramnagar (RIT), Islampur, Dist. Sangli (MS, India) in association with The Institution of Engineers(I), Kolhapur Local Centre, Indian Concrete Institute, Pune Local Centre and Dalmia Cement Bharat Limited.

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Er. Vipin Kaila
State Head, Tech. Services,
Dalmia Cement Bharat Ltd.

Dr. Mahesh Chougule
Chairman, IEI, Kolhapur

Er. Ujwal Kunte
Chairman, ICI, Pune Centre

Dr. Popat Kumbhar
Assoc. Prof. & Head,
Dept of Civil Engg RIT

Dr. Mrs. Sushma Kulka
Convener of Webinar Series
Professor & Director, RIT

Dr. V.P.S.S.M.'s
Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE

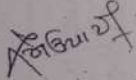


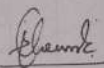
Spoken Tutorial

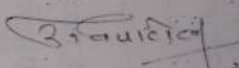
This is proudly awarded to

VIJAYKUMAR SAWANT

for successful completion of One Week Online Faculty Development Program on
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(Budhgaon) in Association with IIT-Bombay Spoken Tutorial project.


Prof. Sneha A. Patil
Chief Cordinator


Dr. D. V. GHEWADE
Principal


HON. Mr. AMIT V. PATIL
Trustee, Dr.V.P.S.S.M



PCE
Pimpri Chinchwad College Of Engineering & Research
Department Of Computer Engineering
In association with Spoken Tutorial Project, IIT Bombay



Certificate Of Participation

This certificate is proudly awarded to

VIJAYKUMAR SAWANT

for attending One Week Online Faculty
Development Program on Python 3.4.3.
Conducted from 20th to 25th April, 2020

Prof. Mahendra Salunke
FDP Co-ordinator

Prof. Shweta A. Koparde
FDP Co-ordinator

Prof. Vaishali P. Latke
FDP Co-ordinator

Dr. Archana Chaugule
H.O.D.
Dept. Of Computer Engg.

Dr. Harish Tiwa
Principal
PCCOER





Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute of Technology,
Budhgaon Dist-Sangli

Three Days Online Workshop on

"UNIVERSAL HUMAN VALUES (UHV)"

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Ms. Sadhana Madhukar Patil

P.V.P.I.T. budhgaon, sangli

has successfully participated in the Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)" during 26th - 28th October, 2020 organized by First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that
Ms.Sadhana M.Patil

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the One Week Online Faculty Development Program (FDP) on the theme "Communication Skills in English for Teacher" (Train the Trainer) during 14th-19th September, 2020 organized by First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY
Budhgaon, Tal-Miraj, Dist-Sangli, Pin-416304, Maharashtra, India



Department of Civil Engineering
CERTIFICATE

This is to certify that *Ms.S.M.Patil* has worked under organizing committee for the "Two Weeks Online Internship-Field Training Program" jointly organized by Department of Civil Engineering P.V.P.I.T., Budhgaon, CREDAI Sangli, CREDAI Pune, Engineers & Architects Association Sangli & Builders Association of India(BAI) held on 29th Jun to 13th July, 2020.

Prof.V.T.Gaikwad
HOD Civil Engg Dept.

Dr.D.V.Ghevade
Principal, PVPIT Budhgaon

Hon.Shri.Amitdada Patil
Trustee, VPSSM Sangli





K. E. Society's

**Rajarambapu Institute of Technology, Rajaramnagar
Islampur, Tal. Walwa, Dist. Sangli, Maharashtra**

(An Autonomous Institute)



CERTIFICATE

This is to certify that Ms.Sadhana Madhukar Patil has successfully attended three days Webinar from 28th to 30th, May 2020 on

"DEVELOPMENT, EXECUTION AND MAINTENANCE OF EPC PROJECT"

Organized by

Department of Civil Engineering

Rajarambapu Institute of Technology, Rajaramnagar

In association with

Dhruv Consultancy Services Ltd., Navi Mumbai.

Mr. Milind Kulkarni,
Joint Managing Director
Dhruv Consultancy Services Ltd.

Prof. Dhananjay Patil
Dept of Civil Engg.

Dr. P. D. Kumbhar
Head, Dept of Civil Engg.

Dr. Mrs. S. S. Kulkarni
Director, RIT



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.
One Week Online Faculty Development Program



डॉ. वसंतदादा पाटील

On
"Role of Civil Engineering in mitigating Post Covid-19 Challenges"

Organized by

Civil Engineering Department

Sponsored By

The Institution of Engineers (India) Kolhapur Local Centre

Certificate

This is to certify that,

MS.SADHANA MADHUKAR PATIL

Has successfully attended One Week Online Faculty Development Program on, "Role of Civil Engineering in mitigating Post Covid-19 Challenges", from 20th July to 24th July 2020.

Prof. N.P. Phadtare

Prof. V.T. Gaikwad
Head Civil Engg. Dept.

Dr. D.V. Ghewade
Principal

Hon. Mr. Amit V. Patil
Trustee, Dr.V.P.S.S.M.'s

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To Verify: shocturl.at/efuPB



Vasantraodada Patil Institute of Technology,
Budhgaon (Sangli)
A/P: Budhgaon, Tal: Miraj, Dist: Sangli, 416304



Department Of Civil Engineering

“Post-Covid Challenges in Civil Engineering Industry” Certificate of Appreciation

*This is certify that Ms.Sadhana Madhukar Patil has successfully completed webinar series on
“Post-Covid challenges in Civil Engineering Industry” organized by department of Civil Engineering
during*

Nag

Gaikwad

25th -29th

Ghewade

Patil

| | | | |
|--|--------------------------------|------------------------------------|-------------------------------------|
| Coordinator Prof.M.V.Nagendra V.Patil | HOD Prof.V.T.Gaikwad | Principal Dr.D.V.Ghewade | Trustee Hon.Shri.Amitdada |
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This is to certify that **Ms.Sadhana Madhukar Patil** has successfully completed One Week Webinar Series on "Metro Rail Technology-Practices & Issues" during 11-15, May 2020 organized by Department of Civil Engineering, Rajarambapu Institute of Technology, Rajaramnagar (RIT), Islampur, Dist. Sangli (MS, India) in association with The Institution of Engineers(I), Kolhapur Local Centre, Indian Concrete Institute, Pune Local Centre and Dalmia Cement Bharat Limited.

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Er. Vipin Kaila
State Head, Tech. Services,
Maharashtra & Goa

Dr. Mahesh Chougule
Chairman, IEI, Kolhapur

Er. Ujwal Kunte
Chairman, ICI, Pune Centre

Dr. Popat Kumbhar
Assoc. Prof. & Head,
Dept of Civil Engg RIT

Dr. Mrs. Sushma Kulkarni
Convener of Webinar Series
Professor & Director, RIT

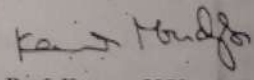


Certificate for Completion of LaTeX Training

This is to certify that **SADHANA PATIL** has successfully completed LaTeX test organized at **Padmabhooshan Vasanthaodada Patil Institute of Technology, Budhgaon** by **Sandesh Awati** with course material provided by the Spoken Tutorial Project, IIT Bombay.

Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training. **SNEHA ARUN PATIL** at **Padmabhooshan Vasanthaodada Patil Institute of Technology, Budhgaon** invigilated this examination. This training is offered by the **Spoken Tutorial Project, IIT Bombay**, funded by **National Mission on Education through ICT, MHRD, Govt., of India**.

May 2nd 2020


Prof. Kannan M Moudgalya
IIT Bombay



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE



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Prof. Sneha A. Patil
Chief Cordinator

Dr. D. V. GHEWADE
Principal

HON. Mr. AMIT V. PATIL
Trustee, Dr.V.P.S.S.M



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantrodada Patil Institute of Technology,
Budhgaon Dist-Sangli
Three Days Online Workshop on
"UNIVERSAL HUMAN VALUES (UHV)"
Organised by
First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that
Abhijit Krushndev Salunkhe
P.V.P.I.T. Budhgaon, Sangli

has successfully participated in the Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)" during 26th - 28th October, 2020 organized by First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD. F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)

Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”


Sponsored by AICTE, New Delhi & TEQIP III


CERTIFICATE


This is to certify that Abhijit Krushndev Salunkhe of P.V.P.I.T. Budhgaon, Sangli has attended One Week National Level Workshop on "Digital Transformation & Pedagogies" organized during August 10-14, 2020, by Government College of Engineering, Karad & Walchand College of Engineering, Sangli, Sponsored by AICTE, New Delhi & TEQIP III

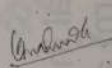


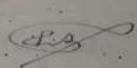
TEQIP III


Dr. S. P. Deshmukh
Convener, GCE


Dr. B. S. Gawali
Convener, WCE


Dr. K. H. Inamdar
HoD, MED, WCE


Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE


Dr. A. T. Pise
Principal, GCE



TEQIP-3
Technical Education Quality Improvement Program

**Veermata Jijabai Technological Institute (VJTI), Mumbai
and
Engineering College Ajmer, Rajasthan**



This is to certify that

Mr. Abhijit Krushndev Salunkhe

has participated and successfully completed TEQIP-III Sponsored One week Online FDP on "Recent Advances in Civil Engineering" organized by Civil & Environmental Engineering Department, VJTI Mumbai under twinning activity with Civil Engineering Department, Engineering College Ajmer, Rajasthan during June 02nd to 07th 2020.

Mr. Dhruv Saxena
FDP Co-ordinator,
Civil Engg. Deptt.,
Engg. College Ajmer,
Rajasthan

Dr. Vikas B. Varekar
FDP Co-ordinator,
Civil & Env. Engg. Deptt.,
VJTI, Mumbai

Dr. Ganpat Singh
HOD,
Civil Engg. Deptt.,
Engg. College Ajmer, Rajasthan

Dr. Sumedh Y. Mhaske
HOD,
Civil & Env. Engg. Deptt.
VJTI, Mumbai

Dr. H. S. Mewara
TEQIP Co-ordinator,
Engg. College Ajmer, Rajasthan

Dr. R. N. Awale
TEQIP Co-ordinator,
VJTI, Mumbai

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Department of Civil Engineering

In association with Spoken Tutorial Project, IITB



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One week online Faculty Development Program

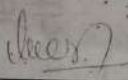
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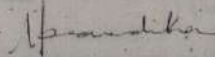
Quantum Geographic Information System (QGIS)


Certificate

This is to certify that Mr. ABHIJIT SALUNKHE
from P.V.P.I.T. Budhgaon, Sangli
has participated in One week online Faculty Development Program
on Quantum Geographic Information System (QGIS)
in association with Spoken Tutorial Project,

Indian Institute of Technology, Bombay funded by National Mission on Education through ICT, MHRD,
Government of India from 1st June 2020 to 5th June 2020.


Dr. Shwetha Prasanna
Convener & HOD (Civil Dept.)


Dr. Neena S Panandikar
(Principal)


Rev. Fr. Kinley D'Cruz
(Director)



Dr. Bhanu vasantraodada Patil Institute of Technology,
Budhgaon (Sangli)
A/P: Budhgaon, Tal: Miraj, Dist: Sangli, 416304



Department Of Civil Engineering

“Post-Covid Challenges in Civil Engineering Industry”

Certificate of Appreciation

This is certify that *Abhijit Krushndev Salunkhe* has successfully completed webinar series on
“Post-Covid challenges in Civil Engineering Industry” organized by department of Civil Engineering
during

25th -29th May 2020.

Nag

G. Salunkhe

G. Ghewade

A. Patil

Coordinator

Prof.M.V.Nagendra
V.Patil

HOD

Prof.V.T.Gaikwad

Principal

Dr.D.V.Ghewade

Trustee

Hon.Shri.Amitdada



Government College of Engineering, Karad
(An Autonomous Institute of Government of Maharashtra)
Vidyanagar Karad Dist.-Satara Maharashtra, PIN- 415 124.
Website: www.gcekarad.ac.in Email: principal@gcekarad.ac.in



AICTE-MARGDARSHAN SCHEME

CERTIFICATE

This is to certify that Mr./ Ms. / Dr. *Abhijit Krushndev Salunkhe* of *P.V.P.I.T.Budhgaon,Sangli* has attended one week online Faculty Development Program on “**OUTCOME BASED EDUCATION: A STEP TOWARDS EXCELLENCE**” from 11-15 May 2020 under Margdarshan Scheme of AICTE, New Delhi.



Please scan the QR code for validation this certificate.

Mr. K. K. Mate
Coordinator,
PCCOER, Pune

Dr. S. S. Mulik
Coordinator,
RMDSSOE, Pune.

Dr. U. V. Patil
Coordinator,
GCE, Karad.

Dr. S. P. Deshmukh
Convener,
GCE, Karad.

Dr. P.M. Joshi
Convener,
GCE, Karad.

Dr. A. T. Pise
Principal,
GCE, Karad.

Your Certificate No is:OBEGCEK-02871

Dr. V.P.S.S.M.'s

Padmabhooshan Vasantraodada Patil Institute Of Technology

Budhgaon-416304, Dist-Sangli.

One Week Online Faculty Development Program

On

"Role of Civil Engineering in mitigating Post Covid-19 Challenges"

Organized by

Civil Engineering Department

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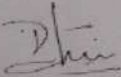
The Institution of Engineers (India) Kolhapur Local Centre

Certificate

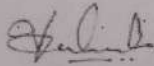
This is to certify that,

AMIT A. KUSANALE

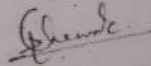
Has successfully attended One Week Online Faculty Development Program on, "Role of Civil Engineering in mitigating Post Covid-19 Challenges", from 20th July to 24th July 2020.



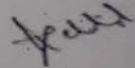
Prof. N.P. Phadtare



Prof. V.T. Gaikwad
Head Civil Engg. Dept.



Dr. D.V. Ghewade
Principal



Hon. Mr. Amit V. Patil
Trustee, Dr. V.P.S.S.M.'s



**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

"DIGITAL TRANSFORMATION & PEDAGOGIES"


Sponsored by AICTE, New Delhi & TEQIP III

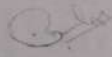
CERTIFICATE

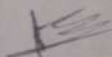
This is to certify that Amit A. Kusanale of PVPIT, Budhgaon
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III

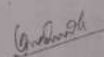


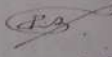
TEQIP III


Dr. S. P. Deshmukh
Convener, GCE


Dr. B. S. Gawali
Convener, WCE


Dr. K. H. Inamdar
HoD, MED, WCE


Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE


Dr. A. T. Pise
Principal, GCE



Dr. Vasanthaodada Shetkari Shikshan Mandali's

Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgoan, Tal-Miraj, Dist-Sangli, Pin-416304, Maharashtra, India



Department Of Instrumentation Engineering
Certificate of Completion

This certifies that Amit A. Kusanale has successfully completed one week student development program on future trends and career opportunities in industry 4.0 in India & abroad during 2nd June to 10th June 2020.

Dr. N.M. Dhawale
Coordinator

Prof. V.L. Karade
HOD, Instrumentation

Dr. D.V. Ghewade
Principal, PVPIT



AISSMS
COLLEGE OF ENGINEERING
ज्ञानम् सकलजगदिताय
Accredited by NAAC with "A+" Grade



Certificate of Participation

This is to certify that Dr / Prof / Ms / Mr **Amit A. Kusanale** has successfully completed **One Week National STP** on "A Smart and Sustainable World in **Concrete and Structures**" organized by Department of Civil Engineering, AISSMS College of Engineering, Pune in association with *UltraTech Cement Limited, Pune* from 4 June 2020 to 8 June 2020.

A. Bhuiyan
Prof Shilpi Bhuiyan
Convener
AISSMS COE
Pune

Hemant Jain
Mr Hemant Jain
Regional Head Technical Services
UltraTech Cement Limited, Pune

U R Awari
Dr. U R Awari
Head
Civil Engineering
Department, AISSMS COE Pune

D S Bormane
Dr. D S Bormane
Principal,
AISSMS COE
Pune



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanthaodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that
Amit A. Kusanale

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the One Week Online Faculty Development Program (FDP) on the theme "*Communication Skills in English for Teacher (Train the Trainer)*" during 14th-19th September, 2020 organized by First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Conyener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanthaodada Patil Institute of Technology,
Budhgaon Dist-Sangli

Three Days Online Workshop on

"UNIVERSAL HUMAN VALUES (UHV)"

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Amit A. Kusanale

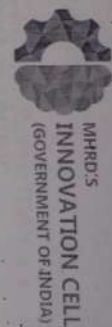
PVPIT, Budhgaon

has successfully participated in the Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)" during 26th - 28th October, 2020 organized by First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



This is to certify that

Dr. / Mr. / Ms. Amit A. Kusumale

of

PVPIIT BUDHGAON

has participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020 during COVID-19 nationwide lockdown.

Dipanshu

Shri. Dipan Sahu
National Coordinator, IIC
MHRD's Innovation Cell

Shobhit

Dr. Shobhit Gambhir
Innovation Director
MHRD's Innovation Cell

Abhay Jore

Dr. Abhay Jore
Chief Innovation Officer
MHRD's Innovation Cell

Certificate no: 20260
Date: 20/05/20



Scan to verify

*The e-Sessions attended by the participant is listed in Annexure

Enviro
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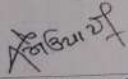
Dr. V.P.S.S.M.'s
Padmabhooshan Vasantraodada Patil Institute of Technology
Budhgaon DIST-SANGLI


CERTIFICATE

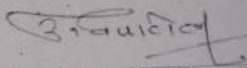
This is proudly awarded to


AMIT KUSANALE

for successful completion of One Week Online Faculty Development Program on
LaTeX from dated 26 Apr 2020 to 02 May 2020 Organized by P.V.P.I.T. Sangli
(Budhgaon) in Association with IIT-Bombay Spoken Tutorial project.


Prof. Sneha A. Patil
Chief Coordinator


Dr. D. V. GHEWADE
Principal


HON. Mr. AMIT V. PATIL
Trustee, Dr.V.P.S.S.M


Spoken Tutorial



Government College of Engineering, Karad
(An Autonomous Institute of Government of Maharashtra)
Vidyanagar Karad Dist.-Satara Maharashtra, PIN- 415 124.
Website: www.gcekarad.ac.in Email: principal@gcekarad.ac.in



AICTE-MARGDARSHAN SCHEME

CERTIFICATE

This is to certify that Mr./Ms./Dr. **AMIT A. KUSANALE** of **PVPIT, BUDHGAON** has attended one week online Faculty Development Program on "**OUTCOME BASED EDUCATION: A STEP TOWARDS EXCELLENCE**" from 11-15 May 2020 under Margdarshan Scheme of AICTE, New Delhi.



Please scan the QR code for validation this certificate.

Mr. K. K. Mate
Coordinator,
PCCOER, Pune

Dr. S. S. Mulik
Coordinator,
RMDSSOE, Pune.

Dr. U. V. Patil
Coordinator,
GCE, Karad.

Dr. S. P. Deshmukh
Convener,
GCE, Karad.

Dr. P.M. Joshi
Convener,
GCE, Karad.

Dr. A. T. Pise
Principal,
GCE.

Your Certificate No is : **OBEGCEK-00835**

FDP
19-20



Kasegaon Education Society's

RAJARBAPU INSTITUTE OF TECHNOLOGY

Department of Civil Engineering (Diploma 2nd Shift)



This is certify that

Amit A. Kusanale

from organisation of PVPIT, Budhgaon has successfully completed **Faculty Development Training Program** on "Online Platforms for Distance Education" organized at our institute during 12th to 14th MAY of 2020.

Mr. V. T. Hulwane & Miss. N. B. Kore
FDTP, Coordinator

Mr. S. S. Ingale
H. O. D.
Civil Engineering

Dr. H. S. Jadhav
Dean Diploma

Dr. S. S. Kulkarni
Director

OD3HQE-CE000103



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli

Three Days Online Workshop on
"UNIVERSAL HUMAN VALUES (UHV)"

Organised by
First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that
Appasaheb Shantappa Ingale
PVPIT Budhgaon, Sangli

has successfully participated in the Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)" during 26th - 28th October, 2020 organized by First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)

Made for free with Certify'em



Dalmia
cement
FUTURE TODAY

CERTIFICATE OF PARTICIPATION

It is to certify that **Appasaheb Shantappa Ingale** has successfully completed One Week Webinar Series on "Metro Rail Technology-Practices Issues" during 11-15, May 2020 organized by Department of Civil Engineering, Rajarambapu Institute of Technology, Rajaramnagar (RIT), Islampur, Dist. Sangli (MS, India) in association with The Institution of Engineers(I), Kolhapur Local Centre, Indian Concrete Institute, Pune Local Centre and Dalmia Cement Bharat Limited.

UUHD4C-CE000626

Vipin Kaila
Vice Head, Tech. Services,
Dalmia Cement Bharat Ltd.

Dr. Mahesh Chougule
Chairman., IEI, Kolhapur

Er. Ujwal Kunte
Chairman., ICI, Pune Centre

Dr. Popat Kumbhar
Assoc. Prof. & Head,
Dept of Civil Engg RIT

Dr. Mrs. Sushma Kulkarni
Convener of Webinar Series
Professor & Director, RIT



Sahay Dnyaneshwar Shikshan Sanstha's
**Annasaheb Dange College of Engineering &
Technology, Ashta.**
(An Autonomous Institute)

(Approved by AICTE, New Delhi, Govt. of Maharashtra and Affiliated to Shivaji University Kolhapur)

NBA Accredited Courses

NAAC 'A' Grade

ISO 9001:2015

ADCET

CERTIFICATE

This is to certify that

Prof. / Dr. / Ms. / Mr Appasaheb Shantappa Ingale of P. V. P. I. T. Budhgaon.
has successfully attended 'ADCET Webinar Series' during 21th to 26th May 2020.
Organized by Department of Basic Sciences. His/Her contribution to the
webinar series is highly appreciated.

