



Faculty Achievement						
	Name of Department		Mechanical Engineering		2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Dr. Vinayak Hindurao Deokar	Paper setting	Question paper setting of Industrial Product Design	Kolhapur Institute of Technology	8/11/2023
2			Workshop	Workshop on Industry 4.0	Goshima and TATA Technology	23/11/2023 to 25/11/2023
3			Paper setting	Question paper setting of Theory of Machines II subject.	Dr. Babasaheb Ambedkar technological University, Lonere	12/12/2023
4			NPTEL FDP	Non-conventional Energy Resources	NPTEL	Jan-April2024
5			Syllabus setting	M.Tech Design engineering syllabus setting	Dr. Babasaheb Ambedkar technological University, Lonere	6/5/2024
6	2023-24	Dr. Koli Gajanan Chandrashekhar	Faculty Development Program	Battery Management System for Electric Vehicles	Sinhgad college of Engineering, Pune	09/10/2023 to 14/10/2023
7			Faculty Development Program	Outcome Based Education and Essential AI Tools for Teachers	Ramakrishna Mission Vivekananda Centenary College (Autonomous), Rahara, Kolkata	14/12/2023 to 20/12/2023
8			Faculty Development Program	Hydrogen and Fuel Cell Technologies for Electric Vehicles	Atal Academy, KIT's College of Engineering, Kolhapur	27/11/2023 to 02/12/2023
9			Book publication	The future of Solar Power	Scientific International Publishing House	2024
10			Paper Setter	Industrial Instrumentation and Control	Tatyasaheb Kore Institute of Engineering & Technology, Warnanagar	5/8/2024

11			Paper Setter	Finite Element Analysis	Tatyasaheb Kore Institute of Engineering & Technology, Warnanagar	11/24/2023
12			Paper Setter	Rapid Prototyping	KIT's College of Engineering Kolhapur	11/8/2023
13			Book Chapter Publication	Emerging Nanomaterials for Advanced Technologies	Introduction to Functional Nanomaterial , Taylor & Francis Publication	2024
14	2023-24	Dr Ajit Ashok Katkar	Book publication	The future of Solar Power	Scientific International Publishing House	2024
15			Paper setter	Energy Conservation and Management(BTME605C)	DBATU	6/5/2024
16			FDP/STTP	NAAC Assessment and Accrediation: Procedures and Processes	ACT Academy Tamil Nadu.	11/09/2023 to 17/09/2023
17			FDP/STTP	WRITING AN EFFECTIVE RESEARCH ARTICLE: TIPS AND TRICKS	KLS VBIT, Hlayal Karnataka	03/10/2023 to 07/10/2023
18			FDP/STTP	Management Developemt & Academic Leadership	ACT Academy Tamil Nadu.	01/12/2023 to 07/12/2023
19			FDP/STTP	Recent Trends in Mechanical Engineering and Industry 4.0	Sanjay Bhokare Group of Institutes, Miraj.	08/01/2024 to 13/01/2024
20			FDP/STTP	Industrial Instrumentation and Automation (IIA 2024)	Siemens Center of Excellence in collaboration with NIT Kurukshertra	06/05/2024 to 10/05/2024
21			2023-24	Dr. V.V.Vanmore	Patent Publication	Micro Abrasive Jet Machine
22	Two week Interdisciplinary refresher course	NEP 2020 orientation and sensitization Programme under Malaviya Misssion Teacher Training Programme (MM-TTP) of University Grant commission(UGC)			MMTTP center Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.	01/04/2024 to 15/04/2024
23	Expert Lecture	Micro Abrasive Jet machining of the course Manufacturing Processes-II			Walchand College of Engineering Sangli	15/04/2024
24	Book Chapter Publication	Machining of titanium alloys by using micro abrasive jet machine: an experimental investigation			Routledge Taylor & Francis Group CRC Press	2024

25	2023-24	Mr. Rahul Uday Urunkar	Journal paper Publication	Performance analysis of sodium alanate hydride reactor with different nanofluids	International Journal of Hydrogen Energy	December 2023
26			Reviwer for SCOPUS Journal	Institute of Advanced Engineering and Science (IAES)	International Journal of Applied Power Engineering	Jan. 2024
27			Book Editor	Futuristic Trends in Renewable & Sustainable Energy	IIP Series (Iterative International Publisher)	April 2024
28			Workshop	Adsorption for CO2 Capture, Green Refrigeration & Energy Storage	IIT Dhanbad	13/04/2024 to 14/04/2024
29			Faculty Development Program	Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024	College of Engineering, Pandharpur	19/06/2024 to 24/06/2024
30			Ph.D.	Ph.D. completed	Shivaji University Kolhapur	July 2024
31	2023-24	Mr. Deshmukh Sardar Balaso	Short Term Training Program	Design of Experiment & Optimization	Ashokrao Mane Group of Institutions, Vathar	11/12/2023 to 16/12/2023
32			PhD	Registratered for PhD	Shivaji University, Kolhapur	1/1/2024
33			Faculty Development Program	Recent Trends in Mechanical Engineering and Industry 4.0	Sanjay Bhokare Group of Institutes, Miraj	08/01/2024 to 13/01/2024
34			NPTEL FDP	IC Engines & Gas Turbines	Indian Institute of Technology, Guwahati	Jan - April 2024
35	2023-24	Mr. Dhananjay Vasanttrao Patil	Faculty Development Program	Hydrogen and Fuel Cell Technologies for Electric Vehicles	ATAL, KITS college of engineering, Kolhapur	27/11/2023 to 02/12/2023
36			International Conference poster	Chemical synthesis of SnO2 nanoparticles for corrosion protection of 304 austenitic stainless steel	IC-NACMBM-2024	12/02/2024 to 14/02/2024
37			Book chapter Publication	Thin Film Metal Oxide Nanocomposite: Synthesis to innovative applications via chemical route	Book Title: Thin Film Nanomaterials: Synthesis, Properties and Innovative Energy Applications Pubihser: Benthem Science Publishers.	2024

38	2023-24	Mr. Praveen Shivaji Atigre	Faculty Development Program	8-day Face-to-Face UHV-II FDP	All India Council for Technical Education (AICTE) at JSPM's Rajarshi Shahu College of Engineering, Pune	17/07/2024 to 24/07/2024
39			Faculty Development Program	"Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education (AICTE)	24/06/2024 to 28/06/2024
40			Faculty Development Program	"Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education (AICTE)	17/06/2024 to 21/06/2024
41			NPTEL FDP	Inspection And Quality Control In Manufacturing	NPTEL-AICTE	Jan-Feb 2024
42			Memorandum of Understanding [MoU]	Memorandum of Understanding [MoU] with Technomac Industries	Technomac Industries, Shiroli MIDC	25/10/2023
43			Memorandum of Understanding [MoU]	Memorandum of Understanding [MoU] with Satyajeet Mechanisms	Satyajeet Mechanisms, Gokul Shirgaon MIDC Kolhapur	14/03/2024
44			Paper Setter	Basic Human Rights	Dr. Babasaheb Ambedkar Technological University	12/12/2023
45			2023-24	Mr. Amol Shivaji Katkar	Faculty Development Program	Curriculum Development aligned with NEP 2020
46	Faculty Development Program	Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024			College of Engineering, Pandharpur	19/06/2024 to 24/06/2024
47	2023-24	Mr. Vikas Dhula Thorat	Faculty Development Program	Recent Trends in Mechanical Engineering	Sanjay Bhokare Group of Institutes Miraj	08/01/2024 to 13/01/2024
48			Crash Course	30-Days Excel Crash Course	Learn More Pro- Skill Course	03/02/2024 to 06/03/2024
49			Faculty Development Program	Outcome Based Education and Application of Generative AI in Teaching and Research	Sri Padmavati Mahila Visvavidyalayam, Tirupati	18/03/2024 to 23/03/2024
50			Crash Course	Automotive Industrial Engineering	COURSERA	22/04/2024 to 06/05/2024
51			Course	GCC-TBC English 30	Maharashtra State Council of Examination , Pune GCC-TBC	2024

DTE Code : **ENG315**



NAAC Accredited

AICTE ID : 1-8019451
AISEE Code : C-11165

HOLY-WOOD ACADEMY'S
SANJEEVAN

GROUP OF INSTITUTIONS, PANHALA

Sanjeevan Knowledge City, Somwar Peth-Injole, Panhala, Tal. Panhala, Dist. Kolhapur.
Pin-416 201 (Maharashtra) Phone : 91468925100

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra, DTE, DCA
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
Affiliated to Shivaji University, Kolhapur, MSHED, Mumbai.

Faculty Achievement						
Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Dr. Vinayak Hindurao Deokar	Paper setting	Question paper setting of Industrial Product Design	Kolhapur Institute of Technology	8/11/2023
2			Workshop	Workshop on Industry 4.0	Goshima and TATA Technology	23/11/2023 to 25/11/2023
3			Paper setting	Question paper setting of Theory of Machines II subject.	Dr. Babasaheb Ambedkar technological University, Lonere	12/12/2023
4			NPTEL FDP	Non-conventional Energy Resources	NPTEL	Jan-April 2024
5			Syllabus setting	M.Tech Design engineering syllabus setting	Dr. Babasaheb Ambedkar technological University, Lonere	6/5/2024



Ref No: KIT / EXAM / A. Y-2023-24 / ESE / T.Y.B.Tech. / Dec-2023/229

08-Nov-23

To,

Mr. Mihir H. Kulkarni
Chairman (Internal)
Dept of MECH, KIT's College of
Engineering (Autonomous), Kolhapur
Mobile No: 9970282425

Mr. V. H. Devkar
Co-Paper Setter (External)
Sanjeevan Engineering & Technology
Institute, Panhala.
Mobile No: 9860826083

**Subject: - Your appointment order as question paper setter & Evaluator for
T.Y.B.Tech. End Semester Examination Semester-V, Dec-2023.**

Dear Sir/ Madam,

With reference to a recommendation by the Board of Studies [BoS] and approval by the Board of Examination [BOE] / Academic standing Committee /Academic Council of KITCOE, Kolhapur. I am pleased to inform that, you have been appointed as Question Paper Setter for End Semester Examination Semester-V, December-2023 as per description in the following table

Program me	Course Code	Course Name
T.Y.B.Tech.	UMEE0515	Industrial Product Design

I request you to prepare **Two (02)** question paper sets in accordance with the syllabus available on KITCOEK website and clearly mentioning "Set A" and "Set B" on front page, top right corner. I hope your experience will help our students for a clear evaluation of knowledge and skills. Kindly accept the appointment order and convey your acceptance within three days to the CoE Office, KITCOEK, in given Google Form Link: <https://forms.gle/51Q2GR8w51bgJlpcA>

I am requesting you to mail a softcopy of the question paper (MS-word 2007 and PDF format) and model answer sheet (PDF Format) to preexam@kitcoek.in (CC to coe.kitcoek@gmail.com) Both hard copy & soft-copy of question paper and model answer sheet, along with scheme of marking and photo copy of QPQRS report both sets is to be submitted on or before, **24/11/2023**, mentioning in subject Course Code- ESE, December-2023/T.Y.B.Tech.. / QP/ **Industrial Product Design**,

The level of questions to be set must be as follows: 1) Difficult – 30 % 2) Moderate- 40 % 3) Easy – 30 %

Please go through the instructions and guidelines by paper setter and a sample template of questions paper provided in the link given in your mail.

Yours Faithfully,

Mr. S. S. Kadam
Deputy Registrar Pre-Exam

Dr. Y. M. Patil
Dean Examinations & Evaluation

TATA TECHNOLOGIES

READY
engineer



TATA

Certificate of Appreciation

Congratulations to 'The Ready Engineer'

Dr. Vinayak Deokar

for completing a three days' workshop on Industry 4.0 organized by GOSHIMA and Tata Technologies under its CSR initiative "Ready Engineer" from 23rd November – 25th November 2023.

Mr. Sujit Dixit

Head – Corporate Sustainability & Internal Audit

Tata Technologies Ltd.

Mr. Deepak Chorage

Chairman

Gokul Shiksha Manufacturers' Association

Date: 19th December 2023

/// Engineering a better world



Dr. Babasaheb Ambedkar Technological University

Lonere-402103 Tal-Mangaon, Dist Raigad(M.S) India.

Order Type: Regular Winter-2023

From: The Controller of Examinations, Dr. Babasaheb Ambedkar Technological University, Lonere.

No: DBATU/EXAM/Regular Winter-2023/No-2888

Date: 12/12/2023

To,

Dr. Vinayak Hindurao Deokar

I am directed to inform you that Dr. Babasaheb Ambedkar Technological University has appointed you as **Chairman** in the following subject (s). The Question Paper should be set on the all units of the syllabus.

Season	Regular Winter-2023
Branch Name	Mechanical Engineering/Mechanical Engineering Sandwich
Subject Code	BTME504_19
Subject Name	Theory of Machines- II

Note:

1. Once order is received kindly upload Question Paper with solution set within 3 days.
2. Kindly mention proper details in Question Paper as Season, Branch Name, Subject Code, Subject Name and Date
3. Kindly check the exam date and Syllabus on "dbatu.ac.in" website and date should be update the same on Question Paper.

Provided a child, a near relation of dependent of yours is not appearing or likely to appear at the Examination in the subject for which an invitation is now being offered to you. Also provided that you are not an author or co-author of a book and that book is prescribed reference book for the said examination.

Guide lines for Paper Setters:

1. Stick to the syllabus. Include the questions from all units.
2. Prepare the question paper in a word file as advised by CoE/ACoE. The question paper should be in a ready to print format.
3. Check whether all necessary data/information is provided in all questions.