Prof. S. S. Mohite
(HOD, Basic Sciences. Dept)

Dr. Vikram Patil
Director

Prof. R. A. Kanai
(Executive Director)



Dr.V.P.Shetkari Shikshan Mandal's
Padmabhooshan Vasantodada Patil Institute of Technology,
Budhgaon (Sangli)
A/P:Budhgaon, Tal:Miraj, Dist:Sangli,416304



Department Of Civil Engineering

"Post-Covid Challenges in Civil Engineering Industry" **Certificate of Appreciation**

*This is certify that Appasaheb Shantappa Ingale has successfully completed webinar series on
"Post-Covid challenges in Civil Engineering Industry" organized by department of Civil Engineering
during*

Nag

Shetkari 25th -29th May *Ghewade*

Patil

Coordinator
Prof.M.V.Nagendra
V.Patil

HOD
Prof.V.T.Gaikwad

Principal
Dr.D.V.Ghewade

Trustee
Hon.Shri.Amitdada



Dr. Vasantodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTODADA PATIL INSTITUTE OF TECHNOLOGY
Budhgaon, Tal-Miraj, Dist-Sangli, Pin-416304, Maharashtra, India



Department of Civil Engineering

CERTIFICATE

This is to certify that *Mr.A.S.Ingale* has worked as co-ordinator for the "Two Weeks Online Internship-Field Training Program" jointly organized by Department of Civil Engineering P.V.P.I.T., Budhgaon, CREDAI Sangli, CREDAI Pune, Engineers & Architects Association Sangli & Builders Association of India(BAI) held on 29th Jun to 13th July, 2020.

Prof.V.T.Gaikwad
HOD Civil Engg Dept.

Dr.D.V.Ghevade
Principal, PVPIT Budhgaon

Hon. Shri. Amitdada Patil
Trustee, VPSSM Sangli

CREDAI
PUNE METRO

CREDAI
SANGLI



Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”


Sponsored by AICTE, New Delhi & TEQIP III


CERTIFICATE


This is to certify that Appasaheb Shantappa Ingale of P V P I T Budhgaon Sangli has attended One Week National Level Workshop on "Digital Transformation & Pedagogies" organized during August 10-14, 2020, by Government College of Engineering, Karad & Walchand College of Engineering, Sangli, Sponsored by AICTE, New Delhi & TEQIP III

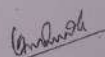


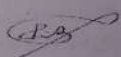
TEQIP III


Dr. S. P. Deshmukh
Convener, GCE


Dr. B. S. Gawali
Convener, WCE


Dr. K. H. Inamdar
HoD, MED, WCE


Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE


Dr. A. T. Pise
Principal, GCE



Confederation of Indian Industry

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CERTIFICATE OF PARTICIPATION

This Certificate is Proudly Presented to

Mr. Sadashiv Mahadev Patil

for Successfully Attended

“CII Digital Training on Industry-Academia Partnership Avenues”
“1st Session of Role of Educators in Industrial Development”

PRATAP PURANIK

CHAIRMAN

CII SOUTHERN MAHARASHTRA ZONAL COUNCIL

27 & 28 JULY 2020



Dr. Vasantodada Patil Shethkari Shikshan Mandal's
PADMABHOOSHAN VASANTODADA PATIL INSTITUTE OF TECHNOLOGY
Budhgaon, Tal-Miraj, Dist-Sangli, Pin-416304, Maharashtra, India



Department of Civil Engineering

CERTIFICATE

This is to certify that *Mr.S.M.Patil* has worked under organizing committee for the "Two Weeks Online Internship-Field Training Program" jointly organized by Department of Civil Engineering P.V.P.I.T., Budhgaon, CREDAI Sangli, CREDAI Pune, Engineers & Architects Association Sangli & Builders Association of India(BAI) held on 29th Jun to 13th July, 2020.

Prof.V.T.Gaikwad
HOD Civil Engg Dept.

Dr.D.V.Ghevade
Principal, PVPIT Budhgaon

Hon.Shri.Amitdada Patil
Trustee, VPSSM Sangli

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Estd. 1941



TOGETHER IS STRENGTH

Dr. V.P.S.S.M.'s
Padmabhooshan Vasantgadada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.
One Week Online Faculty Development Program

On
"Role of Civil Engineering in mitigating Post Covid-19 Challenges"
Organized by

Civil Engineering Department
Sponsored By

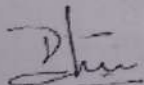
The Institution of Engineers (India) Kolhapur Local Centre

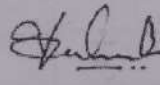
Certificate


This is to certify that,

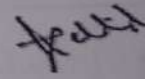
SADASHIV MAHADEV PATIL

Has successfully attended One Week Online Faculty Development Program on, "Role of Civil Engineering in mitigating Post Covid-19 Challenges", from 20th July to 24th July 2020.


Prof. N.P. Phadtare


Prof. V.T. Gaikwad
Head Civil Engg. Dept.


Dr. D.V. Ghewade
Principal


Hon. Mr. Amit V. Patil
Trustee, Dr.V.P.S.S.M.'s

DON BOSCO COLLEGE OF ENGINEERING

FATORDA - GOA



Department of Civil Engineering
In association with Spoken Tutorial Project, IITB
organized



One week online Faculty Development Program
on

Quantum Geographic Information System (QGIS)

Certificate

This is to certify that Mr. Sadashiv Mahadev Patil
from P. V. P. I. T. Budhgaon., Maharashtra

has participated in One week online Faculty Development Program
on Quantum Geographic Information System (QGIS)

in association with Spoken Tutorial Project,

Indian Institute of Technology, Bombay funded by National Mission on Education through ICT, MHRD,
Government of India from 1st June 2020 to 5th June 2020.

Dr. Shwetha Prasanna
Convener & HOD (Civil Dept.)

Dr. Neena S Panandikar
(Principal)

Rev. Fr. Kinley D'Cruz
(Director)



Dr. Vasanttraodada Shetkari Shikshan Mandal's
Padmabhooshan Vasanttraodada Patil Institute of Technology
Budhgoan, Tal-Miraj, Dist-Sangli, Pin-416304, Maharashtra, India

Department Of Instrumentation Engineering
Certificate of Completion

This certifies that Sadashiv Mahadev Patil has successfully completed one week student development program on future trends and career opportunities in industry 4.0 in India & abroad during 2nd June to 10th June 2020.

Dr. N.M. Dhawale
Coordinator

Prof. V.L. Karade
HOD, Instrumentation

Dr. D.V. Ghewade
Principal, PVPIT



Education to Eternity

Certificate Of Participation

Dr. Babasaheb Ambedkar Technological University
Jointly With

J D College Of Engineering & Management, Nagpur
Organized

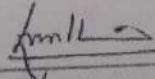
Workshop On Mental Health During Covid-19


This is to certify that Mr./Mrs.

Mr. Sadashiv Mahadev Patil

from P.V.P. Institute of Technology, Budhgaon, Sangli

has participated in five days Online workshop on mental health Awareness during COVID-19 on 'Maintaining Mental Health During Turbulence' which was scheduled during 06th May to 10th May 2020.


Moderator & Coordinator
Prof. Surabhi Pranav


Convenor
Dr.S.R. Choudhari
(Principal, JDCOEM)



Dr. V. P. Jethkari Smikshan Mandal's
Madmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon (Sangli)
A/P: Budhgaon, Tal: Miraj, Dist: Sangli, 416304



Department Of Civil Engineering

“Post-Covid Challenges in Civil Engineering Industry”

Certificate of Appreciation

This is certify that Sadashiv Mahadev Patil has successfully completed webinar series on “Post-Covid challenges in Civil Engineering Industry” organized by department of Civil Engineering during

25th -29th May 2020.

Coordinator
Prof.M.V.Nagendra

HOD
Prof.V.T.Gaikwad

Principal
Dr.D.V.Ghewade

Trustee
Hon.Shri.Amitdada V.Patil

2020-21



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE



This is proudly awarded to

Spoken Tutorial

SADASHIV PATIL

for successful completion of One Week Online Faculty Development Program on
C & CPP from dated 26 Apr 2020 to 02 May 2020 Organized by P.V.P.I.T. Sangli
(Budhgaon) in Association with IIT-Bombay Spoken Tutorial project.

Prof. Sneha A. Patil
Chief Cordinator

Dr. D. V. GHEWADE
Principal

HON. Mr. AMIT V. PATIL
Trustee, Dr.V.P.S.S.M



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute of Technology,
Budhgaon Dist-Sangli

One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that
Vitthal Tanaji Gaikwad

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the **One Week Online Faculty Development Program (FDP)** on the theme "**Communication Skills in English for Teacher (Train the Trainer)**" during **14th-19th September, 2020** organized by **First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)

Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS


One Week National Level Workshop on

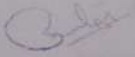
“DIGITAL TRANSFORMATION & PEDAGOGIES”

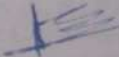
Sponsored by AICTE, New Delhi & TEQIP III

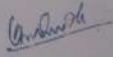
CERTIFICATE

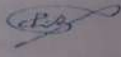
This is to certify that Vitthal Tanaji Gaikwad of PVPIT Budhgaon
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III


Dr. S. P. Deshmukh
Convener, GCE


Dr. B. S. Gawali
Convener, WCE


Dr. K. H. Inamdar
HoD, MED, WCE


Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE


Dr. A. T. Pise
Principal, GCE



TEQIP III

Dr. V.P.S.S.M.'s
Padmabhooshan Vasantraodada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.

One Week Online Faculty Development Program
On

"Role of Civil Engineering in mitigating Post Covid-19 Challenges"

Organized by

Civil Engineering Department
Sponsored By

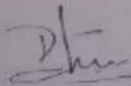
The Institution of Engineers (India) Kolhapur Local Centre

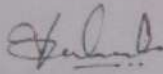
Certificate

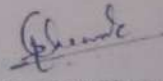
This is to certify that,

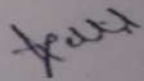
GAIKWAD VITTHAL TANAJI

Has successfully attended One Week Online Faculty Development Program on, "Role of Civil Engineering in mitigating Post Covid-19 Challenges", from 20th July to 24th July 2020.


Prof. N.P. Phadtare


Prof. V.T. Gaikwad
Head Civil Engg. Dept.


Dr. D.V. Ghewade
Principal


Hon. Mr. Amit V. Patil
Trustee, Dr. V.P.S.S.M.'s



ENGINEERING STAFF COLLEGE OF INDIA

(An-Autonomous Organ of The Institution of Engineers(India))
Gachibowli, Hyderabad-500 032



Certificate of Participation

THIS CERTIFICATE IS AWARDED TO

LAXMAN SHAMRAO PATIL


ASSOCIATE PROFESSOR, PVPIT BUDHGAON, SANGLI

for participating in the


NATIONAL WORKSHOP ON

"OBE & NBA ACCREDITATION"

DATE: on 17 & 18 May 2021



HEAD(FDP CELL) &
PROGRAMME DIRECTOR
ESCI



DIRECTOR, ESCI



HINDUSTHAN COLLEGE OF ARTS AND SCIENCE

An Autonomous College – Affiliated to Bharathiar University
Coimbatore-641 028, Tamilnadu India

PG AND RESEARCH DEPARTMENT OF MATHEMATICS

HINDUSTHAN INNOVATIVE LEARNING HUB



***FIVE DAYS ONLINE WORKSHOP AND NATIONAL FACULTY DEVELOPMENT PROGRAMME
RESEARCH METHODOLOGY AND ICT BASED TEACHING AND LEARNING TOOLS***

This is to Certify that Mr/Ms/Dr Dr.SANJAY N PATIL, Associate professor from
EEE,PVPIT, SANGLI

has participated in the 5 days Online Workshop and National FDP on “Research Methodology and ICT based Teaching and Learning Tools” from 16th June to 20th June 2020 organized by Hindusthan College of Arts and Science, Coimbatore, Tamilnadu

A handwritten signature in black ink, appearing to read "S. Anuradha".

Dr. S. Anuradha

(Professor & Head PG & Research Department Of Mathematics)

Certificate Number : BLYQ4C-CE000188

A handwritten signature in green ink, appearing to read "A. Ponnusamy".

Dr.A.Ponnusamy

(Principal)



HINDUSTHAN COLLEGE OF ARTS AND SCIENCE

An Autonomous College – Affiliated to Bharathiar University
Coimbatore-641 028, Tamilnadu India

PG AND RESEARCH DEPARTMENT OF MATHEMATICS

HINDUSTHAN INNOVATIVE LEARNING HUB



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A handwritten signature in black ink, appearing to read "S. Anuradha".

Dr. S. Anuradha

(Professor & Head PG & Research Department Of Mathematics)

Certificate Number : BLYQ4C-CE000188

A handwritten signature in green ink, appearing to read "A. Ponnusamy".

Dr.A.Ponnusamy

(Principal)

Hope Foundation's

Finolex Academy of Management & Technology, Ratnagiri



A Project by Finolex

This certificate is presented to,

Dr. SANJAY N PATIL of

**Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon,
Sangli**

for successfully completing

One week Online Faculty Development Program (FDP) on

**Exploring the Dimensions of Innovation, Incubation and Emerging
Technologies to Embrace Post COVID Changes**

Organized by Department of Mechanical Engineering from

08th June to 12th June 2020.



**Dr. Milind Yadav
Convenor**

**Dr. Milind Kirkire
Convenor, Dean Academics & HoD**

**Dr. Kaushal Prasad
Principal**



Faculty Development Program

Certificate



SRI KRISHNADEVARAYA EDUCATIONAL TRUST'S

SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevarayanagar, Hunasamaranahalli , Off International Airport Road, Bangalore-562 157.
(Affiliated to VTU, Recognized by AICTE , Accredited by NAAC)



***** NIRF Rank - 251 *****

Department of Electrical & Electronics Engineering

CERTIFICATE OF PARTICIPATION

Certificate No 1346

Mr/Mrs/Prof DR. SANJAY N.PATIL

PVPIT, Sangli (MH)

has participated and secured **"S+ Grade"** in a one week National Level Online Short Time Training Program on **"MATLAB for ALL"** during **04th June to 8th June 2020** organized by the **Department of Electrical and Electronics Engineering** , **SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY** , Bangalore-562157.

Mr. R Sivapriyan
Coordinator

Dr. H L Suresh
HOD,EEE

Dr. V R Manjunath
Principal



Estd. in 2001



Spoken Tutorial

One week Faculty Development Program

Certificate of Participation

This is to certify that Dr./Mr./Ms. SANJAY N. PATIL From PVPIT, SANGLI has participated in **One Week Faculty Development Programme (FDP)** on Python 3.4.3 conducted during 15th to 20th June 2020, organized at **Thakur College of Engineering & Technology**, Mumbai by Electronics and Telecommunication Department with Course Material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted from IIT Bombay, is a pre-requisite for completing this training.

20th, June 2020

Dr. B. K. Mishra
Principal, TCET

Lagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education(AICTE) and Government of Maharashtra

A - Block, Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101

• Tel.: 022-6730 8000 / 8106 / 8107 Telefax: 022-2846 1890

Email: tcet@thakureducation.org • Website: www.tcetmumbai.in www.thakureducation.org

MSPM's

**Deogiri Institute of Engineering and Management Studies,
Aurangabad(Maharashtra).**

CERTIFICATE

This is to certify that,

Dr. SANJAY N. PATIL

has attended National level One Week online Faculty Development Programme on
“MATHEMATICS : A Practical Approach in Science and Technology” Organised by
Department of Basic Science and Humanities from 28th June to 3rd July 2020.


Dr. G.R. Gandhe
Coordinator


Dr. S.L. Dhondge
Coordinator


Prof. S.B. Kalyankar
Vice-Principal

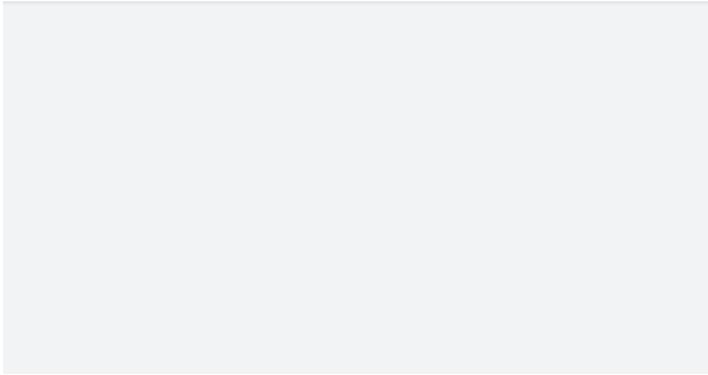

Dr. U.D. Shiurkar
Director

Ambabal Talim Sanstha's
Sanjay Bhokare Group of Institutes
Tilaknagar, Sangli-Miraj Road, Miraj, Dist.: Sangli, Maharashtra, India- 416410.
NAAC "A" Grade Accredited Institute

Certificate

We feel proud to certify that Milind Chandrashekar Butale
of PVPIIT Budhgaon has
successfully Completed Faculty Development Program on "Electrical System
Modelling and Solar Policies" from 18th to 21st July, 2020 organized by
Department of Electrical Engineering, ATS's Sanjay Bhokare Group of Institutes,
Miraj.

| | | | | |
|--|---|---|--|---|
|  Ms. R.S. Gaikwad Event Coordinator |  Mr. S.N. Kamble Event Coordinator |  Mr. M.N. Mestri Event Coordinator |  Mr. D.S. Bhangari Convener HOD Electrical |  Dr. A.C. Bhagali Director ATS's SBGI, Miraj. |
|--|---|---|--|---|




Marathwada Mitra Mandal's
COLLEGE OF ENGINEERING, PUNE
Accredited with 'A' Grade by NAAC
DEPARTMENT OF COMPUTER ENGINEERING

Certificate of Participation
A THREE DAY 'FACULTY DEVELOPMENT PROGRAM' ON
"NBA ACCREDITATION & OUTCOME BASED EDUCATION"
THIS CERTIFICATE IS PRESENTED TO
Milind Butale

for his/her active participation in a three day FDP on "NBA Accreditation & Outcome Based Education" during 18th June to 20th June 2020 organised at Marathwada Mitra Mandal's College of Engineering, Pune.

Ms. Shailaja B. Jadhav
Convener

Dr. H.K. Khanuja
H.O.D.

Dr. S.M. Deshpande
Principal

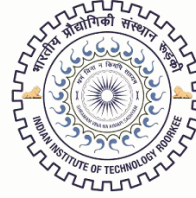




भारतीय प्रौद्योगिकी संस्थान रुड़की
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
गुण अभिवृद्धि कार्यक्रम
QUALITY IMPROVEMENT PROGRAMME



QIP/2021/256



Certificate

This is to certify that **Mr. SWAPNIL YASHAVANT GADGUNE, Padmabhooshan Vasandraodada Patil Institute of Technology, Budhgaon (Maharashtra)** participated in AICTE sponsored Quality Improvement Programme (QIP) short-term course on **"PWM Control Techniques in Modern Multi-Phase Power Converters used for Grid Interfaces and Industrial Drives"** organized via online mode during **11-01-2021 to 15-01-2021** by the **Department of Electrical Engineering, Indian Institute of Technology Roorkee.**

Prof. Anubrata Dey
Course Coordinator

Prof. Sharmili Das
Course Coordinator

Vimal Chandra Srivastava
Coordinator, QIP

KOVAIPUDUR, COIMBATORE - 641042

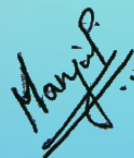


Certificate of Participation

This is to certify that Mr Swapnil Yashavant Gadgune, Padmabhooshan Vasantryadada Patil Institute of Technology, Budhgaon has successfully completed the **AICTE Sponsored Six Days Online Short Term Training Programme on Challenges and Opportunities in Electric Vehicle technologies Adoption - Series:01** organized by the Department of Instrumentation and Control Engineering, Sri Krishna College of Technology, Coimbatore from 16/11/2020 to 21/11/2020.



Dr. M. Karthigai Pandian
Co-Ordinator



Dr. P. Manju
Convener



Dr. Srinivasan Alavandar
Principal

Dr.D.Y.Patil Institute of Technology,Pimpri,Pune
Department Of Electrical Engineering

DPU

Certificate



Two weeks FDP on "Paradigm Shift In Higher Education Institutes : Opportunities and Challenges (PSHEIOC)"

Swapnil Yashwant Gadgune

of **PVPIT Budhgaon, Sangli**

has successfully completed Two Weeks FDP on "Paradigm Shift In Higher Education Institutes:Opportunities and Challenges (PSHEIOC)", during 1st June to 12th June 2020, organized by Department of Electrical Engineering, DIT, Pimpri, Pune in association with Indian Society for Technical Education (ISTE).

Dr. V. A. Kulkarni
Coordinator

Mr. V. S. Bugade
Coordinator

Dr. Urmila Patil
Convenor

HOD EE & Dean Academics, DIT

Dr. Pramod Patil
Principal



Shree Shamrao Patil (Yadravkar) Educational and Charitable Trust's
**Sharad Institute of Technology, College of Engineering,
Yadrav (Ichalkaranji).**

CLARIANT® 
In collaboration with Frako-Germany

Department of Electrical Engineering

Certificate of Participation

This certificate is proudly presented to

Ms. Tanjila Gaphur Tamboli
AITP, VITA

For attending One week online Faculty Development Program on
“Power Quality and Reactive Power Management”
Organised by the Department of Electrical Engineering
In association with CLARIANT Power Systems Ltd.
From. 1st June 2020 to 5th June 2020.