INSTRUCTIONS FOR PAPER SETTERS:

1. If there are figures/tables in the question paper the same must be inserted at appropriate space with clarity. All dimensions of the figure should be legible for the students.
2. Please clearly indicate the marks for each question and internal distribution of marks for sub-questions.
3. It is **mandatory to submit 01 sets** of question paper not in duplicate in accordance with the syllabus.
4. You are also requested to submit the **solution of entire paper along with the marking scheme**. The Paper setter should submit the soft copy of question paper and model answer.

50% questions should be for average students, 25% for above average and 25% should be out of box questions. Please strictly follow the guidelines.

Please reply your acceptance/ not acceptance within 48 hours.

Guide lines for Subject Chairmen / Moderators:

1. Please collect the question papers given by paper setters.
2. Check whether question paper is of standard level or not. Also check whether questions are from all units of the syllabus or not. If needed, modify the paper. Please stick to max.20% modification.
- Check whether necessary data, diagrams, charts, tables, chemical structures etc. are provided in the question paper. If not, please try to include or communicate to paper setter and CoE/ACoE.
4. Please check whether diagrams / chemical structures are legible or not. If not, ask the paper setter to re-submit the paper with proper data.
5. Chairman can set the paper by following all the given instructions when paper setter in the panel is one.
6. The Chairman will be the final authority for the quality of the question paper.

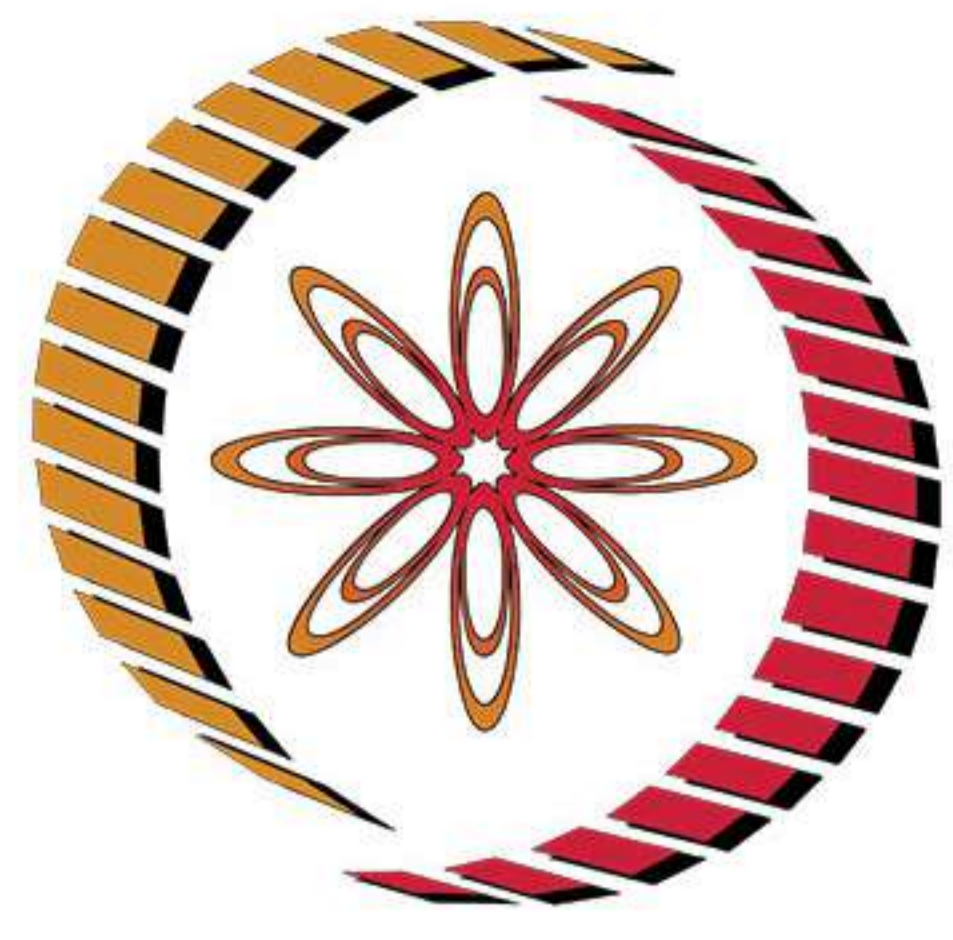
You are requested to keep your invitation strictly confidential.

As per Maharashtra University Act 2016, Section 4B(4), it shall be obligatory on every teacher and on the non-teaching employee of the University, affiliated, conducted colleges, community colleges or recognized institutions to render necessary assistance and service in respect of examinations.

Yours faithfully,

Controller of Examinations (I/c)
Dr. Babasaheb Ambedkar Technological University, Lonere

IMPORTANT INSTRUCTION TO THE PAPER-SETTER



NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to

VINAYAK HINDURAO DEOKAR

for successfully completing the course

Non-conventional Energy Resources

with a consolidated score of 60 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



(Jan-Apr 2024)

Roll No: NPTEL24GE24S1259600233

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16th Nov, 2023, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2023

Dr. Babasaheb Ambedkar Technological University, Lonere
Department of Mechanical Engineering

May 6th, 2024

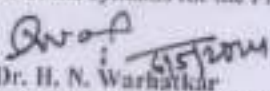
Notification

Sub: Constitution of the Task Force for the preparation of syllabus as per the NEP guidelines

This is to notify that the Task Force for the preparation of the syllabus for the M. Tech. program in Machine Design and CAD/CAM is constituted as follows:

Sr. No.	Name	Designation	Institute / Industry	Position in the Task Force	Contact Details (Mobile No.)	Email Id
1	Dr. Pankaj P. Awate	HOD Mech., PG Coordinator MTECH Design	Padmabhooshan Vasantnradada Patil Institute of Technology, Budhgaon, Sangli	Co-ordinator	8805336485	pankajawatepp@gmail.com
2	Dr. Ganesh S. Dhumal	Data Scientist	Matellio Incorporation, San Jose, USA	Member	9922331407	ganesh.dhumal@matellio.com
3	Dr. Abhimanyu K. Chandgude	Project Manager (Technical)	Automation Edge Technologies Pvt. Ltd. Baner, Pune	Member	9860343199	abhimanyu.chandgude@automat ionedge.com
4	Dr. Nitin Chand R. Patil	Associate Professor & Dean Academic	NK Orchid College of Engineering and Technology Solapur.	Member	8275938799	nitinpatil@orchidengg.ac.in
5	Dr. Vinayak H. Devkar	Associate Professor	Sanjeevan Engineering and Technology Institute, Panhala.	Member	9860826083	vinayak.deokar@seti.edu.in
6	Prof. Nitin D. Patil	Assistant Professor	Padmabhooshan Vasantnradada Patil Institute of Technology, Budhgaon, Sangli	Member	7218420242	ndpatilmech@pvpitsangli.edu.in

The Coordinator of the above Task Force should conduct meetings with all the members and prepare the syllabus as per the guidelines of NEP 2020. It should be noted that the syllabus of all the First year B. Tech. programs is to be kept common. Accordingly, the Co-ordinator should complete this activity in consultation with the Co-ordinators of the allied branches. The Task Force should submit the proposed syllabus containing the structure for all the four years and contents of the syllabus for the First year B. Tech. to the undersigned on or before May 8, 2024.


Prof. Dr. H. N. Warhatkar
 Head, Mechanical Engg. Department,
 Chairman, BoS for Mechanical Engg. and Allied branches,
 Dr. Babasaheb Ambedkar Technological University Lonere

Copy to:

1. Dean, Academics
2. Principal, All the affiliated Institutes
3. All the members of the Task Force



DTE Code : **EN6315**



NAAC Accredited

AICTE ID : 1-8019451
AISSE Code : E-11105

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Sanjivani Knowledge City, Sanwar Peth-Injole, Panhala, Tal. Panhala, Dist. Kolhapur.
Pin- 416 201 (Maharashtra) Phone : 9146995500

Q Approved By AICTE, New Delhi Q Recognized by Govt. of Maharashtra, DTE, DOA
Q Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
Q Affiliated to Shivaji University, Kolhapur., MSBTE, Mumbai.

Faculty Achievement

Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Dr. Koli Gajanan Chandrashekhar	Faculty Development Program	Battery Management System for Electric Vehicles	Sinhgad college of Engineering, Pune	09/10/2023 to 14/10/2023
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3	2023-24	Dr. Koli Gajanan Chandrashekhar	Faculty Development Program	Hydrogen and Fuel Cell Technologies for Electric Vehicles	Atal Academy, KIT's College of Engineering, Kolhapur	27/11/2023 to 02/12/2023
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5	2023-24	Dr. Koli Gajanan Chandrashekhar	Paper Setter	Industrial Instrumentation and Control	Tatyasaheb Kore Institute of Engineering & Technology, Warnanagar	08/05/2024
6	2023-24	Dr. Koli Gajanan Chandrashekhar	Paper Setter	Finite Element Analysis	Tatyasaheb Kore Institute of Engineering & Technology, Warnanagar	24/11/2023
7	2023-24	Dr. Koli Gajanan Chandrashekhar	Paper Setter	Rapid Prototyping	KIT's College of Engineering Kolhapur	08/11/2023
5	2024-25	Dr. Koli Gajanan Chandrashekhar	Book Chapter Publication	Emerging Nanomaterials for Advanced Technologies	Introduction to Functional Nanomaterial , Taylor & Francis Publication	2024



Sinhgad Institutes
Sinhgad Technical Education Society
Sinhgad College of Engineering, Pune
Certificate of Participation

This is to certify that,

Dr. Koli Gajanan Chandrashekhar
Sanjeevan Engineering & Technology Institute, Panhala,
Kolhapur

has attended one week online short term training program (STTP) on "***Battery Management System for Electric Vehicles***" Approved by ISTE, held during 9th Oct. 2023 to 14th Oct. 2023, organized by STES's Sinhgad College of Engineering, Pune, Maharashtra

Prof. K. M. Garse
Coordinator

Dr. A. P. Pandhare
HOD Mech

Dr. Y. P. Reddy
Vice-Principal

Dr. S. D. Lokhande
Principal



Ramakrishna Mission
Vivekananda Centenary College, Rahara
NAAC A++ Accredited



**Chaudhary Charan Singh
University, Meerut**
NAAC A++ Accredited

Certificate

This is to certify that

Dr. KOLI GAJANAN CHANDRASHEKHAR

SANJEEVAN ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA

has participated in the **One Week National level Online Faculty Development Program**

on **Outcome Based Education and Essential AI Tools for Teachers,**

organised by the **Internal Quality Assurance Cell (IQAC)**

of **Ramakrishna Mission Vivekananda Centenary College (Autonomous), Rahara, Kolkata**

in association with **The Department of Mathematics, Chaudhary Charan Singh University, Meerut**

and Co-hosted by **ipsr solutions limited** from **14 December 2023** to **20 December 2023**

and has successfully completed all the tasks, assignments and assessments and secured an **A grade**



Certificate ID: S4jdZtG2Lb

Sw Kamalasthanda

Swami Kamalasthananda
Principal
Ramakrishna Mission Vivekananda
Centenary College Kolkata

Dr. Mendus Jacob

Dr. Mendus Jacob
Professor & Director MCA,
Marian College, Kuttikkanam (Autonomous)
MD & CEO, ipsr solutions limited

Prof. Dr. Shivraj Singh

Prof. Dr. Shivraj Singh
HOD
Department of Mathematics
CCS University, Meerut

ATAL/2023/1700730972



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

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

AICTE Training and Learning (ATAL) Academy

Certificate

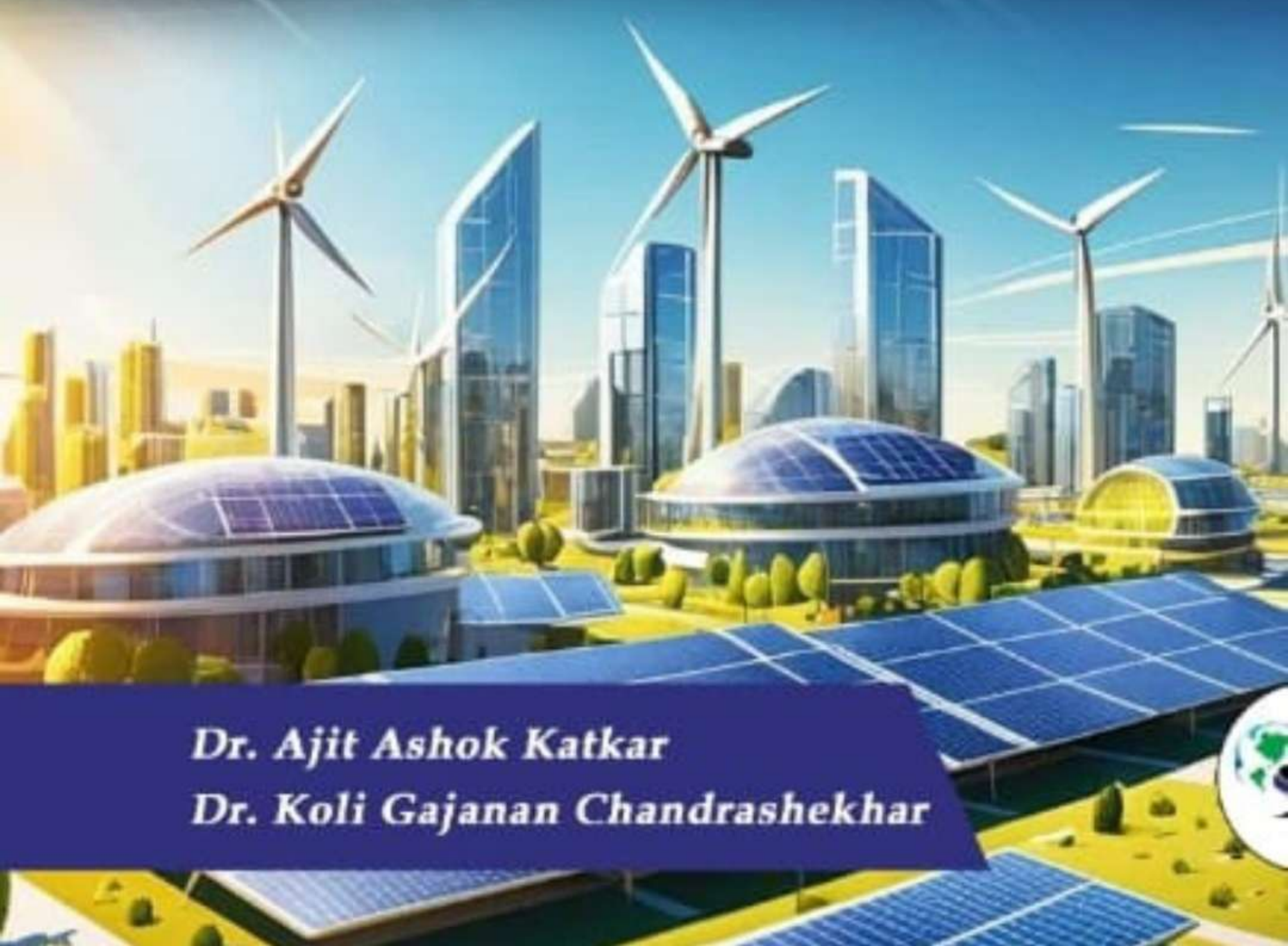
*It is certified that **Dr. Koli Gajanan Chandrashekhar, Assistant Professor of Sanjeevan Engineering & Technology Institute, Panhala** has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Hydrogen and Fuel Cell Technologies for Electric Vehicles** at **KOLHAPUR INSTITUTE OF TECHNOLOGY'S COLLEGE OF ENGINEERING AUTONOMOUS KOLHAPUR** from 27/11/2023 to 02/12/2023.*