Mr. M. S. Kulkarni
Coordinator

Mr. Baldevraj Narang
CEO, Clariant Power
System Ltd. Pune

Dr. K. Hussain
Convener

Dr. S. A. Khot
Principal

Shri Anil Bagne
Executive Director



Dr.Vasanthaodada Shetkari Shikshan Mandal's
Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgoan, Tal-Miraj , Dist-Sangli, Pin-416304, Maharashtra,India



Department Of Instrumentation Engineering
Certificate of Completion

TANJILA GAPHUR TAMBOLI

This certifies that _____ has successfully completed one week student development program on future trends and career opportunities in industry 4.0 in India & abroad during 2nd June to 10th June 2020.

Dr.N.M.Dhawale
Coordinator

Prof.V.L.Karade
HOD,Instrumentation

Dr.D.V.Ghewade
Principal,PVPIT



Government Polytechnic, Malvan

DTE Maharashtra and MSBTE, Mumbai Approved
One Week National Level Online FDP On

Effective use of ICT Tools in Teaching Learning Process



Certificate

This is to certify that

Ms. Tanjila Gaphur Tamboli

of Adarsh Institute of Technology Polytechnic, Vita

has successfully completed One Week National Level Online FDP On **EFFECTIVE USE OF ICT TOOLS IN TEACHING LEARNING PROCESS** organized by Government Polytechnic, Malvan from 8 June 2020 to 12 June 2020. This FDP has been Approved by DTE Maharashtra and MSBTE, Mumbai



Mr. S. G. Kamble
Coordinator

Mr. D. N. Golatkar
Co-Convener

Dr. Y. V. Mahadik
Co-Convener

Dr. S. S. Chopade
Convener

Dr. S. A. Patil
Chairman & Principal
GP Malvan

Certificate No: GPM/FDP/628/1646



Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE
Certificate of Participation

Ms. Janjila Gaphur Jamboli

from AITP, VITA

has participated in Five Days Online Faculty Development Program on
"RESEARCH IN ENGINEERING - A Way Forward"
conducted on 6th to 10th July, 2020 at
A. P. Shah Institute of Technology, Thane.

Dr. M. R. Mulay
Convenor

Dr. S. S. Nanivadekar
Dean Administration

Prof. A. M. Deshpande
Dean Academics

Dr. U. D. Kolekar
Principal



Indian Society for Technical Education
Shaheed Jeet Singh Marg New Delhi – 110 016

CERTIFICATE

This is to certify that Mr/Ms. **PATIL NILAM SANDIP** has successfully completed
ISTE approved Online/SF-STTP/FDP Programme on “**Power Electronics in Electrical
Vehicle and Renewable Energy**” held during **22.02.2021** to **26.02.2021** organized
by **Sanjay Ghodawat University, Atigre, Kolhapur, Maharashtra**

Online/P-2020/1392

Executive Secretary



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

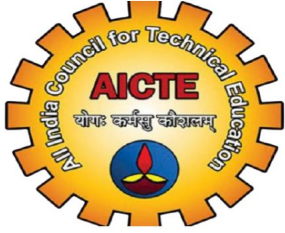
This is to certify that Mrs. Nilam Sandip Patil from PVPIT Budhgaon, Sangli has participated and successfully completed the 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 24 May, 2021 to 28 May, 2021.

A handwritten signature in blue ink, appearing to read "Dr. Rajneesh Arora".

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

A handwritten signature in blue ink, appearing to read "Prof. Rajive Kumar".

Prof. Rajive Kumar
Member Secretary, AICTE



Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur

Certificate of Participation

This is to certify that

Mr./Mrs./Ms./Dr. Sneha A. Patil

has participated in AICTE sponsored two weeks Faculty Development Program on **“Machine Learning & its Applications”** organized by Department of Electronics & Telecommunication Engineering during 5th Jan. to 15th Jan., 2021.

Dr. S. R. Chougule
Coordinator,

Mr. A. R. Nigvekar
Convener

Dr. V. V. Karjinni
Director, KIT CoEK



Shri Vithal Education & Research Institute

College of Engineering Pandharpur,

P.B. No. 54, Gopalpur -Ranjani Road, Gopalpur, Tal.- Pandharpur- 413 304,Dist.- Solapur (Maharashtra)

NBA Accredited all UG Programmes and , NAAC, Accredited Institute, ISO 9001-2015 Certified Institute.

Certificate of Participation

This is to Certify that Mr/Ms. **Ms.SNEHA ARUN PATIL** of **Padmabhusan Vasantraodada Patil Institute of Technology ,Budhgaon- Sangli** has successfully attended One Week Online FDP on **“Advances and Research Opportunities in E&TC Engineering ”** from 10/06/2020 to 14/06/2020 Organized by **Department of Electronics & Telecommunication Engineering, SVERI’s College of Engineering Pandharpur.**
9ZKRBC-CE000087.

Prof.S.P.Swami
Coordinator

Dr. A. S.Vibhute
Head of Department.

Dr. B.P.Ronge
Principal

No:ATAL/2020/1597389757



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **RAJARAM DATTU PATIL**, Associate Professor of **pvpit,budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "**Internet of Things (IoT)**" from **2020-10-5** to **2020-10-9** at **Shri Sant Gajanan Maharaj College of Engineering, Shegaon**.

Director ATAL Academies



Coordinator

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

Sponsored by AICTE, New Delhi & TEQIP III

CERTIFICATE

This is to certify that **RAJARAM DATTU PATIL** of **PVPIT Budhgaon**
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III



TEQIP III

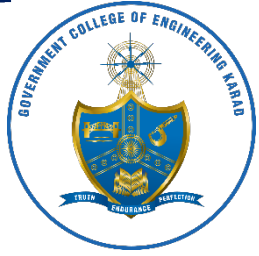
Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
Principal, GCE



GOVERNMENT COLLEGE OF ENGINEERING, KARAD

(An Autonomous Institute of Government of Maharashtra)

(Affiliated to Shivaji University, Kolhapur)

VIDYANAGAR, KARAD (SATARA) (INDIA), PIN-415124

Phone: +91 2164 272414/15 Fax: +91 2164 271713

Website: www.gcekarad.ac.in Email: principalgcekarad@gmail.com

TEQIP-3
Technical Education Quality Improvement Programme

NPIU
National Project Implementation Unit

Certificate

This is to certify that

Shri. / Mrs. / Dr./ Prof. **Shaikh Juberahmad Abdurashid**

from **Pvpit Sangli**

has participated in the One Week Online Faculty Development Program on

Signal, Image & Video Processing: A Practical Approach (SIVPAPA-2020)

under *Technical Education Quality Improvement Program (TEQIP-III)*

organized by **Department of Electronics & Telecommunication Engineering** during May 26-30, 2020.

Dr. A.R. Karwankar
Coordinator

Dr. A. M. Sapkal
Convener

Prof. B. A. Konnur
TEQIP Coordinator

Dr. A. T. Pise
Principal

95. For verification of this E-certificate please email entc.gcekarad@gmail.com
96. Producing illegal copy of this certificate is a serious offence and the accountable shall be prosecuted with legal action.



Dr.Vasanthaodada Shetkari Shikshan Mandal's
Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgoan, Tal-Miraj , Dist-Sangli, Pin-416304, Maharashtra,India



Department Of Instrumentation Engineering
Certificate of Completion

This certifies that Shaikh Juberahmad has successfully completed one week student development program on future trends and career opportunities in industry 4.0 in India & abroad during 2nd June to 10th June 2020.

Dr.N.M.Dhawale
Coordinator

Prof.V.L.Karade
HOD,Instrumentation

Dr.D.V.Ghewade
Principal,PVPIT

CERTIFICATE

of INTERNSHIP

This is to certify that

Dr .Kishor Pandyaji



has Successfully Completed "30 Days Internship Program on Matlab "
at www.pantechsolutions.net in association with IETE Mumbai

Date : Sep 01-2020 to Sep 30-2020



M. Malaiyappan
Director
Pantech Solutions



Parag Walinjkar
CHAIRMAN
IETE MUMBAI

CERTIFICATE

PROUDLY PRESENTED TO

Kishor Pandyaji

2 Weeks FDP On Machine Learning & AI using
Python

May 28, 2021

Date of Completion

Knowledge Solutions India

Organizer





ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Dr. Kishor Khemchand Pandyaji** from **P V P I T Budhgaon, Sangli** has participated and successfully completed the **online workshop on Universal Human Values on the theme “Inculcating Universal Human Values in Technical Education”** during **2-6 July, 2020** as organized by **All India Council for Technical Education(AICTE)**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

No:ATAL/2020/1600078974



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Kishor Pandyaji, Associate Professor** of **PVPIT, Budhgaon, Sangli** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Internet of Things (IoT)**" from **2020-10-5** to **2020-10-9** at **Shri Sant Gajanan Maharaj College of Engineering, Shegaon.**

Director ATAL Academies



Coordinator

No:ATAL/2020/1600078591



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Kishor Pandyaji, Associate Professor** of **PVPIT, Budhgaon, Sangli** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Towards 5G Communications & Beyond with IoT, Machine Learning**" from **2020-11-23** to **2020-11-27** at **Goa College of Engineering**.

Director ATAL Academies



Coordinator



SHREE L. R. TIWARI COLLEGE OF ENGINEERING

Kasabha Park, Mira Road(East), Thane - 401107, Maharashtra, India

(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai)

NAAC Accredited | ISO 9001:2015 Certified

Tel. No: 022-28120144/022-28120145 | Email: shree@rahuleducation.com | Website: www.shree.ac.in



eCertificate of Participation



This is to certify that

Mr. Kiransing Pratapsing Paradeshi

from PVPIT BUDHGAON has participated and successfully completed One Week AICTE - ISTE Approved Short Term Training Programme (STTP) on "Outcome Based Education & NBA" held from 29th June 2020 - 03rd July 2020 organized by R&D Cell & IQAC of Shree. L. R. Tiwari College of Engineering.

Dr. Anju Arya

IQAC DIRECTOR



Certificate ID: PFDPOBENBA-2020-SLRICE 449

Dr. S. Ram Reddy

PRINCIPAL

Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS

Click on Sign to add
your signature on this



One Week National Level Workshop on
"DIGITAL TRANSFORMATION & PEDAGOGIES"

Sponsored by AICTE, New Delhi & TEQIP III



CERTIFICATE

This is to certify that Kiran P. Paradeshi of PVPIT, Budhgaon
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III



TEQIP III

Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
Principal, GCE

Windows
Go to Settings to adjust

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

Sponsored by AICTE, New Delhi & TEQIP III

CERTIFICATE

**This is to certify that Ambadas Balu Shinde of PVPIT, Budhgaon, Sangli
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III**



TEQIP III

Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
Principal, GCE

No:ATAL/2020/1596609058



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Ambadas Balu Shinde**, Assistant Professor of **PVPIT Budhgaon** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Blended Learning and Flipped Classroom**" from **2020-9-7** to **2020-9-11** at **National Institute of Technical Teachers Training and Research, Chandigarh**.

Director ATAL Academies



Coordinator



Dr. Babasaheb Ambedkar Technological University, Lonere
N.K. ORCHID COLLEGE OF ENGG. & TECH., Solapur



CERTIFICATE OF PARTICIPATION

Awarded to

Prof. A. B. Shinde

Has successfully completed the Faculty Development Program on Digitizing Engineering Graphics course under DBATU with supporting products AutoCAD™ & Autodesk® Fusion 360™ organized by Autodesk and N. K. Orchid college of Engineering and Technology, Solapur from 20th -24th July 2020.

Dr M Sadaiah
Prof. Mechanical,

Dr J. B. Dafedar
Principal NKOCET,



Shree Shamrao Patil (Yadavkar) Educational & Charitable Trust's

SHARAD INSTITUTE OF TECHNOLOGY

COLLEGE OF ENGINEERING, YADRAV (ICHALKARANJI)

(An Autonomous Institute)



Department of Electronics and Telecommunication Engineering

One Week Online Faculty Development Programme (FDP)

Sponsored by TEQIP III, DBATU, Lonere

on

Machine Learning & Its Applications

CERTIFICATE

This is to certify that,

Mr. Ambadas Balu Shinde

From PVPIT Budhgaon, Sangli

Attended an Online Faculty Development Programme (FDP) on **“Machine Learning & Its Applications”** during 16th March – 20th March 2021 organized by Sharad Institute of Technology, College of Engineering, Yadrav (Ichalkaranji).

Dr. Sanjay Sutar
FDP Coordinator

Dr. Mrs. S.S. Tamboli
FDP Coordinator

Mrs. K.N. Rode
FDP Co-Coordinator

Dr. Mr. S.T. Jadhav
H.O.D.- E&TC

Dr. Mr. S. A. Khot
Principal



KOLHAPUR INSTITUTE
OF TECHNOLOGY'S
COLLEGE OF
ENGINEERING
(AUTONOMOUS),
KOLHAPUR



Certificate

This is to certify that Dr./Mr./Mrs./Ms **Archana Shivaji Bhandare** in

AICTE-ISTE Sponsored Orientation/ Refresher One Week Online Programme On

“Design and Simulations of Antennas, Electronics Design Automation Technologies”

From 3rd to 8th April 2021

Organised by K. I. T.' s College Of Engineering (Autonomous), Kolhapur.

Prof. A. L. Renke
Coordinator

Prof. V. K. Desai
Convener

Prof. A. R. Nigavekar
Head E & Tc Department

Dr. V. V. Karjinni
Director

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

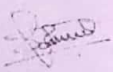
Sponsored by AICTE, New Delhi & TEQIP III

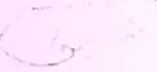
CERTIFICATE


This is to certify that Dr Deepak B Kadam of PVPIT BUDHGAON
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III

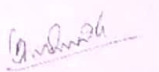


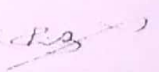
TEQIP III


Dr. S. P. Deshmukh
Convener, GCE


Dr. B. S. Gawali
Convener, WCE


Dr. K. H. Inamdar
HoD, MED, WCE


Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE


Dr. A. T. Pise
Principal, GCE

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

Sponsored by AICTE, New Delhi & TEQIP III

CERTIFICATE

This is to certify that Mr. Shirish Vitthalrao Phakade of P.V.P.I.T, Budhgaon, Sangli.
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III



TEQIP III

Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
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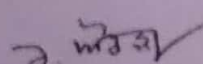


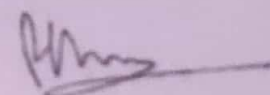


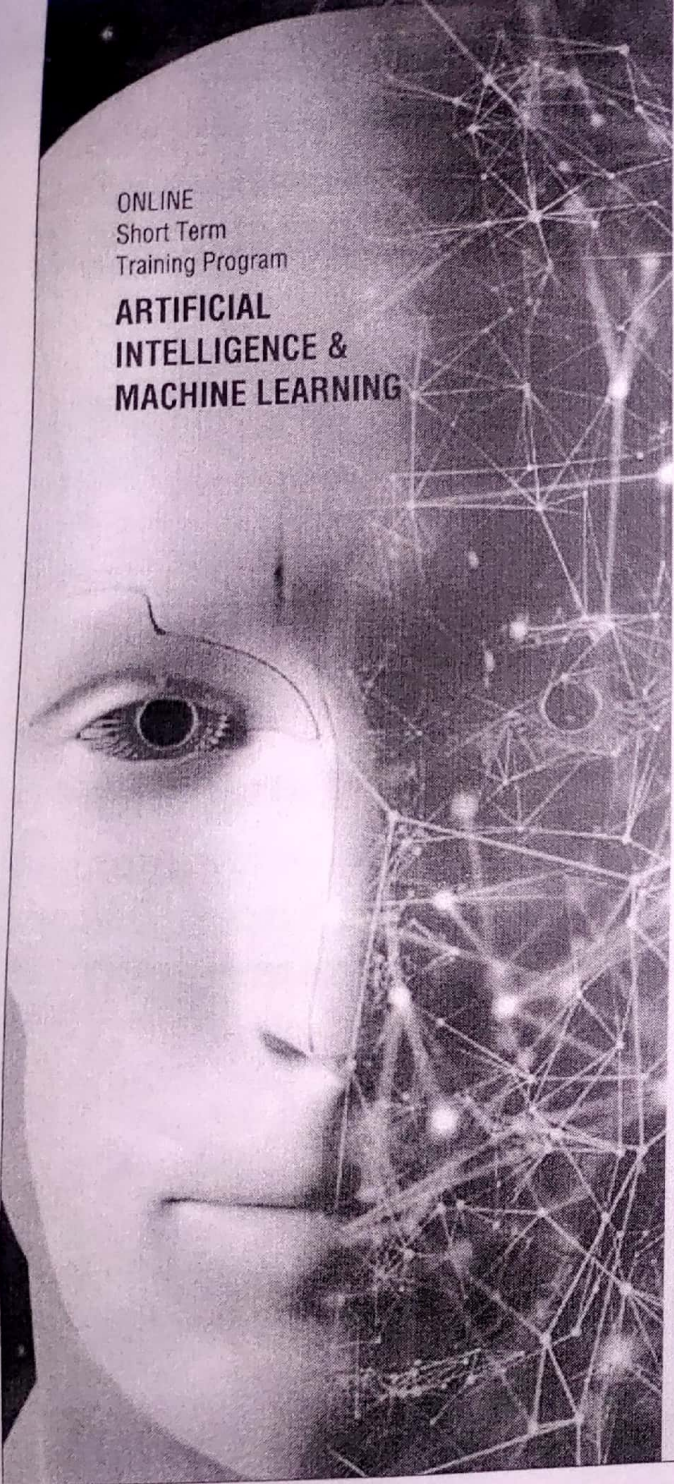
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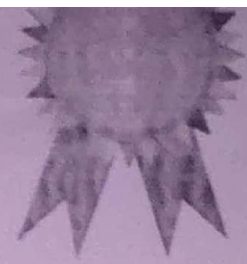
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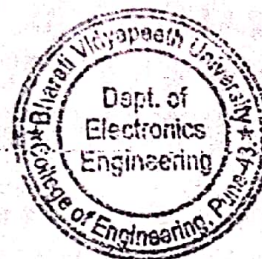
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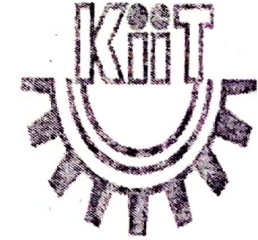
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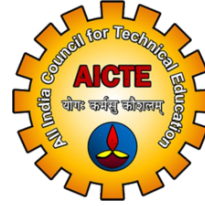
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On

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Highly proficient extraction separation of thorium(IV) from sulfuric acid solution using *N-n*-decylaniline: real sample analysis

Makrand M. Patil¹ · Vishal J. Suryavanshi^{1,2,3} · Abhijeet G. Mulik¹ · Ganpatrao N. Mulik¹

Received: 14 January 2020

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Abstract

Herein we have developed solvent extraction method for thorium(IV) with 0.15 M *N-n* decylaniline in xylene from 0.5 M H₂SO₄. Physicochemical parameters like acid concentration, amine concentration, equilibrium time, phase ratio, diluent, loading capacity to name a few were optimized for the quantitative extraction of thorium(IV). The back-extraction of thorium(IV) from organic phase was done with 0.1 M nitric acid and determined complexometrically. To extend the utility of this method, binary and ternary mixture separation, extraction of thorium(IV) from monazite sand and gas mantle are also investigated.

Keywords Thorium(IV) · *N-n*-decylaniline · Extraction · H₂SO₄

Introduction

Nuclear technology is an attractive alternative to gain energy because of increasing energy requirements and the threat of global warming due to CO₂ release caused by coal and hydrocarbon burning [1]. Thorium is a radioactive element commonly used in nuclear plants. At today mostly satisfying the energy need of the world was depend on the thorium as the reserves of thorium on the earth is much more abundant than uranium, and thorium can be directly turned into uranium in a nuclear reactor [2]. Though thorium is observed in the many ores, its main source in India is monazite ore, thorianite, thorite and thoganite [3]. In process able ores, thorium found in association with uranium and zirconium, hence its extraction and separation is an essentiality. Liquid–liquid extraction is the most used separation technique for production processes and for analytical sampling. Hence, the precise and selective method of estimation of thorium is the need of time. The numbers of researcher groups are working on the estimation of radioactive elements from

the environment. Recently, thorium(IV) with uranium(VI), zirconium(IV) was estimated from perchlorate media using PC-88A [4]. Thorium(IV) was extracted by using bis-2-(butoxyethylether) [5]. The extractive behavior of uranium(VI) and thorium(IV) was done by using TBPO [6] in salicylate medium. Cyanex 301 and Cyanex 302 [7], Cyanex 923 [8] were successfully used for the extractive separation of thorium(IV). Apart from that the extraction study of thorium(IV) was also investigated by several extractants like di-(2-ethylhexyl) 2-ethylhexyl phosphonate [9] bis(2,4,4-trimethylpentyl) phosphinic acid (Cyanex 272) [10]. Amberlite LA-1 or LA-2 [11], *N*-methyl-*N,N,N*-triocetylammmonium chloride [12] mixture of *N-n*-octylaniline and triocetylamine [13] are successfully employed for the extraction of thorium(IV). Extraction of thorium(IV) was done from 2-octylaminopridine [14] in kerosene along with various organophosphorus compounds like TBP (30%) [15], Cyanex302 [16], triphenylphosphine oxide, di-isodecyl phosphoric acid [17–20] as well as Di 1(methyl-heptyl) methyl phosphonate [21], The extraction of Th(IV) was investigated by using di(1-methyl-heptyl) methyl phosphonate (DMHMP) in kerosene as an extractant [22].