Coordinator

Bureau Head (ATAL)



THE FUTURE OF SOLAR POWER



Dr. Ajit Ashok Katkar

Dr. Koli Gajanan Chandrashekhar



| CONFIDENTIAL |

Ref:TKIET/ESE/A.Y.2023-24/FYBTECH./SEM-II/06

Date: May 08, 2024

To,
Chairman
Mr. Abhijit R. Shinge
Internal
TKIET, Warananagar
8421556960

Dr. G. C. Koli
External
SETI, Panhala
7722076379
gajanan.koli@setiedu.in

Subject: Appointment order as question paper setter for End Semester Examination (ESE), Semester- V, May 2024

Dear Sir/Madam,

With reference to the recommendation by the Board of Studies [BoS] and approval by The Board of Examination [BoE] of TKIET, Warananagar, I am pleased to inform that, you have been appointed as Question Paper Setter for ESE Examination Semester-V May 24 as per description in the following table.

Programme	Course Code	Course Name
MECHANICAL ENGG.	ME504	Industrial Instrumentation and Control

I request you to prepare Three set (3) question paper in accordance with syllabus and appointment order and it is responsibility of chairman to upload soft copy of question paper (MS Word-2007 and PDF format) and model answer (PDF format) in the examination portal on or before **May, 12th May 2024** mentioning the subject ESE/Branch/class/Course Name. Please go through the instructions and guidelines by paper setter, question paper format and syllabus provided in the link given in your mail.

Yours faithfully,



Dr. D. N. Mane
Controller of Examinations



Tatyasaheb Kore Institute of Engineering and Technology, Warananagar
(An Autonomous Institute), Warananagar, Tal. Panhala, Kolhapur, Maharashtra
| CONFIDENTIAL |

Ref:TKIET/ESE/A.Y.2023-24/Fourth Year/Semester-VII/Order No-610

Date:24/11/2023

To,
Chairman

1)Asst.Prof. Vikas Namdev Mane

Phone: 9823986596

Email: vnmmech@tkietwarana.ac.in

College: TKIET,Warananagar.

2)Co-Paper Setter
Dr. G. C. Koli

Phone: 7722076379

Email: gajanan.koli@setiedu.in

College: SETI, Panhala

Subject:Appointment order as question paper setter for Fourth YearEnd Semester Examination (ESE) Semester-VII, Dec 23.

Dear Sir/Madam,

With reference to the recommendation by the Board of Studies [BoS] and approval by The Board of Examination [BoE] of TKIET, Warananagar, I am pleased to inform that, you have been appointed as Question Paper Setter for ESE Examination Semester-VII, Dec 23 as per description in the following table.

Programme	Course Code	Course Name
Mechanical Engineering	ME703	FINITE ELEMENT ANALYSIS

I request you to prepare Two (2) question paper sets in accordance with syllabus and appointment order and it is responsibility of chairman to upload soft copy of question paper (MS Word-2007 and PDF format) and model answer (PDF format) in the examination portal on or before 4th Dec 2023 mentioning the subject ESE/Branch/class/Course Name.

Please go through the instructions and guidelines by paper setter ,question paper format and syllabus provided in the link given in your mail.



Yours Faithfully,
Controller Of Examination

Ref No: KIT / EXAM / A. Y-2023-24 / ESE / F.Y.M.Tech. / Dec-2023/229

08-Nov-23

To,

Mr. Sandesh B. Sangale

Chairman (Internal)

Dept of MECH, KIT's College of
Engineering (Autonomous), Kolhapur
Mobile No: 9420459932

Mr. G. C. Koli

Co-Paper Setter (External)

Sanjeevan Engineering & Technology
Institute, Panhala.
Mobile No: 7722076379

**Subject: - Your appointment order as question paper setter & Evaluator for
F.Y.M.Tech. End Semester Examination Semester-I, Dec-2023.**

Dear Sir/ Madam,

With reference to a recommendation by the Board of Studies [BoS] and approval by the Board of Examination [BOE] / Academic standing Committee /Academic Council of KITCOE, Kolhapur. I am pleased to inform that, you have been appointed as Question Paper Setter for End Semester Examination Semester-I, December-2023 as per description in the following table

Program me	Course Code	Course Name
F.Y.M.Tech.	PMDN0129	Rapid Prototyping

I request you to prepare **Two (02)** question paper sets in accordance with the syllabus available on KITCOEK website and clearly mentioning "Set A" and "Set B" on front page, top right corner. I hope your experience will help our students for a clear evaluation of knowledge and skills. Kindly accept the appointment order and convey your acceptance within three days to the CoE Office, KITCOEK, in given Google Form Link: <https://forms.gle/51QZGR8w51bgJipcA>

I am requesting you to mail a softcopy of the question paper (MS-word 2007 and PDF format) and model answer sheet (PDF Format) to preexam@kitcoek.in (CC to coe.kitcoek@gmail.com) Both hard copy & soft copy of question paper and model answer sheet, along with scheme of marking and photo copy of QPQRS report both sets is to be submitted on or before, **24/11/2023**, mentioning in subject Course Code- ESE, December-2023/F.Y.M.Tech.. / QP/ **Rapid Prototyping**,

The level of questions to be set must be as follows: 1) Difficult – 30 % 2) Moderate- 40 % 3) Easy – 30 %

Please go through the instructions and guidelines by paper setter and a sample template of questions paper provided in the link given in your mail.