The chain length of various high molecular weight amines plays an important role in the extraction process. The extraction of thorium(IV) was investigated via number of long chain high molecular weight amines such as *N-n*-heptylaniline [23], *N-n*-octylaniline [24] which shows that, as chain length increases extraction is also increases with decreasing concentration of amine (Table 1). Hence,

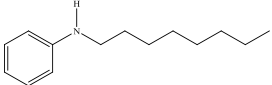
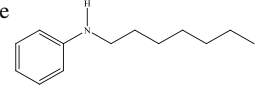
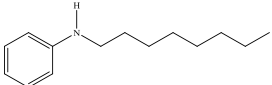
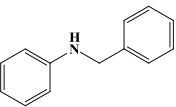
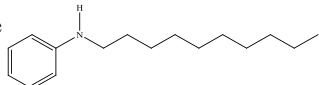
✉ Ganpatrao N. Mulik
ganpatraomulik@rediffmail.com

¹ Department of Chemistry, Balwant College, Vita, Maharashtra 415311, India

² Analytical Chemistry Laboratory, Department of Chemistry, Shivaji University, Kolhapur, Maharashtra 416004, India

³ Department of Chemistry, PVPIT Budhgaon, Sangli, Maharashtra 416304, India

Table 1 Effect of chain length

| Amine | Chain | Concentration | Medium | Extraction % | Ref. |
|--|---|---------------|--------------------------------------|--------------|------|
| <i>N-n</i> -octylaniline  | -Octyl -(CH ₂) ₇ CH ₃ | 1% | 1.5 M H ₂ SO ₄ | 99.8 | [13] |
| <i>N-n</i> -heptylaniline  | -Heptyl -(CH ₂) ₆ CH ₃ | 0.40 M | 0.9 M H ₂ SO ₄ | 99.8 | [23] |
| <i>N-n</i> -octylaniline  | -Octyl -(CH ₂) ₇ CH ₃ | 0.20 M | 0.7 M H ₂ SO ₄ | 99.7 | [24] |
| <i>N</i> -benzylaniline  | -Benzyl -CH ₂ Ph | 0.38 M | 2 M H ₂ SO ₄ | 99.9 | [39] |
| <i>N-n</i> -decylaniline  | -Decyl -(CH ₂) ₉ CH ₃ | 0.15 M | 0.5 M H ₂ SO ₄ | 99.9 | PM |

PM present method

to study this trend we have applied *N-n*-decylaniline for the extraction of thorium(IV) and we found that the results are predominant as compared to earlier reported methods.

Previously we have reported number of solvent extraction methods for the extraction separation and determination of other metal ions [25–33]. Here, we report the extraction behavior of thorium(IV) from H₂SO₄ media by using *N-n*-decylaniline as an extractant. In this study, we examined the number of a parameter such as acid and reagent concentration, phase ratio, shaking time, effect of various diluents, loading capacity and diverse ion for selective extraction of thorium(IV). We achieved better separation of thorium (IV) from binary and ternary mixture. This method is also applied for the extraction of thorium (IV) from monazite sand and gas mantle.

Experimental

All the chemical and reagents are of analytical grade and purchased from Sigma Aldrich. The pH of the solution was measured by using Elico digital pH meter model LI-120. A standard stock solution of thorium(IV) (1.0 mg/mL) was prepared by dissolving the adequate amount of Th(NO₃)₄·4H₂O in 5 mL concentrated HNO₃ and evaporated to moist dryness to remove nitric acid and finally diluted with double distilled water to 1 L calibrated volumetric flask. This stock solution was standardized gravimetrically [34] and used for further extraction study. The *N-n*-decylaniline was synthesized by reported Gardlund method [35], and its solution (% v/v) was prepared in xylene.

General extraction procedure

Aliquot solution containing 1 mg thorium(IV), 0.5 M H₂SO₄ was added to make a volume of 10 cm³ aqueous phase. To the aqueous phase 10 mL of organic phase of 0.15 M *N-n*-decylaniline in xylene was added and then transferred to separating funnel. The resulting aqueous and organic solution was shaken for 3 min and the two layers were allowed to separate. After phase disengagement aqueous phase was separated and evaporated to moist dryness and determined for thorium(IV) content, as the result shows that almost zero percent of thorium(IV) was found therefore, aqueous phase was discarded and organic phase was stripped with of 0.1 M nitric acid (2 × 10 mL). The stripped aqueous solution containing thorium(IV) was concentrated to moist dryness and diluted with water and pH of the solution was adjusted to 2 using dilute nitric acid, sodium hydroxide and determined complexometrically using xylenol orange as an indicator [36]. The total time required for the extraction procedure was about 20 min.

The metal distribution ratio (D) was calculated from the equation given below:

$$\text{Distribution ratio (D)} = \frac{[M]_{org.;total}}{[M]_{aq.;total}} \quad (1)$$

where [M]_{org.;total} and [M]_{aq.;total} represent the total concentration of metal ion that has equilibrated in the organic and aqueous phases, respectively.

The extraction efficiency (%E) was calculated by using the subsequent equation:

$$\text{Extraction efficiency}(\%E) = \frac{100D}{D + \frac{V_{aq}}{V_{org}}} \quad (2)$$

where V_{aq} and V_{org} refer to the volume of the aqueous and organic phase, respectively.

Results and discussion

Effect of concentration of *N-n*-decylaniline on extraction of thorium(IV)

Initially, the effect of concentration of *N-n*-decylaniline on extraction of thorium(IV) was studied from 0.5 M H_2SO_4 media and 0.05–0.5 M *N-n*-decylaniline in xylene by keeping phase ratio 1:1, Fig. 1. This study indicates that the extraction of thorium(IV) commenced at 0.05 M *N-n*-decylaniline and increases with increase in concentration and become quantitative at 0.15 M and remains constant up to 0.3 M *N-n*-decylaniline. Hence, to ensure the complete extraction of thorium(IV) 0.15 M *N-n*-decylaniline concentration was recommended for further extraction procedure.

Effect of acid concentration on extraction of thorium(IV)

Influence of the acid concentration on the extraction of thorium(IV) by using *N-n*-decylaniline in xylene was studied. In this study concentration of H_2SO_4 is varied over the range 0.1 M to 4.0 M while, 0.15 M *N-n*-decylaniline concentration in organic phase was kept constant and

extraction of thorium(IV) was carried out. The extraction of thorium(IV) was commenced at 0.01 M and becomes quantitative at 0.5 M. In the range of 0.5 M to 1.5 M H_2SO_4 acid concentration, extraction remains quantitative. Beyond that, the extraction of thorium(IV) goes on decreasing as shown in Fig. 2. This is because of the formation of stable ion-pairs of *N-n*-decylaniline with sulfuric acid, which prevent exchange of complexed ions, thereby decreasing extraction. Therefore, for further extraction study 0.5 M H_2SO_4 was adopted.

Effect of various diluents on extraction of thorium(IV)

The extractability and selectivity for the extraction of thorium(IV) by organic extractant are greatly affected by the nature of the solvents. Thus, the influence of nature of diluents such as xylene, toluene, benzene, chloroform, carbon tetrachloride, nitrobenzene, methyl isobutyl ketone, *n*-butanol and amyl acetate on the extraction of thorium(IV) was investigated. 0.15 M *N-n*-decylaniline diluted in above diluents and applied for the extraction of thorium(IV). The result shows that the extraction was quantitative in xylene, toluene, carbon tetrachloride, benzene and chloroform while other diluents such as nitrobenzene (62.5%), *n*-butanol (4.1%), methyl isobutyl ketone (25.3%) and amyl acetate (25.3%) shows incomplete extraction of thorium(IV). Hence, for further extraction study xylene adopted as a diluent for quantitative extraction due to its low dielectric constant, better phase separation, cost effective and clear phase separation.

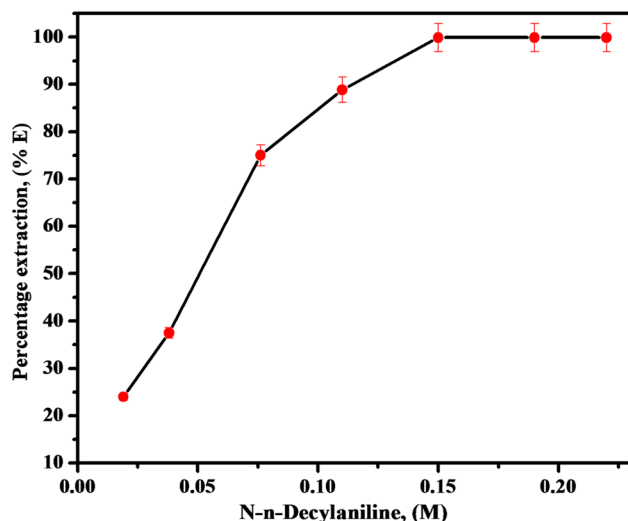


Fig. 1 Effect of amine concentration. Extraction condition: thorium(IV)=1 mg, H_2SO_4 =0.5 M, aqueous: organic=1:1, shaking time=3 min, strippant=0.1 M HNO_3 (2×10 mL)

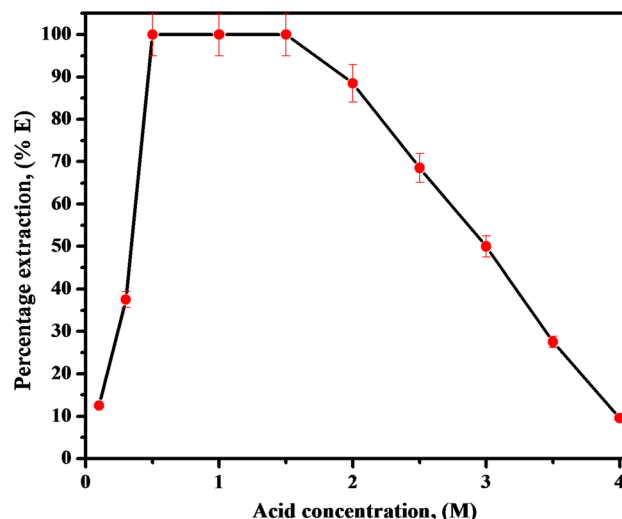


Fig. 2 Effect of acid concentration. Extraction condition: thorium(IV)=1 mg, aqueous: organic=1:1, shaking time=3 min, strippant=0.1 M HNO_3 (2×10 mL), *N-n*-decylaniline=0.15 M

Effect of stripping agents

Back extraction process is the reverse phenomenon of extraction and it is important step in the solvent extraction to separate the thorium(IV) from organic phase. To back extract thorium(IV) from *N-n*-decylaniline organic phase we have used different stripping agents such as HNO₃, HCl, ammonia, acetic acid, ammonia buffer and water. It was observed that thorium(IV) extracted with *N-n*-decylaniline in xylene and was completely stripped with 0.1–1.0 M nitric acid. Other stripping agents showed incomplete stripping. Result are tabulated in Table 2 Therefore, further stripping study was carried out with 0.1 M nitric acid.

Effect of aqueous to organic phase ratio on extraction of thorium(IV)

Extraction efficiency of 10 mL 0.15 M *N-n*-decylaniline was investigated by using various volume ratios of aqueous phase to organic phase from 1:1 to 20:1 as shown in (Table 3). The results indicate that the quantitative extraction occurred at a volume ratio of 1:1 to 2.5:1. beyond the ratio of 2.5:1 the extraction efficiency of thorium(IV) decreases with increase in phase ratio. Therefore, for further extraction study 1:1 phase ratio was recommended to avoid chemical loss.

Effect of equilibration time on extraction of thorium(IV)

The influence of equilibration time on the extraction of thorium(IV) was studied by using 0.15 M *N-n* decylaniline in xylene and the aqueous solution of 1 mg of thorium(IV) in 0.5 M H₂SO₄. The shaking time was varied from 5 s to 30 min. It was observed that, the percentage extraction of thorium(IV) reached 100% within a 2 min of equilibrium

Table 2 Effect of stripping agent concentrations on extraction of thorium(IV)

| Concentration (M) | HCl (%E) | Distribution ratio (D) | HNO ₃ (%E) | Distribution ratio (D) |
|-------------------|----------|------------------------|-----------------------|------------------------|
| 0.1 | 63.7 | 1.75 | 99.9 | 999 |
| 0.5 | 69.3 | 2.25 | 99.9 | 999 |
| 1.0 | 75.3 | 3.04 | 99.9 | 999 |
| 1.5 | 87.5 | 7 | 96.4 | 26.22 |
| 2.0 | 91.1 | 10.23 | 91.5 | 10.76 |
| 3.0 | 93.4 | 14.15 | 87.5 | 7.0 |
| 4.0 | 86.2 | 6.24 | 81.1 | 4.29 |
| 5.0 | 75.8 | 3.13 | 78.3 | 3.60 |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.15 M in xylene, H₂SO₄=0.5 M, aqueous: organic=1:1, shaking time=3 min, %E=percentage extraction, D=distribution ratio

Table 3 Effect of aqueous to organic ratio on extraction of thorium(IV)

| Aq:org | Percentage extraction (%E) | Distribution ratio (D) |
|--------|----------------------------|------------------------|
| 1:1 | 99.9 | 999 |
| 2:1 | 99.9 | 999 |
| 2.5:1 | 99.9 | 999 |
| 5:1 | 87.5 | 7 |
| 7.5:1 | 71.4 | 2.5 |
| 10:1 | 57.1 | 1.33 |
| 15:1 | 42.8 | 0.75 |
| 20:1 | 14.2 | 0.17 |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.15 M in xylene, H₂SO₄=0.5 M, shaking time=3 min, %E=percentage extraction, D=distribution ratio

time indicating that rapid attainment of extraction equilibrium was occurred, however, the prolong shaking period of 5 min does not effect on the quantitative extraction. Hence, for further study 3 min equilibrium time was selected to ensure the complete extraction of thorium(IV).

Nature of extracted species

By investigating conventional slope analysis method and experimental data we determined the stoichiometry of the extraction mechanism of thorium(IV). Slope value of Log D_[Thorium(IV)] versus Log C_[*N-n*-decylaniline] at 1.0 M and 1.5 M H₂SO₄ concentration was found to be 1.94 and 2.08 respectively (Fig. 3) and slope value of Log D_[Thorium(IV)] versus

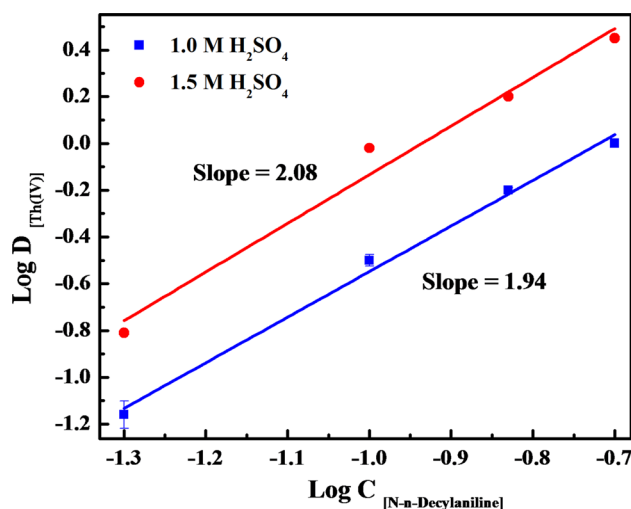


Fig. 3 Log–Log plot of Log D_[Thorium(IV)] versus Log C_[*N-n*-decylaniline]. Extraction condition: thorium(IV)=1 mg, aqueous: organic=1:1, shaking time=3 min, strippant=0.1 M HNO₃ (2×10 mL) *N-n*-decylaniline=0.10 M, H₂SO₄=1 M and 1.5 M

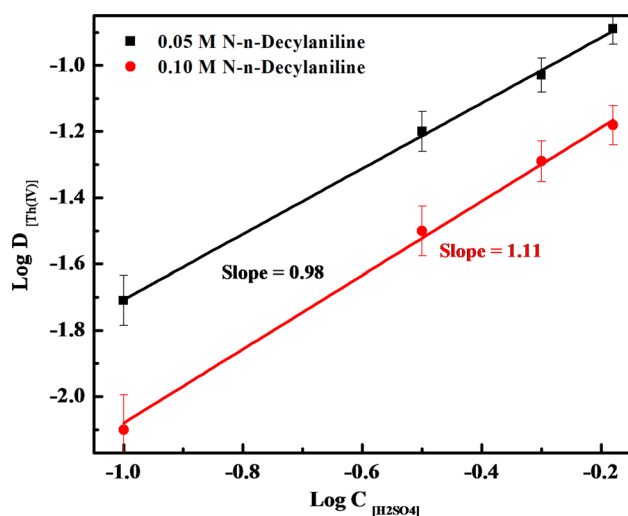
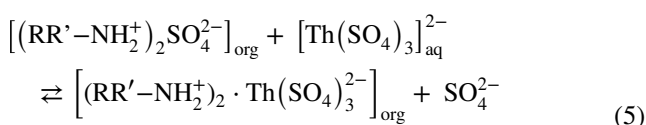
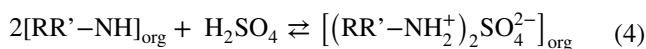
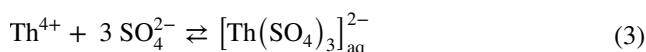


Fig. 4 Log-Log plot of $\text{Log } D_{[\text{Thorium(IV)}]}$ versus $\text{Log } C_{[\text{H}_2\text{SO}_4]}$. Extraction condition: thorium(IV)=1 mg, aqueous: organic=1:1, shaking time=3 min, strippant=0.1 M HNO_3 (2×10 mL) *N-n*-decylaniline=0.05 M and 0.10 M

$\text{Log } C_{[\text{H}_2\text{SO}_4]}$ at 0.05 M and 0.10 M of *N-n*-decylaniline concentration was found to be 0.98 and 1.11 respectively (Fig. 4). Hence, from slope analysis method the probable composition of the extracted species will be 1:2:1 (metal:extractant:acid). The probable extraction mechanism is as follows [23, 24].



where, $\text{R} = \text{C}_6\text{H}_5$ and $\text{R}' = \text{C}_{16}\text{H}_{27}$.

Effect of metal loading capacity of 0.15 M *N-n*-decylaniline

The extraction behavior thorium(IV) as a power of metal loading capacity of 0.15 M *N-n*-decylaniline was analyzed at various concentration of thorium(IV) between 0.5 and 5 mg. The investigation shows the significant loading of thorium(IV) over 10 mL of 0.15 M *N-n*-decylaniline occurs in the range of 0.5 mg to 4 mg, it means that up to 4 mg of thorium(IV) was tolerable at higher concentration. The amount of thorium(IV) transferred from the aqueous phase

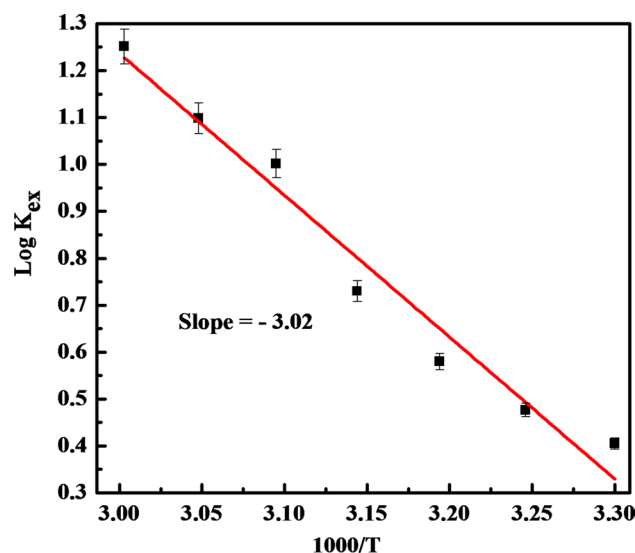


Fig. 5 Effect of temp study. Extraction condition: thorium(IV)=1 mg, aqueous: organic=1:1, shaking time=3 min, strippant=0.1 M HNO_3 (2×10 mL), *N-n*-decylaniline=0.10 M, $\text{H}_2\text{SO}_4=0.5$ M

to the organic phase after every contact time was confirmed by calculating the difference in the metal ion concentration in the aqueous phase before and after extraction. This study illustrates that 4 mg of thorium(IV) was loading capacity of 10 mL of 0.15 M *N-n*-decylaniline.