Yours Faithfully,



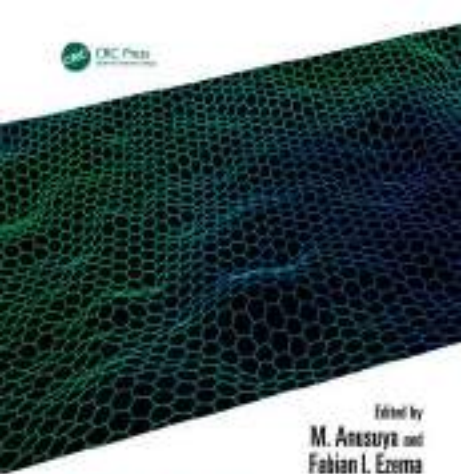
Mr. S. S. Kadam

Deputy Registrar Pre-Exam



Dr. Y. M. Patil

Dean Examinations & Evaluation



Edited by
**M. Anusuya and
Fabian I. Ezema**

Introduction to Functional Nanomaterials

15

Emerging Nanomaterials for Advanced Technologies

Koli Gajanan Chandrashekhar

Sanjeevan Engineering & Technology Institute, Panhala, Maharashtra, India

K. Mahesh Dutt

Dayanandasagar Academy of Technology & Management, Bangalore, India

G. Bharath Reddy

CVR College of Engineering, Hyderabad, India

Apparao Damarasingu

Aditya Institute of Technology and Management, Tekkali, India

R. G. Padmanabhan

Arasu Engineering College, Kumbakonam, India

15.1 Introduction to Emerging Nanomaterials

Nanomaterials, a cornerstone of modern materials science, have captivated researchers and industries alike with their unique properties and versatile applications. At the nanoscale, materials exhibit extraordinary characteristics distinct from their bulk counterparts, making them pivotal in advancing technologies across various domains [1].

15.1.1 Nanomaterials: Definition and Characteristics

Nanomaterials are defined by their dimensions, typically ranging from 1 to 100 nanometres. At this scale, quantum effects become predominant, influencing the physical, chemical, and biological properties of materials. Engineered nanomaterials can be categorised into nanoparticles, nanocomposites, nanotubes, and nanowires, each designed with specific properties tailored for diverse applications. The characteristics that distinguish nanomaterials include their high surface area-to-volume ratio, quantum confinement effects, and exceptional mechanical, electrical, and thermal properties. These unique attributes stem from their nanoscale dimensions, enabling unprecedented control over material behaviour and interactions [2].

15.1.2 Significance in Advanced Technologies

The significance of emerging nanomaterials reverberates across various advanced technologies, shaping the landscape of electronics, energy, medicine, and environmental science. In electronics, nanomaterials play a transformative role in enhancing device performance. Nanoscale transistors and conductive nanomaterials pave the way for faster, smaller, and more efficient electronic components. Their high surface area facilitates rapid charge and discharge processes, leading to improved energy density and storage efficiency [3]. Nanomaterials also hold promise in catalysing advancements in renewable energy technologies, such as solar cells and fuel cells. The biomedical field witnesses groundbreaking applications with nanomaterials, particularly in drug delivery systems and diagnostic tools. Nanoparticles can encapsulate

DTE Code : **ENG315**



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 AISEE Code : C-1195

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra, DTE, DCA
 Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
 Affiliated to Shivaji University, Kolhapur, MSRIE, Mumbai.

Faculty Achievement						
Name of Department			Mechanical Engineering		2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Dr Ajit Ashok Katkar	Book publication	The future of Solar Power	Scientific International Publishing House	2024
2			Paper setter	Energy Conservation and Management(BTME605C)	DBATU	6/5/2024
3			FDP/STTP	NAAC Assessment and Accrediation: Procedures and Processes	ACT Academy Tamil Nadu.	11/09/2023 to 17/09/2023
4			FDP/STTP	WRITING AN EFFECTIVE RESEARCH ARTICLE: TIPS AND TRICKS	KLS VBIT, Hlayal Karnataka	03/10/2023 to 07/10/2023
5			FDP/STTP	Management Developemt & Academic Leadership	ACT Academy Tamil Nadu.	01/12/2023 to 07/12/2023
6			FDP/STTP	Recent Trends in Mechanical Engineering and Industry 4.0	Sanjay Bhokare Group of Institutes, Miraj.	08/01/2024 to 13/01/2024
7			FDP/STTP	Industrial Instrumentation and Automation (IIA 2024)	Siemens Center of Excellence in collaboration with NIT Kurukshertra	06/05/2024 to 10/05/2024



THE FUTURE OF SOLAR POWER

Dr. Ajit Ashok Katkar

Dr. Koli Gajanan Chandrashekhar

Order No: DBATU/EXAM/Summer24/PS164

Date: 06/05/2024

From: **The Controller of Examinations,**
Dr. Babasaheb Ambedkar Technological University,
Lonere., 402103

To,
Dr. A. A. Katkar,

I am directed to inform you that Dr. Babasaheb Ambedkar Technological University has appointed you as a Paper Setter in the following subject (s). The Question Paper should be set on the all units of the syllabus.

Season	Regular & Supplementary Summer 2024
Branch Name	Automation & Robotics/Robotics
Subject Code	BTMOE605C
Subject Name	Energy Conservation and Management (Mechanical)

- Note: 1. Kindly share the Question Paper on mail : coe_psmech@dbatu.ac.in on or before 15th May 2024 (While mailing the Question Paper, the Mail Subject must be "Subject Code with Subject Name")
2. Kindly mention proper details on Question Paper as Season, Branch Name, Subject Code, Subject Name and Date.
3. Kindly check the syllabus on dbatu.ac.in website.

Provided a child, near relation of dependent of yours is not appearing or likely to appear at the Examination in the subject for which an invitation is now being offered to you. Also provide that you are not an author or co-author of a book and that book is prescribed/reference book for the said examination.

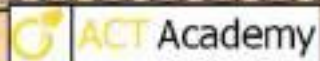
INSTRUCTIONS FOR CHAIRMAN AND PAPER SETTERS:

1. Stick to the syllabus. Include the questions from all units.
2. Prepare the question paper in a pdf format as advised by Controller of Examination. The question paper should be in a **ready to print format**.
3. Check whether all necessary data/information is provided in all questions.
4. If there are figures/tables in the question paper the same must be inserted at appropriate space with clarity. All dimensions of the figure should be legible for the students.
5. Please clearly mention the marks for each question and internal distribution of marks for subquestions.
6. You are also requested to submit the solution of entire paper after a week, along with the marking scheme.
7. **Chairman must set Question Paper separately.**
50% questions should be for average students, 25% for above average and 25% should be out of box questions. Please strictly follow the guidelines.