Effect of temperature on extraction of thorium(IV)

We studied the effect of temperature on the extraction of thorium(IV) in the range 303 K to 340 K, at 0.5 M H_2SO_4 solution using 10 mL 0.1 M *N-n*-decylaniline and was studied by contacting the phases for 3 min in thermostat. The results indicated that the distribution coefficient increases with increasing temperature. This change of the extraction equilibrium constant (K_{ex}) with temperature can be expressed using Van't hof equation.

$$D (\text{Log } K_{\text{ex}}) / d (1/T) = -(\Delta H) / (2.303 R) \quad (6)$$

The plot of the $\text{Log } K_{\text{ex}}$ versus $1000/T$ is liner with the slope value -3.02 (Fig. 5) and the enthalpy change of the extraction reaction was evaluated as $(\Delta H) = 57.82 \text{ kJ mol}^{-1}$. This showed that reaction is an endothermic process. The change in entropy (ΔS) and free energy (ΔG) was calculated using Eqs. 7 and 8 (Table 4).

$$(\Delta S) = (\Delta H) - (\Delta G) / T \quad (7)$$

$$(\Delta G) = -2.303 RT \text{Log } K_{\text{ex}} \quad (8)$$

Table 4 Effect of temperature on extraction of thorium(IV)

| Temp. (K) | 1000/T | Percentage extraction (%E) | D | Log D | Log K _{ex} | ΔG (KJ/mol) | ΔH (KJ/mol) | ΔS (KJ/mol) |
|-----------|--------|----------------------------|-------|-------|---------------------|-------------|-------------|-------------|
| 303 | 3.300 | 71.75 | 2.53 | 0.403 | 0.4052 | -2.350 | 57.82 | 7.949 |
| 308 | 3.246 | 74.91 | 2.98 | 0.474 | 0.4763 | -2.808 | | 9.307 |
| 313 | 3.194 | 79.08 | 3.78 | 0.577 | 0.5796 | -3.469 | | 11.270 |
| 318 | 3.144 | 84.25 | 5.34 | 0.727 | 0.7297 | -4.438 | | 14.140 |
| 323 | 3.095 | 90.90 | 9.98 | 0.999 | 1.0013 | -6.190 | | 19.345 |
| 328 | 3.048 | 92.58 | 12.47 | 1.095 | 1.0980 | -6.895 | | 21.199 |
| 333 | 3.003 | 94.66 | 17.72 | 1.248 | 1.2506 | -7.969 | | 24.107 |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.10 M in xylene, aqueous: organic=1: 1, H₂SO₄=0.5 M, shaking time=3 min, strippant=0.1 M HNO₃ (2×10 mL), T=temperature, %E=percentage extraction, D=distribution ratio, ΔG=Gibb's free energy, ΔH=enthalpy, ΔS=entropy

The negative value of free energy (ΔG) suggests that the reaction is spontaneous, while the positive entropy value proves that extraction of the thorium(IV) increases with increasing temperature.

Diverse ion study

The influence of various cations and anions on the developed extraction method of thorium(IV) was studied by using 10 mL 0.15 M *N-n*-decylaniline, 0.5 M H₂SO₄ within a relative error of 2%. The results indicates that, there was no interference shown by large number of the cations and anions. Eventhough, the cations which creates intereferece in the extraction procedure were masked by suitable masking agents prior to the extraction procedure. The determination of such cations are done by demasking those with proper reagents. The tollerence limit of various cations and anions are given in (Table 5).

Applications

As an extension, we applied the optimized process for the separation of thorium(IV) from different samples.

Separation of thorium(IV) from binary mixture

The proposed method permitted to the separation and determination of thorium(IV) from binary mixture containing Ba(II), Pb(II), U(IV), Mo(VI), Cd(II), Nd(III), Eu(III), Pd(II) each cation was investigated by a specific method [37, 38] and specific chromogenic reagent whereas thorium(IV) was determined complexometrically and shown in Table 6.

Sepration of thorium(IV) from ternary mixture

The applicability of the method for separation and determination of thorium(IV) from the ternary mixture of associated metal ion was studied. The complete extaction of thorium(IV) was carried out with the proposed method, on the other hand unextracted associated metal ions remain in the aqueous phase. The extracted thorium(IV) from the organic phase was stripped with 0.1 M HNO₃ and determined by 0.001 M EDTA by using xylenol orange indicator Table 7.

Analysis of thorium(IV) from monazite sand

The proposed method was successfully used for the analysis of monazite sand. In this study, a sample solution of monazite (100 μg mL⁻¹) was prepared by the authorized procedure. Sample solution was used for extraction of thorium(IV) as per our general extraction procedure, six-time replicate analysis was done. The amount of thorium(IV) found out by our procedure was 8.56% against 8.6%.

Separation of thorium(IV) from gas mantle

For this analysis, 1.0 g of commercial grade gas mantle was digested with 20 mL of H₂SO₄ for 3 h. The mixture was extracted with 0.1 M HCl and diluted to 100 mL. An aliquot of diluted solution was analyzed by general procedure. It was observed that cerium and beryllium were coextracted but not back stripped while magnesium was not coextracted. The extracted thorium(IV) was stripped and determined by

Table 5 Effect of diverse ion

| Metal ions added | Added as | Tolerance limit (mg) |
|----------------------|--|----------------------|
| Cr(II) ^d | CrCl ₂ | 05 |
| Mg(II) | MgSO ₄ ·7H ₂ O | 05 |
| Te(VI) | Na ₂ TeO ₃ | 05 |
| Ce(IV) | Ce(SO ₄) ₂ | 10 |
| Co(II) ^a | CoCl ₂ ·6H ₂ O | 10 |
| Ni(II) ^b | NiCl ₂ ·6H ₂ O | 10 |
| Fe(III) ^c | FeCl ₃ | 10 |
| Cu(II) ^e | CuSO ₄ ·5H ₂ O | 25 |
| Zn(II) | ZnSO ₄ ·7H ₂ O | 50 |
| Mn(II) | MnSO ₄ ·H ₂ O | 20 |
| Mo(VI) | MoCl ₆ | 25 |
| Cd(II) | CdCl ₂ | 20 |
| Hg(II) | HgCl ₂ | 15 |
| Li(I) | Li ₂ SO ₄ ·4H ₂ O | 15 |
| Al(III) | AlCl ₃ ·6H ₂ O | 05 |
| In(III) | In ₂ (SO ₄) ₃ ·5H ₂ O | 05 |
| La(III) | La ₂ O ₃ | 05 |
| Bi(III) | BiCl ₃ | 10 |
| Sn(II) | SnCl ₂ ·2H ₂ O | 10 |
| Co(II) | Co(NO ₃) ₂ ·6H ₂ O | 10 |
| Zr(IV) | ZrO(NO ₃) ₂ ·6H ₂ O | 10 |
| Cr(III) | CrCl ₃ ·6H ₂ O | 10 |
| Sr(II) | Sr(NO ₃) ₂ ·4H ₂ O | 3 |
| Gd(III) | Gd(NO ₃) ₃ | 3 |
| Dy(III) | Dy ₂ (SnO ₃) ₃ | 3 |
| Be(II) | Be(NO ₃) ₂ ·3H ₂ O | 3 |
| Y(III) | Y(NO ₃) ₃ | 3 |
| Ti(VI) | Ti(SO ₄) ₂ | 3 |
| Sb(III) | SbCl ₃ | 3 |
| U(VI) | UO ₂ (NO ₃) ₂ | 25 |
| Pb(II) | Pb(NO ₃) ₂ | 30 |
| Oxalate | Oxalic acid | 100 |
| Fluoride | Sodium fluoride | 100 |
| Nitrate | Sodium nitrate | 100 |
| Acetate | Sodium acetate | 100 |
| Tartrate | Sodium tartrate | 125 |
| Thiourea | Thiourea | 150 |
| Ascorbate | Ascorbic acid | 200 |
| Succinate | Sodium succinate | 300 |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.15 M in xylene, aqueous: organic=1:1, H₂SO₄=0.5 M, shaking time=3 min, strip-pant=0.1 M HNO₃ (2×10 mL)

^aCitrate, ^btartrate, ^cthiourea, ^dacetate, ^ethiocyanate, ^foxalate

^{a,b,c,d,e,f}Masking agents

Table 6 Separation and determination of thorium(IV) from binary mixture

| Metal ions | Amount taken (mg) | Average recovery (%E) | Chromogenic ligand | Ref. |
|------------|-------------------|-----------------------|--------------------|------|
| Th(IV) | 5 | 99.5 | | |
| Ce(IV) | 5 | 99.3 | Formaldehyde | [37] |
| Th(IV) | 5 | 99.8 | | |
| Cd(II) | 20 | 99.4 | PAN | [37] |
| Th(IV) | 5 | 99.5 | | |
| Pb(II) | 25 | 99.3 | Eriochrome Black-T | [37] |
| Th(IV) | 1 | 99.4 | | |
| Nd(III) | 2 | 99.2 | Arsenazo-I | [38] |
| Th(IV) | 1 | 99.7 | | |
| Sm(III) | 2 | 99.2 | Arsenazo-I | [38] |
| Th(IV) | 1 | 99.8 | | |
| Zr(IV) | 2 | 99.2 | Alizarin red-S | [38] |
| Th(IV) | 5 | 99.7 | | |
| Mo(VI) | 15 | 99.2 | Thiocyanate | [38] |
| Th(IV) | 5 | 99.8 | | |
| U(IV) | 25 | 99.5 | Arsenazo-I | [38] |
| Th(IV) | 1 | 99.6 | | |
| La(III) | 1 | 99.5 | Arsanazo-I | [38] |
| Th(IV) | 1 | 99.7 | | |
| Eu(III) | 1 | 99.6 | Arsanazo-I | [38] |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.15 M in xylene, aqueous: organic=1:1, H₂SO₄=0.5 M, shaking time=3 min, strip-pant=0.1 M HNO₃ (2×10 mL)

general method. The content of thorium(IV) was 23.6% against standard value of 24%.

Conclusion

The proposed method used for the extraction and separation of thorium(IV). The investigation leads to a number of conclusions including;

1. The result shown that *N-n*-decylaniline have good extractability for thorium(IV) in H₂SO₄ medium.
2. This method can be used for the separation thorium(IV) from ternary mixture as well as real sample such as monazite sand, gas mantle.
3. Long chain amines have magnificent extraction appearance with large number of anionic metal complexes. Which are vastly used for extraction of thorium.

Table 7 Separation and determination of thorium(IV) from ternary mixtures

| Metalion | Amount taken (mg) | Amount found (mg) | Recovery % |
|----------|-------------------|-------------------|------------|
| Th(IV) | 1 | 0.99 | 99.4 |
| Cd(II) | 10 | | |
| La(III) | 10 | | |
| Th(IV) | 1 | 0.99 | 99.6 |
| Nd(III) | 10 | | |
| Sm(III) | 10 | | |
| Th(IV) | 1 | 0.99 | 99.5 |
| Mo(VI) | 2 | | |
| Zr(IV) | 2 | | |
| Th(IV) | 1 | 0.99 | 99.4 |
| La(III) | 10 | | |
| Pb(II) | 10 | | |
| Th(IV) | 1 | 0.99 | 99.5 |
| U(VI) | 10 | | |
| La(III) | 10 | | |
| Th(IV) | 1 | 0.99 | 99.7 |
| Ce(IV) | 5 | | |
| U(VI) | 10 | | |
| Th(IV) | 1 | 0.99 | 99.5 |
| Zn(II) | 30 | | |
| U(VI) | 20 | | |

Condition thorium(IV)=1 mg, *N-n*-decylaniline=0.15 M in xylem, aqueous: organic = 1: 1, H₂SO₄=0.5 M, shaking time=3 min, strip-pant=0.1 M HNO₃ (2 × 10 mL)

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Liquid–liquid extraction of uranium(VI) from weak sodium acetate medium using 2-octylaminopyridine: real sample analysis

Gurupad D. Kore^{1,2} · Sunil B. Zanje³ · Arjun N. Kokare¹ · Vishal J. Suryavanshi¹ · Mansing A. Anuse¹ · Sanjay S. Kolekar¹

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Abstract

The analytical technique has been developed for the extraction and determination of uranium(VI). This process is based on the ion-pair complex formation of uranium(VI) with 2-octylaminopyridine in xylene. Uranium(VI) is quantitatively extracted by optimizing the parameters of solvent extraction in presence of sodium acetate, such as pH, concentration of weak organic acids, strippant, shaking period, solvent study, and concentration of extractant. A mechanism of extraction was proposed based on the slope ratio analysis method. The interference of various cations and anions was also investigated. The versatility of the developed method was investigated by employing it to binary and ternary mixtures. The robustness of the method was demonstrated by determining uranium(VI) in the bone sample.

Keywords Solvent extraction · Uranium(VI) · 2-octylaminopyridine · Sodium acetate · Bone sample

Introduction

Uranium is the most vital element for nuclear energy [1]. It is universal that uranium is toxic and is being radioactive; thus the safety profiles for uranium compounds are well established [2]. Hence it is one of the elements for which world health organization (WHO) norms are most stringent (30 µg/L) in drinking water. This is because uranium is a relatively contaminating element in many surface or near-surface environments, its geological exploration requires the measurement of trace quantities of metal ions in water and other samples [3–5]. The natural source for uranium is monazite which contains a sizeable amount of uranium. Consequently, the separation purification of uranium is of great practical importance. The methodology adopted for extraction and purification from ore and nuclear fuel reprocessing has always attracted the attention of separation

scientists. The efficient and selective extraction of uranium from aqueous solution has been a subject of significant interest because of the global shortage of uranium sources and radioactive contaminants in the environment, soil, water in which versatile new materials that can separate efficiently desired ore [6–8].

A large number of modern analytical tools have been available for the determination of uranium in a wide variety of samples, The increasing availability of powerful instrumental techniques such as neutron activation analysis (NAA), energy dispersive X-ray fluorescence (EDXRF), inductively coupled plasma atomic emission spectrometry (ICP-AES); inductively coupled plasma emission mass spectrometry (ICP-MS) has enabled the analysis of complex mixtures with high accuracy and precision [9–14]. Even though these techniques provide high sensitivity and favorable detection limit, their application requires rather expensive equipment and leads to higher running cost [15]. Generally, solvent extraction and spectrophotometric technique are widely used to separate and determine uranium(VI) [16–20].

In this context, attentions have been given for the development of soft donor complexing agents as extractants for Ln/An separation. Relatively soft donor atom such as nitrogen prefers 5f elements than 4f elements, providing the higher selectivity than harder oxygen atoms. Concerning this high molecular weight, amines act as better extractant

✉ Gurupad D. Kore
gdkore1027@gmail.com

¹ Analytical Chemistry Research Laboratory, Department of Chemistry, Shivaji University, Kolhapur 416004, India

² Department of Chemistry, Padmabhushan Vasantraodada Patil Mahavidyalaya, Kavathemahankal, MS 416405, India

³ Department of Chemistry, J. M. Patel Arts, Commerce and Science College, Bhandara, MS 441904, India

to oxygen-containing extractants like tri-*n*-butyl phosphate (TBP), trioctyl phosphine oxide (TOPO), and dioctyl sulfoxide (DOSO). This difference allows for preferential coordination with actinides (5f) over lanthanides. Hence amines with soft nitrogen atoms are a subject of extensive research as a potential extractant of actinides from high-level liquid waste (HLLW) [21]. The literature survey demonstrates that the solvent extraction of uranium(VI) can be carried out by various extractants like tri-*n*-butyl phosphate, trioctyl phosphine oxide and dioctyl sulfoxide [22], cyanex-272 [23]. This manuscript describes the extraction and separation of uranium(VI) from bone sample and associated elements using 2-octylaminopyridine (2-OAP) in sodium acetate medium. The advantage of this method over the earlier method is that extraction is in acetate medium which is a relatively greener approach than the earlier where extraction was carried out in mineral acids. The concentration of 2-OAP is moderate and it is synthesized in a laboratory at a low cost. The method is rapid, simple, and applicable for extraction and determination of uranium(VI) from binary, ternary mixture and bone sample.

Experimental

Apparatus

Digital spectrophotometer optimized α was used for the absorption measurement using 1 cm quartz cells. An Elico digital pH meter model LI-127 is used to measure the pH. All weighing operations were carried out by METTLER TOLEDO analytical single pan balance model ML-204/-01 having accuracy 1×10^{-4} g.

Reagents

Standard uranium(VI) solution

A solution of uranium(VI) (1 mg mL^{-1}) was prepared by dissolving 2.109 g of uranyl nitrate hexahydrate [$\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$]; (Analytical R. grade, BDH, Poole, UK) in water containing one mL of conc., HNO_3 . The solution was diluted with water to one liter in a volumetric flask. Standardized by precipitating ammonium diuranate and ignited to U_3O_8 , and prepared working solution by appropriate dilution in 0.01 M HNO_3 [24].

2-Octylaminopyridine (2-OAP)

2-OAP was synthesized by the Borsch and Petrukhin method [25] and the working extractant solution having molarity (0.05 M) was prepared in xylene.

Buffer solution: pH 8.6

Dissolved 2 g of boric acid and 2 g of potassium chloride in water followed by 6.5 mL of 1 M NaOH and diluted to 500 mL.

Arsenazo-I

Arsenazo-I (0.05% w/v) was prepared by dissolving 0.05 g of arsenazo-I (s. d. Fine –chem. limited) in water.

All reagents and metal salts used are of analytical grade and their solutions were prepared in water and mineral acid. Double distilled water was used throughout the experiment.

Recommended procedure

A solution containing 200 μg uranium(VI), was mixed with 0.01% w/v sodium acetate and pH was adjusted to 4.0 with dil. HCl and NaOH by maintaining total dilution volume to 25 mL and then transferred to 125 mL separatory funnel. 10 mL 0.05 M 2-OAP in xylene as an extractant was added in separatory funnel and equilibrated for 5 min, two phases were allowed to separate. The uranium(VI) extracted in the organic phase was back-extracted with 3 M HCl (3×10) mL as a strippant solution.

The stripped solution containing uranium(VI) was evaporated to moist dryness, then 0.5 mL of conc. perchloric acid was added to decompose organic matter and diluted to 30 mL with water. Again it was evaporated to moist dryness and extracted into 30 mL of water. The pH was adjusted to 4.0 and transferred it into 50 mL volumetric flask, 4 mL 0.05% w/v arsenazo(I) solution was added and followed by 10 mL of buffer solution (pH 8.6) and diluted up to the mark. The absorbance was measured at 600 nm against a reagent blank [27].

Results and discussion

Effect of pH

The extraction of uranium(VI) was carried by 10 mL of 0.05 M 2-OAP in xylene in the presence of 0.01 M sodium acetate from pH 1–10. The study elucidates that the quantitative extraction was achieved in the pH range 3.8–4.8 (Fig. 1). With an increase in pH, the extraction decreases because, at higher pH, uranium(VI) in acetate medium will form a less stable ion-pair complex with 2-OAP. The pH 4.0 was selected for further extraction.

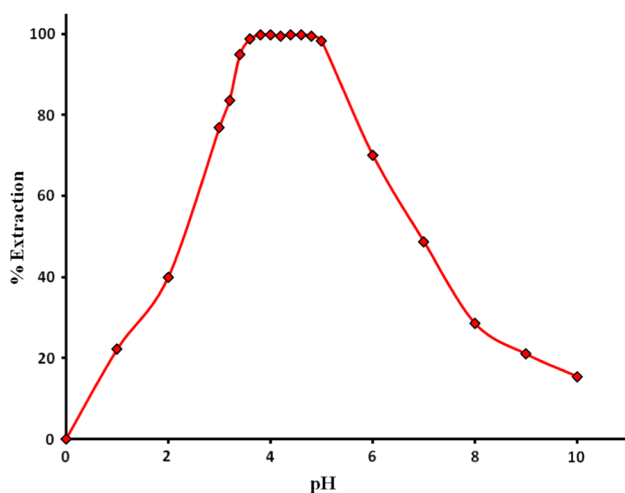


Fig. 1 Effect of pH on extraction of U(VI)-2-OAP complex. Uranium(VI)=200 μg , sodium acetate=0.01%, 0.05 M 2-OAP=10 mL, solvent=xylene, aqueous/organic = 2.5 / 1

Impact of weak organic acid concentration

The distribution ratio (D) of uranium(VI) was investigated at pH 4.0 with 10 mL of 0.05 M 2-OAP in xylene in the presence of varying concentrations of different weak organic anions like acetate, succinate, malonate, and citrate. Quantitative extraction of uranium(VI) was found from acetate and succinate media. However, acetate gives more reproducible results, and more importantly it is greener, cost-effective. The weak acid curve of sodium acetate indicates that quantitative extraction was taking place in the conc. range of 0.008 to 0.011 M. In general procedure 0.01 M sodium acetate was recommended throughout the experiment (Fig. 2). The salicylate, malonate, citrate, and oxalate do not give quantitative extraction of uranium(VI) as there was no formation of stable ion-pair complexes.

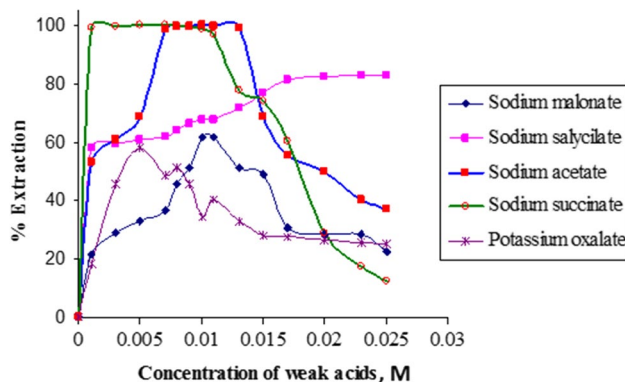


Fig. 2 Effect of weak acids concentration on extraction of U(VI)-2-OAP ion-pair complex. Uranium(VI)=200 μg , pH=4.0, 0.05 M 2-OAP=10 mL, solvent=xylene, aqueous/organic = 2.5/1

Effect of 2-OAP concentration

The concentration of 2-OAP was studied in a concentration range 0.001 to 0.5 M to optimize extraction conditions. The study reveals that extraction increases up to 0.035 M and remained constant up to 0.06 M. However further increase in reagent concentration, extraction decreases this might be due to the formation of stable 2-OAP-acetate species. Therefore for quantitative extraction 10 mL 0.05 M of 2-OAP was used throughout the experiment (Fig. 3).

Solvent study

The use of a suitable solvent is very vital in solvent extraction. The various solvents were studied such as amyl alcohol, 1,2-dichloroethane, dichloromethane, xylene, nitrobenzene, n-butanol, kerosene, methyl-*isobutyl*ketone, chloroform, toluene, benzene (Table 1). The extraction of uranium(VI) was found to be quantitative in xylene and nitrobenzene with 0.05 M 2-OAP. It was found that there is any significant relation between dielectric constant and percentage extraction, xylene was selected as solvent for extraction of uranium(VI) which has low cost and showed clear phase separation.