As per Maharashtra University Act 2016, Section 48(4), It shall be obligatory on every teacher and on the non-teaching employee of the University, affiliated, conducted colleges, community colleges or recognized institutions to render necessary assistance and service in respect of examinations.

Yours faithfully,

Controller of Examinations(I/C)
Dr. Babasaheb Ambedkar Technological
University, Lonere



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DR. AJIT ASHOK KATKAR
ASSOCIATE PROFESSOR

DEPARTMENT OF MECHANICAL ENGINEERING
SANJEEVAN ENGINEERING AND TECHNOLOGY INSTITUTE
KOLHAPUR, MAHARASHTRA

for actively attending the One Week National Level Faculty
Development Programme on '**NAAC Assessment and
Accreditation: Procedures and Processes**' from 11.09.2023 to
17.09.2023, conducted by A.C.T. Academy, Tamil Nadu in
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Date of Issue : 18-09-2023

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Dr. Ashik Bellary
Convenor


Dr. V. A. Kulkarni
Principal

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This certificate is awarded to

DR. AJIT ASHOK KATKAR

**ASSOCIATE PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING
SANJEEVAN ENGINEERING AND TECHNOLOGY INSTITUTE
KOLHAPUR, MAHARASHTRA**

For having successfully participated in One Week National Level Faculty Development Programme on "**Management Development and Academic Leadership**" conducted by A.C.T. Academy, Tamil Nadu from 01.12.2023 to 07.12.2023.

PROF. (DR). SOUDAMINI MENON
Director, A.C.T Academy



K. DEEPIKA
Chairperson, A.C.T Academy



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

CERTIFICATE

This is to certify that Mr/Ms. **AJIT ASHOK KATKAR** has successfully completed ISTE approved Online/SF-STTP/FDP Programme on “**Recent Trends in Mechanical Engineering and Industry 4.0**” held during **08.01.2024** to **13.01.2024** organized by **ATS’s Sanjay Bhokare Group of Institutes, Miraj, Maharashtra.**

Online/P-2024/10610

Executive Secretary



SHORT-TERM COURSE

on

“Industrial Instrumentation and Automation (IIA 2024)”



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Department of Electronics & Communication Engineering, NIT Kurukshetra

Certificate of Participation

This is to certify that Prof./Dr./Mr./Ms.....**KATKAR AJIT ASHOK**.....
of.....**SANJEEVAN ENGINEERING & TECHNOLOGY INSTITUTE**..... has participated in the
Short-Term Course on “Industrial Instrumentation and Automation (IIA 2024)” organized by
the Siemens Center of Excellence in collaboration with Department of Electronics &
Communication Engineering, National Institute of Technology Kurukshetra, Haryana during
May 06-10, 2024.

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Faculty Achievement						
Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Dr. V.V.Vanmore	Patent Publication	Micro Abrasive Jet Machine	The Patent Office, Kolkata. Application No. 386859-001	19/10/2023
2			Two week Interdisciplinary refresher course	NEP 2020 orientation and sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grant commission(UGC)	MMTTP center Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.	01/04/2024 to 15/04/2024
3			Expert Lecture	Micro Abrasive Jet machining of the course Manufacturing Processes-II	Walchand College of Engineering Sangli	15/04/2024
4			Book Chapter Publication	Machining of titanium alloys by using micro abrasive jet machine: an experimental investigation	Routledge Taylor & Francis Group CRC Press	2024



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डिजाइन के पंजीकरण का प्रमाण पत्र

Certificate of Registration of Design

डिजाइन सं. / Design No. : 386859-001
 तारीख / Date : 23/05/2023
 पारस्परिकता तारीख / Reciprocity Date* :
 देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *MICRO ABRASIVE JET MACHINE* से संबंधित है, का पंजीकरण, श्रेणी 15-09 में 1.Mr. Vinod Vasantryo Vanmore 2. Dr. Uday Anna Dabade के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 15-09 in respect of the application of such design to *MICRO ABRASIVE JET MACHINE* in the name of 1.Mr. Vinod Vasantryo Vanmore 2. Dr. Uday Anna Dabade.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधधीन प्रावधानों के अनुसरण में।

In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि : 19/10/2023
 Date of Issue



महानियंत्रक पेटेंट-डिजाइन और व्यापार चिह्न
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Certificate of Participation

NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME

This is to certify that Dr. Vinod Vasantrao Vanmore, Assistant Professor, Sanjeevan Engineering and Technology Institute Panhala Kolhapur, has completed the “NEP 2020 Orientation and Sensitization Programme” under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grant Commission (UGC) organized by UGC-Malaviya Mission Teacher Training Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur from 1st April to 15th April, 2024.

Dr C. G. Deth
Director (MM-TTC)

Invitation to Deliver Expert Lecture on Manufacturing Processes for S.Y.B.Tech Mechanical Engg .

2 messages

amar bhandare <amar.bhandare@walchandsangli.ac.in>

Sat, Apr 13, 2024 at 11:52 AM

To: "Vinod V. Vanmore" <vinodvanmore@gmail.com>

Cc: HOD Mechanical <hod.mechanical@walchandsangli.ac.in>, UDAY DABADE <uday.dabade@walchandsangli.ac.in>

Dear Sir,

I hope this message finds you well. On behalf of Department of Mechanical Engg (Walchand college of Engg Sangli) we extend an invitation to you to deliver an expert lecture for S.Y.B.Tech Mechanical Engg class on Manufacturing Processes. Your extensive expertise in this area makes you an ideal candidate to share valuable insights with our students.

We believe that your perspective will greatly enrich our event and provide attendees with valuable knowledge and inspiration. Your contribution will undoubtedly contribute to the success of this activity.

The details of the lecture are as follows:

Topic: Manufacturing Processes

Class: S.Y.B.Tech Mechanical Engg

Date: 15/04/2024

Time: 10:15 am-12:15 pm

Venue: Mechanical Department.

Thank you for considering our invitation. We look forward to the possibility of welcoming you as our distinguished guest speaker.

Thanks and Regards,
Dr. Amar.S.Bhandare

Assistant Professor,

Department of Mechanical Engineering

WALCHAND COLLEGE OF ENGINEERING

(An Autonomous Institute)
Vishrambag, Miraj Road, Sangli

<http://www.walchandsangli.ac.in> |

Cell no: 9923562527

To: amar bhandare <amar.bhandare@walchandsangli.ac.in>

Cc: HOD Mechanical <hod.mechanical@walchandsangli.ac.in>, UDAY DABADE <uday.dabade@walchandsangli.ac.in>

Dear Sir,

Thanks for the invitation.