Influence of stripping agents

Stripping is the reverse of extraction or back extraction which directly affects the extraction of uranium(VI). The back extraction uranium(VI) from the loaded organic phase was performed with stripping agents such as HNO_3 , HCl , CH_3COOH , NH_3 , NaOH for the quantitative extraction of uranium(VI) with 10 mL of 0.05 M 2-OAP. There was quantitative recovery of uranium(VI) with HCl

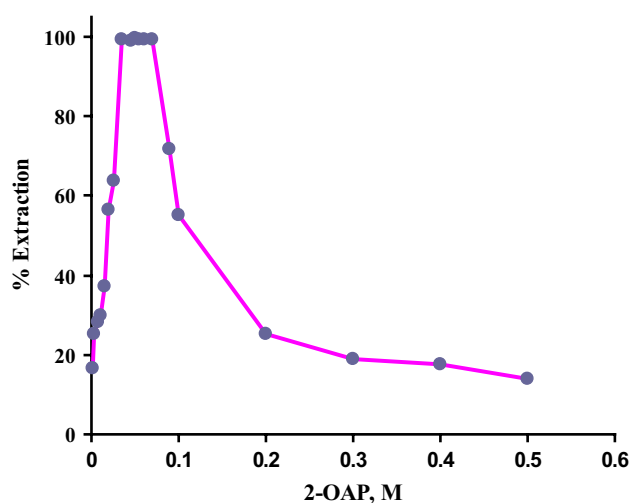


Fig. 3 Effect of 2-OAP concentration on extraction of uranium(VI). Uranium(VI)=200 μg , pH=4.0, sodium acetate=0.01%, solvent=xylene, aqueous/organic = 2.5/1

Table 1 The solvent study for quantitative extraction of U(VI)

| Solvent | Dielectric constant, ϵ | Percentage extraction, %E | Distribution ratio, D |
|-------------------------------|---------------------------------|---------------------------|-----------------------|
| Amyl alcohol | 13.90 | 48.7 | 2.37 |
| 1,2-Dichloroethane | 10.50 | 54.1 | 2.95 |
| Dichloromethane | 9.08 | 64.9 | 4.63 |
| Xylene | 2.30 | 100 | ∞ |
| Nitrobenzene | 34.82 | 94.8 | 45.95 |
| <i>n</i> -Butanol | 17.80 | 34.0 | 1.29 |
| Kerosene | 1.80 | 67.5 | 5.20 |
| Methyl <i>isobutyl</i> ketone | 13.11 | 84.5 | 6.51 |
| Chloroform | 4.40 | 63.9 | 4.43 |
| Toluene | 2.38 | 79.4 | 9.62 |
| Benzene | 2.28 | 44.5 | 4.96 |

in the range 2.5–4 M. Hence 3 M HCl, was recommended for further study (Fig. 4). The stripping mechanism of uranium(VI) is represented.

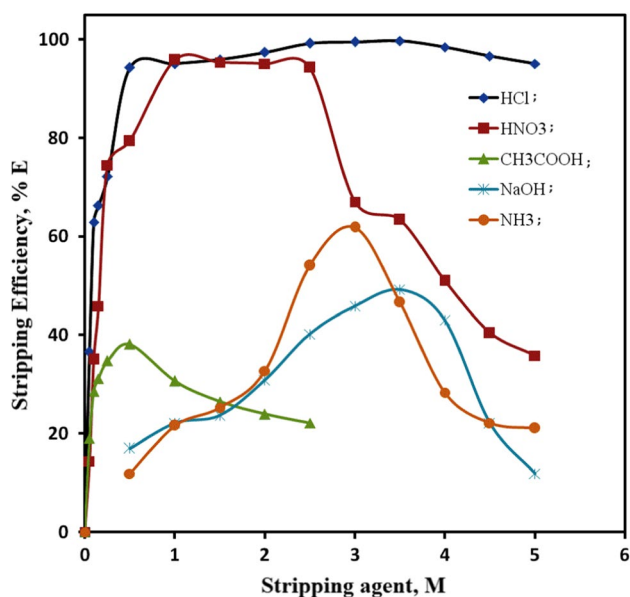
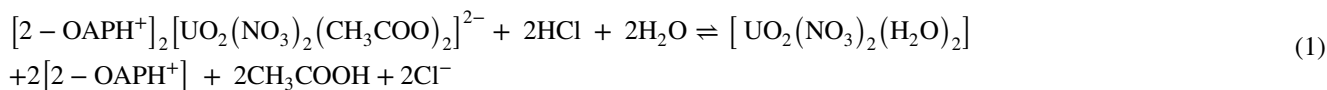


Fig. 4 Influence of stripping agent on extraction of uranium(VI). Uranium(VI)=200 μg , pH=4.0, 0.05 M 2-OAP=10 mL, solvent = xylene, aqueous/organic = 2.5/1

Effect of organic to aqueous volume ratio

The different volumes of aqueous phase to organic phase was investigated by keeping organic phase volume constant. The investigation was carried out in the range of 1:1–1:30. It was found that 1:1–1:5 ratios give quantitative extraction of uranium(VI). Beyond 1:5 ratio the distribution ratio decreases because of lack of 2-OAP extractant due to an increase in volume (Fig. 5). Therefore 1:2.5 ratio of organic to aqueous was recommended for the proposed method for practical suitability to avoid the losses of chemicals.

Metal loading capacity

Extraction of uranium(VI) was examined as a function of metal loading capacity at various concentration of uranium(VI) in the range of 100–1500 μg per 10 mL. The quantitative extraction took place in the range 100–900 μg . It means that to extract up to 900 μg of uranium(VI), 10 mL 0.05 M 2-OAP was enough and thereafter extrac-

tion decreases. Illustrating that there was less availability of 2-OAP. Therefore the loading capacity of 10 mL of 0.05 M 2-OAP was 900 μg of uranium(VI).

Stoichiometry of extracted species

The extraction mechanism of uranium(VI) was proposed by examining the experimental data and based on the slope

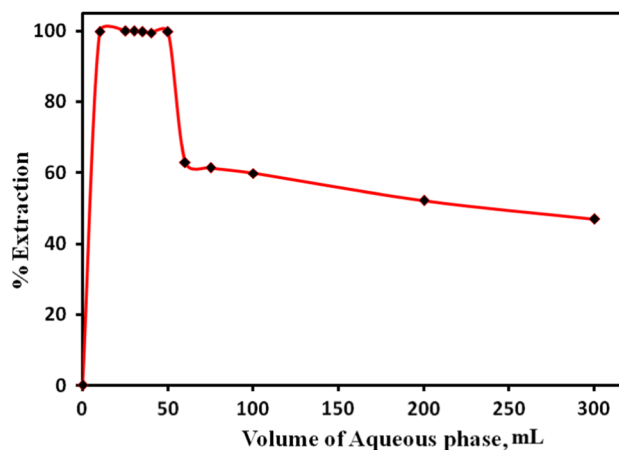


Fig. 5 Effect of organic to aqueous volume ratio on extraction of uranium(VI). Uranium(VI)=200 μg , pH=4.0, 0.05 M 2-OAP=10 mL, solvent = xylene, sodium acetate = 0.01%

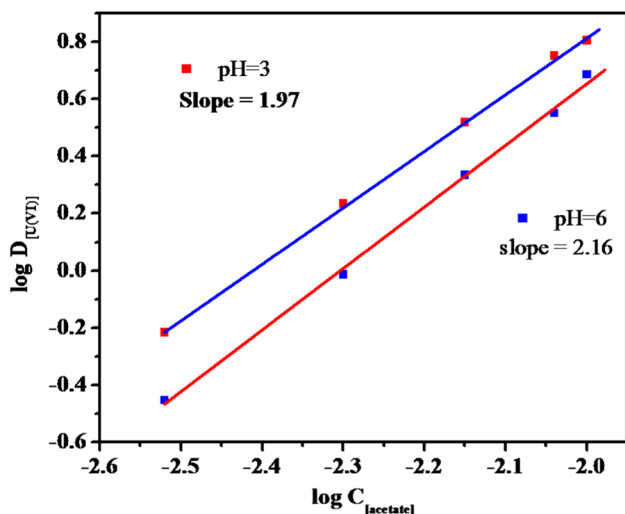


Fig. 6 Stoichiometry of uranium(VI), Plot of $\text{Log } D_{[\text{U(VI)}]}$ versus $\text{Log } C_{[\text{malonate}]}$. Uranium(VI)=200 μg , $\text{pH}=4.0$, $0.05 \text{ M } 2\text{-OAP}=10 \text{ mL}$, solvent = xylene, aqueous/organic = 2.5/1

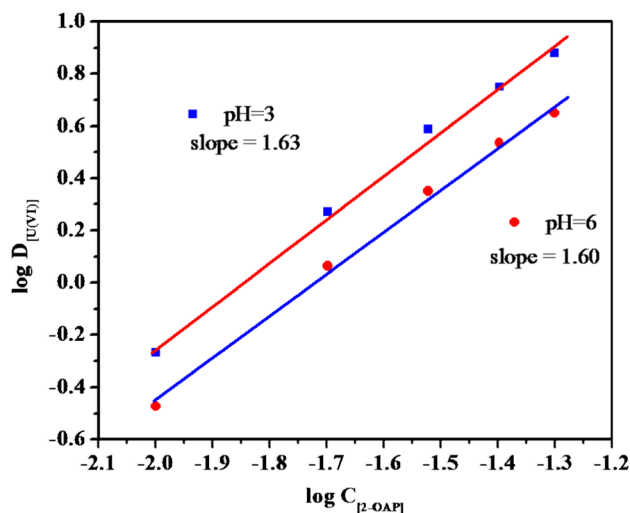


Fig. 7 Stoichiometry of uranium(VI), plot of $\text{Log } D_{[\text{U(VI)}]}$ versus $\text{Log } C_{[2\text{-OAP}]}$. Uranium(VI)=200 μg , $\text{pH}=4.0$, $0.05 \text{ M } 2\text{-OAP}=10 \text{ mL}$, solvent = xylene, aqueous/organic = 2.5/1

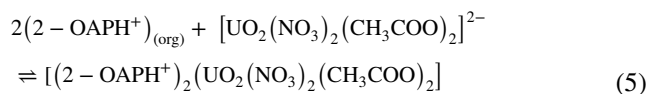
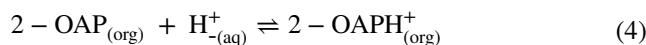
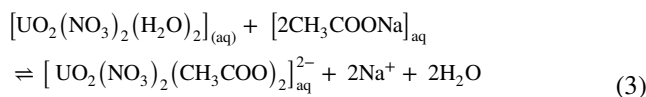
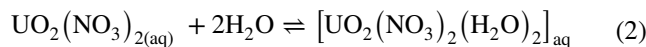
Table 2 The influence of foreign ions on extraction of uranium(VI)

| Tolerance limit in mg | Foreign ions added |
|-----------------------|---|
| 1 | Th(IV) ^a , Zr(IV) ^b , Pb(II) ^c , Mn(II) ^a |
| 2 | Co(II), Sn(II), Ca(II), Ni(II), Al(III), Zn(II), Fe(III), Nd(III), Bi(III), Mg(II), Se(IV), Sr(III), Te(IV) |
| 3 | Ba(II), Cd(II), V(V), Ag(I), Sb(III), In(III), Ru(III), Ga(III), Hg(II) |
| 4 | Mo(VI), Ce(IV), Tl(III), La(III), W(VI), Mn(II), Cu(II) |
| 10 | Ascorbate, iodide, malonate, salicylate, tartarate, thiourea EDTA |
| 15 | Thiosulphate, chloride, bromide, nitrate, succinate |
| 25 | Citrate, thiocyanate, nitrite, sulphate |

a = citrate, b = oxalate, c = thiosulphate

ratio analysis method. The plot of $\text{log } D_{[\text{U(VI)}]}$ versus $\text{log } C_{[\text{acetate}]}$ at fixed $\text{pH } 3$ and 6 was linear with slopes 1.97 and 2.16 respectively. This indicates that two acetate ions react with one UO_2^{2+} species (Fig. 6).

The plot of $\text{log } D_{[\text{U(VI)}]}$ versus $\text{log } C_{[2\text{-OAP}]}$ at fixed $\text{pH } 3$ and 6 showed a slope 1.63 and 1.60 respectively. Which illustrates that two moles of 2-OAP take part in reaction with one mole of uranium(VI) (Fig. 7). Therefore the slope analysis method proposes the possible composition of species as 1:2:2 (Metal:acetate:2-OAP). The probable mechanism of extraction based on the slope ratio analysis method as follows



The effect of foreign ions

The interference of different foreign cations and anions on the extraction of uranium(VI) was examined with 0.01 M sodium acetate and at $\text{pH } 4$. The study showed that there was a sufficient tolerance limit for anions and cations. However the Th(IV), Zr(IV), Pb(II), Mn(VII) showed interference which was eliminated by the use of sequestering agent and tolerance limit was enhanced to cause allowed $\pm 2\%$ error in the recovery of uranium(VI) (Table 2).

Applications

Separation of uranium(VI) from associated metal ions

The versatility of the proposed method was checked by carrying out extraction of uranium(VI) with various associated metal ions such as Zr(IV), Ce(IV), Y(III), Th(IV), La(III), Nd(III), Sm(III), Cd(II), Pb(II), Ba(II) and Ru(III) with 10 mL of 0.05 M 2-OAP in xylene from 0.01 M acetate medium. A very few metal ions like Zr(IV), Th(IV), Pb(II) have interfered which are masked by suitable masking agents. Added metal ion was determined by a reported method using chromogenic reagent spectrophotometrically [24, 26–28] whereas uranium(VI) was determined spectrophotometrically by aresnazo-I method (Table 3).

Separation of uranium(VI) from ternary mixture

A ternary mixture of uranium(VI) with Th(IV), Zr(IV); La(III), Ce(IV); Cd(II), Pb(II); Th(IV), Fe(II); Th(IV), Pd(II); Y(III), La(III); Ru(III), Pd(II); Sm(III), Nd(III); Pb(II), Th(IV); Zr(IV), Ru(III); were prepared and are subjected to extraction by general procedure. Associated metal ions remained in the aqueous phase whereas from loaded organic phase containing uranium(VI) was stripped with 3 M HCl (3 × 10) mL and determined spectrophotometrically by arsenazo-I (Table 4). The ions like Zr(IV) and Th(IV) have interfered but their interference was removed by using a suitable masking agent.

Table 3 Binary mixture separation of uranium(VI) from associated metal ions

| Metal ions | Amount taken in µg | Average recovery in % | Relative standard deviation, % | Chromogenic ligand |
|----------------------|--------------------|-----------------------|--------------------------------|----------------------|
| U(VI) | 200 | 99.7 | 0.13 | Arsenazo—I |
| Zr (IV) ^a | 400 | 99.1 | 0.15 | Alizarin red—S |
| U(VI) | 200 | 99.5 | 0.08 | |
| Ce(IV) | 300 | 99.8 | 0.09 | Formaldehyde |
| U(VI) | 200 | 99.7 | 0.10 | |
| Y(III) | 75 | 99.9 | 0.05 | Arsenazo—I |
| U(VI) | 200 | 99.5 | 0.12 | |
| Th(IV) ^b | 40 | 99.9 | 0.08 | Arsenazo—III |
| U(VI) | 200 | 99.7 | 0.07 | |
| La (III) | 250 | 99.5 | 0.16 | Arsenazo—I |
| U(VI) | 200 | 99.7 | 0.12 | |
| Sm(III) | 200 | 99.5 | 0.11 | Arsenazo—I |
| U(VI) | 200 | 99.7 | 0.05 | |
| Pb(II) ^c | 80 | 98.4 | 0.09 | PAR |
| U(VI) | 200 | 99.7 | 0.13 | |
| Cd(II) | 40 | 99.7 | 0.16 | PAR |
| U(VI) | 200 | 99.5 | 0.07 | |
| Ru(III) | 400 | 99.7 | 0.11 | Thiourea |
| U(VI) | 200 | 99.7 | 0.07 | |
| Fe(II) | 400 | 99.6 | 0.16 | Ammonium thiocyanate |
| U(VI) | 200 | 99.7 | 0.13 | |
| Nd(III) | 200 | 99.7 | 0.06 | Arsenazo—I |
| U(VI) | 200 | 99.5 | 0.08 | |
| Pd(II) | 250 | 99.7 | 0.11 | 4-ChloroPTPT |

*Average of five determinations

a = 10 mg of oxalate, b = 10 mg citrate, c = 10 mg thiosulphate

Table 4 Separation of U(VI) from synthetic mixture

| Metal ions | Amount taken in µg | Recovery of U(VI)* % | Relative standard deviation % |
|------------|--------------------|----------------------|-------------------------------|
| U(VI) | 200 | 99.7 | 0.7 |
| Th(IV) | 40 | | |
| Zr(IV) | 400 | | |
| U(VI) | 200 | 99.5 | 0.13 |
| La(III) | 500 | | |
| Ce(IV) | 500 | | |
| U(VI) | 200 | 99.5 | 0.09 |
| Cd(II) | 500 | | |
| Pb(II) | 500 | | |
| U(VI) | 200 | 99.2 | 0.11 |
| Th(IV) | 500 | | |
| Fe(II) | 500 | | |
| U(VI) | 200 | 99.7 | 0.17 |
| Th(IV) | 500 | | |
| Pd(II) | 500 | | |
| U(VI) | 200 | 99.7 | 0.16 |
| Y(III) | 500 | | |
| La(II) | 500 | | |
| U(VI) | 500 | 99.5 | 0.19 |
| Ru(III) | 500 | | |
| Pd(II) | 500 | | |
| U(VI) | 200 | 99.2 | 0.09 |
| Sm(III) | 500 | | |
| Nd(III) | 500 | | |
| U(VI) | 500 | 99.2 | 0.11 |
| Pb(II) | 500 | | |
| Th(IV) | 500 | | |
| U(VI) | 200 | 99.5 | 0.17 |
| Zr(III) | 500 | | |
| Ru(III) | 500 | | |

*Average five determinations

Determination of uranium(VI) from bone sample

The beauty of the proposed method was that we are successfully separated and determined uranium(VI) from a bone sample with 0.05 M 2-OAP as an extractant. The bone sample was collected carefully and crushed to suitable fineness, dried perfectly by keeping it in an oven at temperature 363 K for about two hours. The sample was cooled and 0.900 g was transferred in beaker, 2 mL conc. perchloric acid was added and followed by 5 mL conc. nitric acid and heated up to moist dryness on hot plate. The residue was extracted in water and diluted to 25 mL with water. One mL of sample solution was employed for the extraction of uranium(VI) by the proposed method and determined uranium(VI) by arsenazo-I method (Table 5).

Conclusion

The solvent extraction of uranium(VI) from weak organic acid media by 2-OAP as an extractant was investigated. The optimum conditions for the extraction of uranium(VI) were investigated. The extraction mechanism was proposed on the basis of slope ratio analysis method. The beauty of proposed method was that it was successfully employed for the determination of uranium(VI) from a synthetic mixture of associated metal ions and bone sample. The method is simple, reliable and reproducible. It does not require sophisticated instrumentation. The extraction of uranium(VI) was carried out from acetate medium, this shows that the method is eco-friendly belong to green chemistry approach.

Table 5 Separation of uranium(VI) from bone sample

| Sample | Reported value of uranium(VI) µg /g | Uranium found by proposed* method µg /g | Relative standard deviation % |
|--------------------|-------------------------------------|---|-------------------------------|
| Animal bone sample | 360 | 359.5 | 0.008 |
| | 360 | 359.0 | 0.007 |
| | 360 | 359.0 | 0.01 |
| | 360 | 359.3 | 0.006 |
| | 360 | 359.5 | 0.009 |

*Average of five determination

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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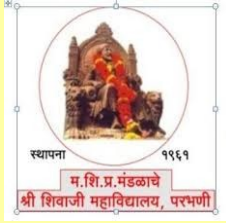
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|---------|---------|---------|---------|---------|---------|---------|---------|
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राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल

के अंतर्गत

मॉड्यूल 3 : संचार कौशल, मोड और ज्ञान प्रसार

को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)



**This is to certify that
SARJERAO EKNATH NARWADE**

NITTT Registration No: 20202101643

has successfully completed

**Module 3 : Communication Skills, Modes and Knowledge Dissemination
of**

National Initiative for Technical Teachers Training

Director
NITTTTR, Bhopal



Director
NITTTTR, Chandigarh



Member Secretary
AICTE



Director
NITTTTR, Chennai



Director
NITTTTR, Kolkata



FEBRUARY 2021

Roll No: NPTEL20HS62S71800029

To
AMIT KUMAR CHAVAN
SAMRAT ASHOK NAGAR
NEAR WATER TANK
MANGAON
MAHARASHTRA - 416118
PH. NO :9689043199



| Score | Type of Certificate |
|-------|------------------------|
| >=90 | Elite+Gold |
| 75-89 | Elite+Silver |
| >=60 | Elite |
| 40-59 | Successfully Completed |
| <40 | No Certificate |

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
AMIT KUMAR CHAVAN
for successfully completing the course

Postmodernism in Literature

with a consolidated score of **55** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 24.58/25 | Proctored Exam | 30/75 |
|--------------------|----------|----------------|-------|

Devendra Jalihal

Total number of candidates certified in this course: 76

[Handwritten signature]



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTRAODADA
PATIL INSTITUTE OF TECHNOLOGY**
Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Smita Sagar Patil** has participated in the **Two Days Online Workshop on "Self Image Building and Emotional Intelligence (EQ)"** organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held on **3rd and 6th July,2020.**

Certificate ID - IV5VLW-CE000116

Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal





ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Vikas Laxman Karade** from **P V P I T Budhgaon, Sangli Maharashtra** has participated and successfully completed the **online workshop on Universal Human Values** on the theme **“Inculcating Universal Human Values in Technical Education”** during **2-6 July, 2020** as organized by **All India Council for Technical Education(AICTE)**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTRAODADA
PATIL INSTITUTE OF TECHNOLOGY**
Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Ms. Priyanka D. Patil** has participated in the **Two Days Online Workshop on "Self Image Building and Emotional Intelligence (EQ)"** organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held on **3rd and 6th July,2020**.

Certificate ID - IV5VLW-CE000026

Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal





Dr. Babasaheb Ambedkar Technological University, Lonere
N.K. ORCHID COLLEGE OF ENGG. & TECH., Solapur



CERTIFICATE OF PARTICIPATION

Awarded to

Prof. Vikas Karade

Has successfully completed the Faculty Development Program on Digitizing Engineering Graphics course under DBATU with supporting products AutoCAD™ & Autodesk® Fusion 360™ organized by Autodesk and N. K. Orchid college of Engineering and Technology, Solapur from 20th -24th July 2020.

Dr M Sadaiah
Prof. Mechanical,

Dr J. B. Dafedar
Principal NKOCET,



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that

Vikas Karade

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the **One Week Online Faculty Development Program (FDP)** on the theme *“Communication Skills in English for Teacher” (Train the Trainer)* during **14th-19th September, 2020** organized by **First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that

Ms. Priyanka D. Patil

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the **One Week Online Faculty Development Program (FDP)** on the theme *“Communication Skills in English for Teacher” (Train the Trainer)* during **14th-19th September, 2020** organized by **First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that
Rajendra More

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the **One Week Online Faculty Development Program (FDP)** on the theme *“Communication Skills in English for Teacher” (Train the Trainer)* during **14th-19th September, 2020** organized by **First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. Babasaheb Ambedkar Technological University, Lonere (Maharashtra)

is organing One Day Workshop on

Human Values in Technical Education: Road Ahead

Under the guidance of



Prof. Vedala Rama Sastry

Honorable Vice-Chancellor

Dr. Babasaheb Ambedkar Technological University, Lonere

Objective of the Workshop

The main objective of the workshop is to sensitize the teachers to imbibe Human Values among the students of Engineering & Technology. Human Values education will transform the overall personality and thought process of the young students in this mechanized world. All the Principals and the SIP Coordinators from the affiliating colleges are expected for this workshop.

Date & Time

10/10/2020 at 11.00 am

YouTube Live:

<https://www.youtube.com/watch?v=QIAqyGIG2eY&feature=youtu.be>

Eminent Speakers



Shri. Atul Ji Kothari
Shiksha Sanskriti Utthan
Nyas, New Delhi



Dr. H. D. Charan
Hon'ble Vice-Chancellor,
Bikaner Tech. University,
Bikaner



Dr. Rajneesh Arora
Chairman, NCC-IP, AICTE,
New Delhi

Organised by

UHV Cell

Dr. Babasaheb Ambedkar Technological University, Lonere (Maharashtra)

Coordinator:

Dr. A.P. Shesh

Associate Dean, Human Values

Mob. 9422692151, apshesh@dbatu.ac.in



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasantraodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

"UNIVERSAL HUMAN VALUES (UHV)"

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Vikas L Karade

PVPIT Budhgaon

has successfully participated in the **Three Days Online Workshop on "UNIVERSAL HUMAN VALUES (UHV)"** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

“UNIVERSAL HUMAN VALUES (UHV)”

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Rajendra Sarjerao More
PVPIT , Budhgaon

has successfully participated in the **Three Days Online Workshop on “UNIVERSAL HUMAN VALUES (UHV)”** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasantrodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

“UNIVERSAL HUMAN VALUES (UHV)”

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

***Pushpadant magdum
Pvpit sangli***

has successfully participated in the **Three Days Online Workshop on “UNIVERSAL HUMAN VALUES (UHV)”** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

“UNIVERSAL HUMAN VALUES (UHV)”

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Sagar S. Sutar

Pvpit Budhgaon

has successfully participated in the **Three Days Online Workshop on “UNIVERSAL HUMAN VALUES (UHV)”** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasantrodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

“UNIVERSAL HUMAN VALUES (UHV)”

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Smita Sagar Patil

PVPIT BUDHGAON

has successfully participated in the **Three Days Online Workshop on “UNIVERSAL HUMAN VALUES (UHV)”** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



Dr. V.P.S.S.M.'s

**Padmabhooshan Vasantraodada Patil Institute of Technology,
Budhgaon Dist-Sangli**

Three Days Online Workshop on

“UNIVERSAL HUMAN VALUES (UHV)”

Organised by

First Year Engineering Department & Value Education Cell, PVPIT

Certificate of Participation

This is to certify that

Priyanka D. Patil
PVPIT, Budhgaon

has successfully participated in the **Three Days Online Workshop on “UNIVERSAL HUMAN VALUES (UHV)”** during **26th - 28th October, 2020** organized by **First Year Engineering Department & Value Education Cell, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Dr. S. L. Patil
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. A. A. Patil
Convener & HoD F. Y. B. Tech
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)



सत्यमेव जयते
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA

MSME-TECHNOLOGY DEVELOPMENT CENTRE (PPDC)

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Ministry of Micro, Small & Medium Enterprises

सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय

Government of India Organization

भारत सरकार की संस्था

Foundry Nagar, Agra-282 006 (U.P.)

फाउन्ड्री नगर, आगरा-282 006 (उ0प्र0)

प्रमाण पत्र

Certificate

This is to certify that

MR. D. NANDKISHOR MOTIRAM DHAWALE

has successfully completed online training

on

**COLLABORATIVE ROBOTS &
AUTOMATED GUIDED VEHICLES**

from 26.10.2020 to 27.10.2020

DATE : October 28, 2020
PLACE : AGRA




R.PANNEERSELVAM
PRINCIPAL DIRECTOR

No. PPDC/Trg./OSP/2020-21/12519



Payment receipt for your successful transaction on 115 Collaborative Robotics

1 message

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Mon, Oct 26, 2020 at 16:44

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| Initial | Mr |
| Full Name | Nandkishor Motiram Dhawale |
| Father Name | Motiram |
| Date Of Birth | 10081981 |
| Gender | Male |
| Category | Other Backward Class (OBC) |
| Sub Category | None of the Above |
| Aadhar Card No | 513197501553 |
| Email Id | nmdhawale@gmail.com |
| Contact Number | 8766906664 |
| Full Address | 82, Shukrawar Peth, Madhavnagar, Dist- Sangli |
| Pin Code | 416406 |
| Highest Qualification | Ph D |
| Employment Status | Employed |

For any product or service related queries, please
contact PROCESS AND PRODUCT DEVELOPMENT
CENTRE support.



Vikas Karade <vlkarade.instru@pvpitsangli.edu.in>

MATLAB Day Workshop 7 Nov - Resources

1 message

Dhruv Chandel <dchandel@mathworks.com>

Sun, Nov 8, 2020 at 3:40 PM

To: "vlkarade.instru@pvpitsangli.edu.in" <vlkarade.instru@pvpitsangli.edu.in>

<This is a one-time only auto-generated message. Please do not reply!>

Greetings from MathWorks, the makers of MATLAB and Simulink

Thanks for attending the 'MATLAB Day Hands-on Workshop' on 07 November 2020. Due to overwhelming demand, we are sharing the session recordings and files with all attendees via this email. Kindly use the following link to download the same (the link will expire in 1 months' time): <https://mathworks-my.sharepoint.com/:f:/p/dchandel/EtJ9DeRMUEJHvMhCWQPK44wBJmVXOvqmBLHvZ8zbxRIm0g?e=v9sojK>

If there were any areas of interest which we could not cover in the session, we would encourage you to explore the hundreds of existing videos on our website: <https://in.mathworks.com/videos/search.html>

For next steps, it is highly recommended that you complete the Online Self-paced courses on MATLAB Academy (<https://matlabacademy.mathworks.com/>). These 2-3 hour long courses, with hands-on exercises run directly from the browser, and offer certificates on completion:

- [MATLAB Onramp](#)
- [Simulink Onramp](#)
- [Machine Learning Onramp](#)
- [Deep Learning Onramp](#)
- [Image Processing Onramp](#)
- [Stateflow Onramp](#)
- [Control Design Onramp with Simulink](#)

Best Wishes,

Dr Dhruv Chandel

Education Team



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सत्यमेव जयते
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA

MSME-TECHNOLOGY DEVELOPMENT CENTRE (PPDC)

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Ministry of Micro, Small & Medium Enterprises

सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय

Government of India Organization

भारत सरकार की संस्था

Foundry Nagar, Agra-282 006 (U.P.)

फाउन्ड्री नगर, आगरा-282 006 (उ0प्र0)

प्रमाण पत्र

Certificate

This is to certify that

DR. NANDKISHOR MOTIRAM DHAWALE

has successfully completed online training

on

**3D PRINTING LEADING TOWARDS
INDUSTRY 4.0**

from 21.12.2020 to 23.12.2020

DATE : January 2, 2021
PLACE : AGRA




R.PANNEERSELVAM
PRINCIPAL DIRECTOR

No. PPDC/Trg./OSP/2020-21/15420

No:ATAL/2020/1609135459



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Vikas Laxman Karade**, Assistant Professor of PVPIT Budhgaon participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator

No:ATAL/2020/1609132134



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Sagar Sudhakar Sutar**, **Assistant Professor** of **PVPIT** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP** on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantraodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



KNOWLEDGE • CHARACTER • UNITY



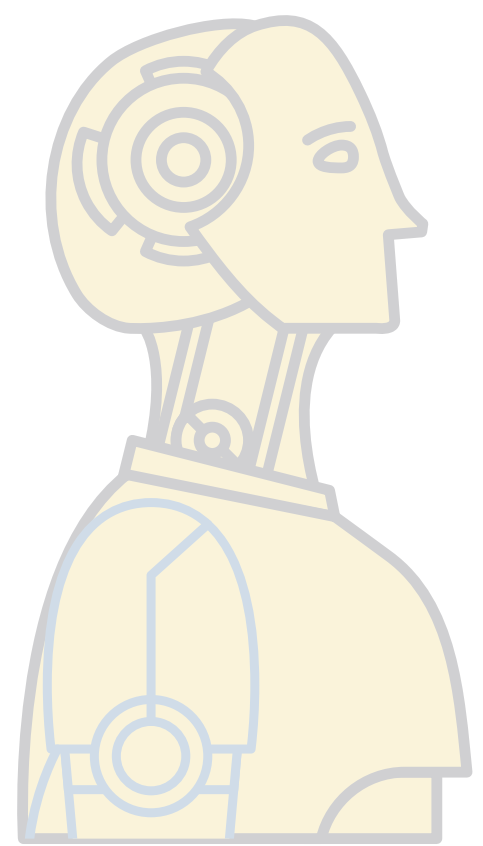
Date: 28th December 2020 -

2nd January 2021

Time : 10:00 AM - 1:00 PM

NITTE MEENAKSHI INSTITUTE OF
TECHNOLOGY , DEPARTMENT OF COMPUTER
SCIENCE AND ENGINEERING IN
COLLABORATION WITH KNOWLEDGE
SOLUTIONS INDIA PRESENTS:

SIX DAY FACULTY DEVELOPMENT PROGRAM ON ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING



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Mr. Gurvansh Singh

Senior Subject Matter

Expert, KSI

Convenors:

Dr. H.C. Nagaraj
Principal, NMIT

Dr. Thippeswamy M.N.
HOD - CSE, NMIT

Coordinators:

Ms. Sujatha Joshi
Associate Professor,

Dr. Vasanth Kumar
Associate Professor,

Department of CSE, NMIT

Department of CSE, NMIT

Microsoft in
Education Global
Training Partner





THIS CERTIFICATE IS AWARDED TO
Assoc. Prof. Nandkishor Dhawale
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021





THIS CERTIFICATE IS AWARDED TO
Asst. Prof. Vikas Karade
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021





THIS CERTIFICATE IS AWARDED TO
Asst. Prof. Smita Patil
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021





THIS CERTIFICATE IS AWARDED TO
Asst. Prof. Rajendra More
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021



No:ATAL/2020/1608709281



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Amolkumar Narayan Jadhav**, Assistant Professor of **Padmabhooshan Vasantgadada Patil Institute of Technology, Budhgaon- 416304** participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "**Computer Science & Biology**" from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasantgadada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



THIS CERTIFICATE IS AWARDED TO
Asst. Prof. Amolkumar Jadhav
For participating in a 6 days Faculty Development
Program on
" Machine Learning & AI "
Held between 28/12/2020 to 02/01/2021 in online mode

MR. SANDEEP JETHANI
Director, Knowledge Solutions India
DATE : 05/01/2021





“येथे बहुतांचे हित”

Marathwada Mitra Mandal's College of Engineering (MMCOE), Pune

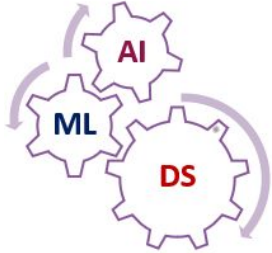
Accredited with “A” Grade by NAAC, Recipient of ‘Best College Award 2019’ By SPPU,
NBA Accreditation of Mechanical and Electrical Engineering

Marathwada Mitra Mandal's Institute of Technology (MMIT), Pune

Accredited with “A” Grade by NAAC

Certificate of Participation

Mr. Amolkumar N. Jadhav



Has successfully completed International Short Term Training Programme (STTP) through ICT mode on ‘**Advanced Applications in Artificial Intelligence and Machine Learning**’ organized by Marathwada Mitra Mandal's Institutions MMCOE and MMIT from 2nd To 6th August 2021.

Dr. H. K. Khanuja
HOD, COMP, MMCOE

Mr. S. G. Rathod
HOD, COMP, MMIT

Dr. R. V. Bhortake
Principal, MMIT

Dr. S. M. Deshpande
Principal, MMCOE



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE

This is to certify that

Mr. Amolkumar N. Jadhav



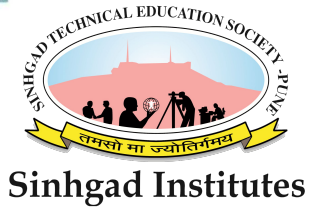
from **PVPIT, Budhgaon Sangli**, has participated in Three Days Online Faculty Development Program on **Disruptive Technologies** organized by **Department of Computer Science and Engineering, PVPIT, Budhgaon** in association with **Dr. Babasaheb Ambedkar Technological University, Lonere** under **TEQIP-III** from 16th March 2021 to 18th March, 2021.

Mrs. D.D.Dhokate
Co-coordinator
Asst.Prof. CSE, PVPIT

Prof. B.S. Patil
Coordinator
HOD-CSE, PVPIT

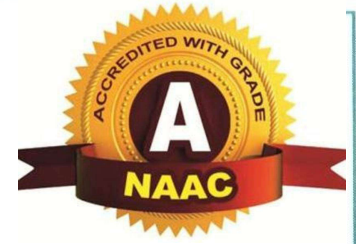
Dr. A.W. Kiwalekar
Academic Coordinator
TEQIP-III, DBATU, Lonere

Dr. D.V. Ghewade
Convener
PVPIT, Budhgaon



Sinhgad Institutes

STES's
Sinhgad Academy of Engineering
Department of Information Technology



Certificate of Participation

This is to certify that **Mr. Amolkumar N. Jadhav** of PVPIT, Budhgaon Sangli has attended one week online FDP on "***Advanced Trends and Practices in IT***" held from 8th December 2020 to 12th December 2020 organized by Department of Information Technology, Sinhgad Academy of Engineering.

Prof.P.Y.Pawar

FDP

Coordinator

Prof.D.R.Anekar

FDP

Coordinator

Prof.A.N.Adapanawar

HOD(IT)

Dr.K.M.Gaikwad

Vice Principal

Dr.K.P.Patil

Principal



AISSMS

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi, Recognized by
Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University
and recognized 2(f) and 12(B) by UGC (Id.No. PU / PN/ Engg. / 093 (1992)
Accredited by NAAC with 'A+' Grade



CERTIFICATE OF PARTICIPATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Mr. Amolkumar N. Jadhav

*for his/her active participation in 1 Day HANDS-ON Faculty Development Program on **Web Development**
organised by Department of Computer Engineering ,AISSMS COE,Pune
in association with Brainovision Solutions India Pvt.Ltd.*

held on 13-12-2020

B R Quazi
Faculty Coordinator

V V Waykule
Faculty Coordinator

Neha Amit Rai
Faculty Coordinator

Ganesh Nag Doddi
CEO, BRAINOVISION

Dr. D P Gaikwad
HOD,Computer Engineering Dept

Dr.D S Bormane
Principal,AISSMS COE



Maratha Vidya Prasarak Samaj's

**Karmaveer Adv Baburao Ganpatrao Thakare College of Engineering,
Nashik**

Permanently Affiliated to Savitribai Phule Pune University, Pune and Approved by AICTE, New Delhi



Certificate of Participation

This is to certify that
Mr. Amolkumar N. Jadhav
of

PVPIT, Budhgaon Sangli

has participated in 3 days online workshop on
“Intellectual Property Rights”

Organized by

Computer Engineering Department , MVPS's KBT College of Engineering, Nashik

During 9th Nov. 2020 to 11th Nov. 2020

Mrs. V.S. Tidake
Coordinator

Dr. V.S. Pawar
HOD Computer Engineering

Prof. N.B. Desale
Vice-Principal

Dr. N.S. Patil
Principal



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantrodada Patil Institute Of Technology
Budhgaon-416304, Dist-Sangli.

Certificate

This is to certify that,

Mr. Amolkumar N. Jadhav

has attended a National Webinar On

“Teachers’ Role in NEP -2020 Implementation”

Organized in association with

Bharatiy Shikshan Mandal

And

NITI Aayog

Held on 19th June 2021



Mr. P.T. Patil
IQAC Coordinator

Dr. D.V. Ghewade
Principal

Hon. Mr. Amit V. Patil
Trustee, Dr.V.P.S.S.M.'s



Shree Shamrao Patil (Yadravkar) Educational & Charitable Trust's

Sharad Institute of Technology, Polytechnic

Yadrav (Ichalkaranji) Approved by AICTE, New Delhi, Recognized by DTE, Mumbai

(Govt. of Maharashtra) Affiliated to MSBTE Mumbai. All Programmes are NBA

Accredited. MSBTE Code : Regular Shift 0968/ Shift Program 1589 DTE Code : D-6436

Department of Electronics & Telecommunication Engineering in association with **IETE**

Organizes

**National Level One week Online Faculty Development Program on
Internet of Things**

Certificate Of Participation

This certificate is being awarded to

Mr. Amolkumar N. Jadhav

from **PVPIT, Budhgaon Sangli** for successful completion of online One Week Faculty Development Program on **“Internet of Things”** organized by Electronics & Telecommunication Engineering Department of **Sharad Institute of Technology, Polytechnic, Yadrav** in association with **IETE** from 11th Jan 2021 to 15th Jan 2021.

Mrs. A.N. Naik
Co-Ordinator

Ms. M.G. Soundatte
HOD, E & TC (2nd Shift)

Mr. A.J. Chinchawade
HOD, E&TC (1st Shift)

Mr. B.S. Tashildar
Principal, SITP Yadrav

Hon. Mr. Anil A. Bagane
Exe. Director, SITP,
Yadrav



RNS Institute of Technology, Bengaluru

(AICTE Approved, VTU Affiliated, NAAC 'A' Grade Accredited)

UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA for the Academic years 2018-19, 2019-20 and 2020-21



Department of Mechanical Engineering

CERTIFICATE

Mr. Amolkumar N. Jadhav

of

PVPIT, Budhgaon Sangli

has participated in the National Level Webinar on
"Automation and Robotics" on June 09 2021

A handwritten signature in black ink, appearing to read 'T Sreenivasan', written over a horizontal line.

Dr. T Sreenivasan
HoD

Sd/-

Dr. M K Venkatesha
Principal

RNS Institute of Technology, Bengaluru

(AICTE Approved, VTU Affiliated, NAAC 'A' Grade Accredited)

UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA for the Academic years 2018-19, 2019-20 and 2020-21



Department of Mechanical Engineering

CERTIFICATE

Mr. Amolkumar N. Jadhav

of

PVPIT, Budhgaon Sangli

has participated in the National Level Webinar on
"Machinability Studies using optimization technique"

on June 09 2021

A handwritten signature in black ink, appearing to read 'Sreenivasan'.

Dr. T Sreenivasan
HoD

Sd/-

Dr. M K Venkatesha
Principal

This certificate declares that

Mr. Amolkumar N. Jadhav

Asst. Prof., PVPIT, Budhgaon Sangli

has completed

**Shri Havagiswami College Udgir
Skill Development Programme
Building Relationship**



on 5/30/2021, with a passing score of 60%

Certificate ID: XHKRDI-CE000097



Dr. V.P.S.S.M.'s
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon Dist-Sangli
One Week Online Faculty Development Program (FDP)
Communication Skills in English for Teacher (Train the Trainer)
14-19 September, 2020

Certificate of Participation

This is to certify that

Mr. Prasad V. Phalle

P.V.P. Institute of Technology, Budhgaon (Sangli)

has participated and successfully completed the **One Week Online Faculty Development Program (FDP)** on the theme *“Communication Skills in English for Teacher” (Train the Trainer)* during **14th-19th September, 2020** organized by **First Year Engineering Department, P.V.P. Institute of Technology, Budhgaon (Sangli).**

Mr. S. E. Narwade
Co-ordinator
PVPIT, Budhgaon (Sangli)

Dr. Mrs. A. A. Patil
HoD & Convener
PVPIT, Budhgaon (Sangli)

Dr. D. V. Ghewade
Principal
PVPIT, Budhgaon (Sangli)

No:ATAL/2020/1603462296



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

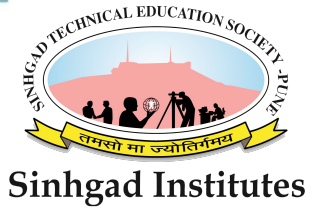
Certificate

This is certified that **Prasad Vijaykumar Phalle, Assistant Professor** of **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon- 416304** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP on "Cyber-Physical Systems"** from **2020-11-7** to **2020-11-11** at **Indian Institute of Information Technology Pune.**

Director ATAL Academies

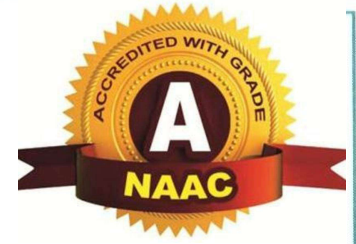


Coordinator



Sinhgad Institutes

STES's
Sinhgad Academy of Engineering
Department of Information Technology



Certificate of Participation

This is to certify that **Mr. Prasad Vijaykumar Phalle** of **Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon- 416304** has attended one week online FDP on "***Advanced Trends and Practices in IT***" held from 8th December 2020 to 12th December 2020 organized by Department of Information Technology, Sinhgad Academy of Engineering.

Prof.P.Y.Pawar

FDP

Coordinator

Prof.D.R.Anekar

FDP

Coordinator

Prof.A.N.Adapanawar

HOD(IT)

Dr.K.M.Gaikwad

Vice Principal

Dr.K.P.Patil

Principal



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Prasad Vijaykumar Phalle** from **Padmabhooshan Vasantryadada Patil Institute of Technology Budhgaon, Sangli** has participated and successfully completed the online workshop on **Universal Human Value** on the theme **“Inculcating Universal Human Values in Technical Education”** during **14-18 December, 2020** as organized by **All India Council for Technical Education(AICTE)**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

No:ATAL/2020/1608652545



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **Prasad Vijaykumar Phalle, Assistant Professor** of **Padmabhooshan Vasanthaodada Patil Institute of Technology, Budhgaon- 416304** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online FDP on "Computer Science & Biology"** from **2021-1-18** to **2021-1-22** at **Padmabhooshan Vasanthaodada Patil Institute of Technology**.

Director ATAL Academies



Coordinator



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Prasad Vijaykumar Phalle** from **Padmabhooshan Vasantodada Patil Institute of Technology Budhgaon, Sangli** has participated and successfully completed the **Part 1** of the online **UHV Refresher 1 FDP** organized by **All India Council for Technical Education(AICTE)** from **15 February, 2021 to 19 February, 2021.**

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



Dr. V.P.S.S.M.'s
Padmabhooshan Vasantrodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE



This is to certify that

Mr. Prasad Vijaykumar Phalle

from **Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon**, has participated in Three Days Online Faculty Development Program on **Disruptive Technologies** organized by **Department of Computer Science and Engineering, PVPIT, Budhgaon** in association with **Dr. Babasaheb Ambedkar Technological University, Lonere** under **TEQIP-III** from 16th March 2021 to 18th March, 2021.

Mrs. D.D. Dhokate
Co-coordinator
Asst. Prof. CSE, PVPIT

Prof. B.S. Patil
Coordinator
HOD-CSE, PVPIT

Dr. A.W. Kiwalekar
Academic Coordinator
TEQIP-III, DBATU, Lonere

Dr. D.V. Ghewade
Convener
PVPIT, Budhgaon

K.E. Society's

Rajarambapu Institute of Technology, Rajaramnagar

Certificate of Participation

This is to certify that

Mr. Prasad Vijaykumar Phalle

from

CSE Department, PVPIT, Budhgaon

Has successfully attended Five Days STTP on

Advanced Machine Learning and Block Chain Technology

From 20-21, 27-28 March and 3rd April, 2021

Organized by Department of Computer Science & Information Technology under **Lead college scheme**, Shivaji University, Kolhapur



Prof. D. T. Mane
Coordinator

Dr. A. C. Adamuthe
HOD

Dr. S. K. Patil
Dean, Academics

Dr. S. S. Kulkarni
Director

CERTIFICATE

PROUDLY PRESENTED TO

Mr. Prasad Phalle

2 Weeks FDP On Machine Learning & AI using
Python

May 28, 2021

Date of Completion

Knowledge Solutions India

Organizer





Dr. V.P.S.S.M.'s
Padmabhooshan Vasantrodada Patil Institute of Technology
Budhgaon DIST-SANGLI



CERTIFICATE

This is to certify that

Mr. Prasad V. Phalle



from **Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon**, has participated and attended online Webinar on "Industry 4.0 & Opportunities for Graduating students" organized by Padmabhooshan Vasantrodada Patil Institute of Technology Budhgaon (Sangli).

Mrs. D.D. Dhokate
Co-coordinator

Prof. B.S. Patil
HOD-CSE, PVPIT

Dr. D. V. GHEWADE
Principal



Pimpri Chinchwad Education Trust's
Pimpri Chinchwad College of Engineering & Research

AN ISO 9001:2015 CERTIFIED INSTITUTE



In Association with



CERTIFICATE OF PARTICIPATION

This certificate is proudly presented to

Mr. Prasad Adsule

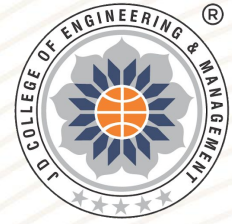
Padmabhooshan Vasantodada Patil Institute of Technology, Sangli

Has participated in one week **Online Faculty Development Program** on “**Emerging Trends in Refrigeration & Air Conditioning**”
organised by Department of Mechanical Engineering in association with
ISHRAE (The Indian Society of Heating, Refrigerating and Air Conditioning Engineers) Pune Chapter
& IE(I) (The Institution of Engineers (India) Pune Local Centre) during 01 June 2020 to 06 June 2020.

CO-ORDINATOR FDP
MR. VIJAY P DESAI

HOD
MECHANICAL DEPARTMENT
DR. SHAM H MANKAR

PRINCIPAL
Dr. Harish Tiwari



Education to Eternity

J D College of Engineering & Management, Nagpur

An Autonomous Institute

Affiliated to Technological University Of DBATU

Certificate of Participation

This is to certify that Dr./Mr./Mrs./Ms. **Mr. Chetan D. Patil** from **PVPIT BUDHGAON** has participated in one week **"Online Faculty Development Program on PHP-MySQL"** from 17th June to 22nd June, 2020 organized by Department of Basic Science and Humanities(First Year), J D College of Engineering & Management, Nagpur in association with Spoken Tutorial, IIT Bombay.

Dr. M. V. Takarkhede
Co-ordinator

Prof. M. M. Baig
Spoken Tutorial
Coordinator

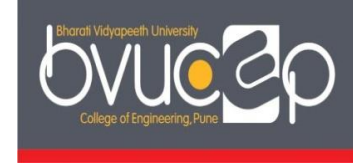
Dr. A. N. Gupta
Head of Department

Dr. N. V. Pradnyakar
Dean Students

Dr. S. V. Sonekar
Offtg. Principal



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Mr. Chetan D. Patil** from **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** has participated and completed ***One Week Faculty Development Programme on 'Future Materials: Nanocomposites'*** from **15th June, 2020 to 21st June, 2020** organized by Department of Mechanical Engineering.

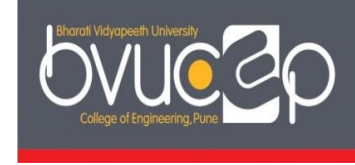
Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Sachin S. Chavan
Convener, FDP
Professor



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Mr. Chetan D. Patil** from **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** has participated and completed ***One Week Faculty Development Programme on 'Research Opportunities in Advanced Manufacturing Processes'*** from 22nd June, 2020 to 28th June, 2020 organized by Department of Mechanical Engineering of BV(DU) COE, Pune.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Pradeep Jadhav
Convener, FDP
Professor



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTODADA
PATIL INSTITUTE OF TECHNOLOGY**

Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Subhash Annappa Kore** has participated in the **One week Online Program** on "**Future Trends and Opportunities in Industry**" organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held from **27th to 31st May,2020**.

Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal



DTE College Code: EN-5161

Certificate

This to certify that ,

Subhash Annappa Kore

P.V.P. Institute of Technology Budhgaon 416304

has successfully completed

One week online Faculty Development Program on "Product Design & Novelty" from 6th to 10th June, 2020
organized by Department of Mechanical Engineering, Dr Vithalrao Vikhe Patil College of Engineering
Ahmednagar, Maharashtra and The Institution of Engineers (India) Ahmednagar local Centre

Certificate Id :Y9Y0HQ-CE000042

P. A. Narwade
Coordinator

Dr D. B Karaujule
Co-Coordinator

Dr R. R. Navthar
Co-Convener

Dr K. B. Kale
Convener

Er M.M. Anekar
Hon. Secretary (IEI)

Dr U. P. Naik
Principal

Er Sangam Sinha
Chairman (IEI)



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTRAODADA
PATIL INSTITUTE OF TECHNOLOGY**
Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Subhash Annappa Kore** has participated in the **Two Days Online Workshop on "Self Image Building and Emotional Intelligence (EQ)"** organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held on **3rd and 6th July,2020**.

Certificate ID - IV5VLW-CE000094

Prof.N.V.Hargude
Dean R&D Coordinator

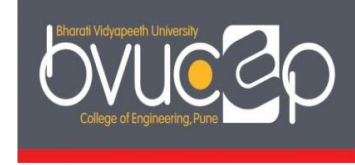
Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal





**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Mr. Sandesh S Awati** from **Padmabhooshan Vasantraodada Patil institute of technology Budhgaon** has participated and completed ***One Week Faculty Development Programme on 'Future Materials: Nanocomposites'*** from **15th June, 2020 to 21st June, 2020** organized by Department of Mechanical Engineering.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Sachin S. Chavan
Convener, FDP
Professor



Dr.Vasanthaodada Shetkari Shikshan Mandal's
Padmabhooshan Vasanthaodada Patil Institute of Technology
Budhgoan, Tal-Miraj , Dist-Sangli, Pin-416304, Maharashtra,India



Department Of Instrumentation Engineering
Certificate of Completion

This certifies that Sandesh S Awati has successfully completed one week student development program on future trends and career opportunities in industry 4.0 in India & abroad during 2nd June to 10th June 2020.

Dr.N.M.Dhawale
Coordinator

Prof.V.L.Karade
HOD,Instrumentation

Dr.D.V.Ghewade
Principal,PVPIT



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTODADA
PATIL INSTITUTE OF TECHNOLOGY**

Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Mr. Nikhil P. Ambole** has participated in the **One week Online Program** on **"Future Trends and Opportunities in Industry"** organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held from **27th to 31st May,2020**.

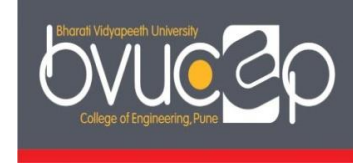
Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Mr. Nikhil P. Ambole** from **PVPIT BUDHGAON** has participated and completed ***One Week Faculty Development Programme on 'Future Materials: Nanocomposites'*** from **15th June, 2020 to 21st June, 2020** organized by Department of Mechanical Engineering.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Sachin S. Chavan
Convener, FDP
Professor

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering and Technology, Ashta

(An Autonomous Institute affiliated to Shivaji University, Kolhapur)



CERTIFICATE



This is to Certify that { **N. P. Ambole** } of the institute {PVPIT BUDHGOAN} has successfully completed Virtual one week STTP on **“Vibration Control of Rotating Machines” Under Lead College Scheme of Shivaji University, Kolhapur**

organised by **Department of Mechanical Engineering, ADCET, Ashta** during 8 -12th June 2020.

Dr. S. P. Chavan
Coordinator

Dr. L. Y. Waghmode
Head of Department

Dr. V. S. Patil
Director

Prof R. A. Kanai
Executive Director



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTODADA
PATIL INSTITUTE OF TECHNOLOGY**

Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Anant Kumbhojkar** has participated in the **One week Online Program** on **"Future Trends and Opportunities in Industry"** organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held from **27th to 31st May,2020**.

Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Anant Kumbhojkar** from **PVPIT Budhgaon, Sangli** has participated and successfully completed the **online workshop on Universal Human Values** on the theme **“Inculcating Universal Human Values in Technical Education”** during **2-6 July, 2020** as organized by **All India Council for Technical Education(AICTE)**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

**Government College of Engineering, Karad (Satara) MS
& Walchand College of Engineering, Sangli, MS**

One Week National Level Workshop on

“DIGITAL TRANSFORMATION & PEDAGOGIES”

Sponsored by AICTE, New Delhi & TEQIP III

CERTIFICATE

**This is to certify that Seema Pravin Mane of P.V.P.I.T Budhgaon Sangli
has attended One Week National Level Workshop on "Digital Transformation & Pedagogies"
organized during August 10-14, 2020, by Government College of Engineering, Karad &
Walchand College of Engineering, Sangli, Sponsored by
AICTE, New Delhi & TEQIP III**



TEQIP III

Dr. S. P. Deshmukh
Convener, GCE

Dr. B. S. Gawali
Convener, WCE

Dr. K. H. Inamdar
HoD, MED, WCE

Dr. V. B. Dharmadhikari
TEQIP Coordinator, WCE

Dr. A. T. Pise
Principal, GCE



Dr. Babasaheb Ambedkar Technological University, Lonere
N.K. ORCHID COLLEGE OF ENGG. & TECH., Solapur



CERTIFICATE OF PARTICIPATION

Awarded to

Prof. S.P. Mane

Has successfully completed the Faculty Development Program on Digitizing Engineering Graphics course under DBATU with supporting products AutoCAD™ & Autodesk® Fusion 360™ organized by Autodesk and N. K. Orchid college of Engineering and Technology, Solapur from 20th -24th July 2020.

Dr M Sadaiah
Prof. Mechanical,

Dr J. B. Dafedar
Principal NKOCET,



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTODADA
PATIL INSTITUTE OF TECHNOLOGY**

Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Mrs. Seema Pravin Mane** has participated in the **One week Online Program** on "**Future Trends and Opportunities in Industry**" organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held from **27th to 31st May,2020**.

Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal



Dr.Vasantaodada Patil Shetkari Shikshan Mandal's
**PADMABHOOSHAN VASANTODADA
PATIL INSTITUTE OF TECHNOLOGY**

Budhgaon, Tal-Miraj, Dist.-Sangli, Pin- 416304, Maharashtra, India

DEGREE PROGRAM

Department of Mechanical Engineering

CERTIFICATE



This is to certify that **Sawan wani** has participated in the **One week Online Student Development Program (SDP)** on "**Future Trends and Opportunities in Industry**" organised by Department of Mechanical Engineering, P.V.P.I.T.Budhgaon held from **27th to 31st May,2020**.

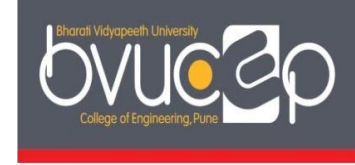
Prof.N.V.Hargude
Dean R&D Coordinator

Prof.C.G.Harge
Head of Department

Dr.D.V.Ghewade
Principal



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Pravin Popatrao Shinde** from **PVPIT Budhgaon** has participated and completed ***One Week Faculty Development Programme on 'Future Materials: Nanocomposites'*** from **15th June, 2020 to 21st June, 2020** organized by Department of Mechanical Engineering.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Sachin S. Chavan
Convener, FDP
Professor



DTE College Code: EN-5161

Certificate

This to certify that,
Pravin Popatrao Shinde
PVPIT Budhgaon
has successfully completed

One week online Faculty Development Program on "Product Design & Novelty" from 6th to 10th June, 2020
organized by Department of Mechanical Engineering, Dr Vithalrao Vikhe Patil College of Engineering
Ahmednagar, Maharashtra and The Institution of Engineers (India) Ahmednagar local Centre
Certificate Id :Y9Y0HQ-CE000223

P. A. Narwade
Coordinator

Dr D. B Karaujule
Co-Coordinator

Dr R. R. Navthar
Co-Convener

Dr K. B. Kale
Convener

Er M.M. Anekar
Hon. Secretary (IEI)

Dr U. P. Naik
Principal

Er Sangam Sinha
Chairman (IEI)



Dr. Babasaheb Ambedkar Technological University, Lonere
N.K. ORCHID COLLEGE OF ENGG. & TECH., Solapur



CERTIFICATE OF PARTICIPATION

Awarded to

Prof. Pravin Shinde

Has successfully completed the Faculty Development Program on Digitizing Engineering Graphics course under DBATU with supporting products AutoCAD™ & Autodesk® Fusion 360™ organized by Autodesk and N. K. Orchid college of Engineering and Technology, Solapur from 20th -24th July 2020.

Dr M Sadaiah
Prof. Mechanical,

Dr J. B. Dafedar
Principal NKOCET,



Dr. Babasaheb Ambedkar Technological University, Lonere
N.K. ORCHID COLLEGE OF ENGG. & TECH., Solapur



CERTIFICATE OF PARTICIPATION

Awarded to

Prof. Swapnil Patil

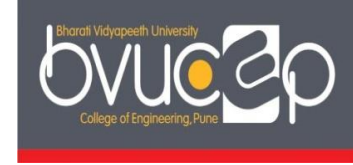
Has successfully completed the Faculty Development Program on Digitizing Engineering Graphics course under DBATU with supporting products AutoCAD™ & Autodesk® Fusion 360™ organized by Autodesk and N. K. Orchid college of Engineering and Technology, Solapur from 20th -24th July 2020.

Dr M Sadaiah
Prof. Mechanical,

Dr J. B. Dafedar
Principal NKOCET,



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Prof. SWAPNIL GANPATI PATIL** from **PVPIT BUDHGOAN** has participated and completed ***One Week Faculty Development Programme on 'Future Materials: Nanocomposites'*** from **15th June, 2020 to 21st June, 2020** organized by Department of Mechanical Engineering.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Sachin S. Chavan
Convener, FDP
Professor



DTE College Code: EN-5161

Certificate

This to certify that ,

SWAPNIL GANPATI PATIL

Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon, Sangli
has successfully completed

One week online Faculty Development Program on "Product Design & Novelty" from 6th to 10th June, 2020
organized by Department of Mechanical Engineering, Dr Vithalrao Vikhe Patil College of Engineering
Ahmednagar, Maharashtra and The Institution of Engineers (India) Ahmednagar local Centre

Certificate Id :Y9Y0HQ-CE000105

P. A. Narwade
Coordinator

Dr D. B Karaujule
Co-Coordinator

Dr R. R. Navthar
Co-Convener

Dr K. B. Kale
Convener

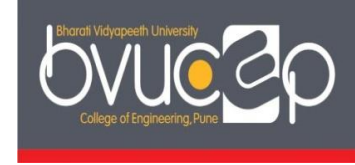
Er M.M. Anekar
Hon. Secretary (IEI)

Dr U. P. Naik
Principal

Er Sangam Sinha
Chairman (IEI)



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY),
COLLEGE OF ENGINEERING, PUNE**



Department of Mechanical Engineering

CERTIFICATE OF PARTICIPATION



This is to certify that **Mr. SWAPNIL GANPATI PATIL** from **Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon** has participated and completed ***One Week Faculty Development Programme on 'Research Opportunities in Advanced Manufacturing Processes'*** from 22nd June, 2020 to 28th June, 2020 organized by Department of Mechanical Engineering of BV(DU) COE, Pune.

Dr. Kailasnath Sutar
Co- Chairman, FDP
Head of Department

Dr. Anand Bhalerao
Chairman, FDP
Principal, BV(DU)COEP

Dr. Pradeep Jadhav
Convener, FDP
Professor



DTE College Code: EN-5161

Certificate

This to certify that ,

RAVINDRA DATTATRAYA PATIL

PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY BUDHGAON

has successfully completed

One week online Faculty Development Program on "Product Design & Novelty" from 6th to 10th June, 2020
organized by Department of Mechanical Engineering, Dr Vithalrao Vikhe Patil College of Engineering
Ahmednagar, Maharashtra and The Institution of Engineers (India) Ahmednagar local Centre

Certificate Id :Y9Y0HQ-CE000240

P. A. Narwade
Coordinator

Dr D. B Karaujule
Co-Coordinator

Dr R. R. Navthar
Co-Convener

Dr K. B. Kale
Convener

Er M.M. Anekar
Hon. Secretary (IEI)

Dr U. P. Naik
Principal

Er Sangam Sinha
Chairman (IEI)

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering and Technology, Ashta

(An Autonomous Institute affiliated to Shivaji University, Kolhapur)



CERTIFICATE



This is to Certify that **{Mr. A. J. Pawar}** of the institute {PVPIT Budhgaon} has successfully completed Virtual one week STTP on **“Vibration Control of Rotating Machines”** **Under Lead College Scheme of Shivaji University, Kolhapur**

organised by **Department of Mechanical Engineering, ADCET, Ashta** during 8 -12th
June 2020.

Dr. S. P. Chavan
Coordinator

Dr. L. Y. Waghmode
Head of Department

Dr. V. S. Patil
Director

Prof R. A. Kanai
Executive Director