[Quoted text hidden]



Walchand College of Engineering, Sangli

(An Autonomous Institute)

Vishrambag, SANGLI-416415 (M.S.), India

Website : www.walchandsangli.ac.in

Email : director@walchandsangli.ac.in, walchand@rediffmail.com

Director +91-233-2303433

Office +91-233-2300383

Fax : +91-233-2300831

Date: 15/04/2024

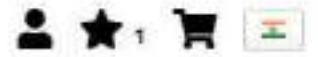
Appreciation letter

Dr. Vinod .V. Vanmore has delivered an expert lecture on the topic Micro Abrasive Jet Machining of the course Manufacturing Processes-II on 15th April 2024 for S.Y.B.Tech Mechanical Engg. This session is found to be useful and informative for this course. We are thankful for devoting your time and support.

Dr.A.S.Bhandare
Assistant Professor
Mechanical Engg. Department

Dr. S. U. Sapkal
Head
Mechanical Engg. Department

To,
Dr. Vinod .V. Vanmore.
Assistant Professor,
Mechanical Dept,
SETI, Panhala,
Kolhapur.



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Edited by
Bjorn Schuller, Rajeev Gupta, Rakesh Mote,
Abhishek Sharma, J.P. Giri, R.B. Chadge

 [PREVIEW BOOK](#)

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1st Edition

Recent Advances in Material, Manufacturing, and Machine Learning

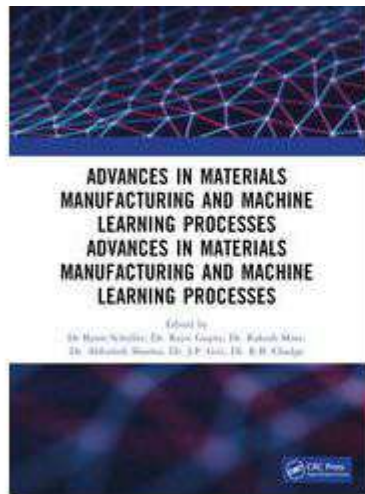
Proceedings of 2nd International Conference (RAMMML-23)

Edited By Bjorn Schuller, Rajeev Gupta, Rakesh Mote, Abhishek Sharma, J.P. Giri, R.B. Chadge

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59 Machining of titanium alloys by using micro abrasive jet machine: an experimental investigation

Vinod V. Vanmore¹ and Uday A. Dabade²

¹Assistant Professor, Sanjeevan Engineering & Technology Institute Panhala, Kolhapur, Maharashtra, India

²Professor, Walchand College of Engineering, Sangli, Maharashtra, India

Abstract

Ceramics, silicon, glass, titanium and nickel alloys, and other difficult-to-cut materials are now widely used in the MEMS, electronic device, and aerospace industries. The increased cost is due to the machining of these materials. One of these materials' most convenient micromachining technologies is micro abrasive jet machining (MAJM). This method has several distinct advantages, including a small heat-affected zone, low cutting forces, high machining versatility, and high flexibility. Fine abrasive particles (aluminum oxide or silicon carbide) and highly compressed air or gas (helium, nitrogen, or air) are directed on the target surface via a fine nozzle in this machining process. The abrasives exiting the nozzle at high speeds impinge on the target surface, causing material removal due to erosive action. This method had a very high etching rate compared to other micro-fabrication techniques. Furthermore, it does not require a clean room environment, making it particularly appealing for low-cost industrial practices for machining difficult-to-cut materials. This research aimed to create MAJM for difficult-to-machine materials like the titanium alloy (Ti-6Al-4V) plate. The new design and fabrication of the Laval nozzle were first reported in order to increase the machining productivity of micromachining. The circular cross-sectional nozzle was designed for high-speed, precise etching and patterning on difficult-to-machine materials. Using Taguchi's design of experiment methodology, this study investigates the effect of various parameters such as air pressure, abrasive size, and standoff distance on machining performance. The analysis of variance (ANOVA) method was used to determine the significance of each factor. The developed MAJM experimental setup investigates whether the Laval nozzle reduces the dimensional variation of the machined hole.

Keywords: ANOVA, MAJM, material removal rate, Taguchi method, Ti-6Al-4V

Introduction

Titanium and nickel-based ferrous and super alloys, ceramic materials, composite materials, and cobalt-chromium alloys have all been developed in recent decades for high-strength, heat-resistant applications in the automobile, aviation, nuclear, healthcare, and electronic sectors. All these materials are stronger and harder than typical engineering materials. However, these materials' applications are currently limited because converting the final component costs half the total cost of the product. This is because of the decreased cutting speed and shallower depth of cut caused by excessive tool wear. As a result, these materials are categorised as difficult to cut. For these materials, traditional machining processes are inefficient. Many attempts have been made in recent years to improve material machinability through the use of external energy-assisted machining. Among the numerous external energy-assisted machining processes, micro abrasive jet machining (MAJM) has piqued the interest of metal-cutting researchers. Much research has been conducted in recent years. Machining superalloys and refractory metals has become critical in order to meet the demands of ever-increasing jet engine technology [1]. The complex designs of jet engine parts present machining challenges that are beyond the capabilities of traditional machining procedures. One such issue is drilling small deep holes in superalloys. Non-traditional (or advanced) machining techniques are well suited to creating cost-effective holes in such cases. Other conditions driving these advanced machining technologies (AMPS) for drilling include micro-drilling holes.

Metals are particularly interesting because they are relatively low-cost substrates, are widely available, recyclable, disposable, and have good structural strength. Titanium alloys are especially intriguing due to their current biomedical applications. As a result, the goal is to create and test a system capable of predicting the geometric evolution of micro holes in titanium alloy (Ti-6Al-4V). For drilling purposes, "micro" is typically considered as large as 2 mm (0.078 in.), and here selected, micro holes on difficult-to-machine materials from various machining processes for experimentation. Aerospace, automotive, medical, electronic, optics, jewellery, printed circuit boards, semiconductors, and mechanical watches all use microholes.

Workpiece Materials and Experimental Procedure

Titanium alloy

MAJM was used to machine difficult-to-machine materials such as Ti-6Al-4V. Titanium and its alloys are appealing materials due to their high strength-to-weight ratio at high temperatures and excellent corrosion



DTE Code : **ENG315**



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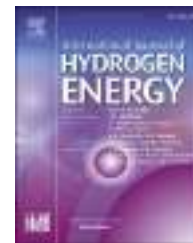
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 Affiliated to Shivaji University, Kolhapur, MSUETI, Mumbai.

NAAC Accredited
 AICTE ID : 1-8019451
 AISHE Code : C-11165

Faculty Achievement						
Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Rahul Uday Urunkar	Journal paper Publication	Performance analysis of sodium alanate hydride reactor with different nanofluids	International Journal of Hydrogen Energy	December 2023
2			Reviwer for SCOPUS Journal	Institute of Advanced Engineering and Science (IAES)	International Journal of Applied Power Engineering	Jan. 2024
3			Book Editor	Futuristic Trends in Renewable & Sustainable Energy	IIP Series (Iterative International Publisher)	April 2024
4			Workshop	Adsorption for CO2 Capture, Green Refrigeration & Energy Storage	IIT Dhanbad	13/04/2024 to 14/04/2024
5			Faculty Development Program	Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024	College of Engineering, Pandharpur	19/06/2024 to 24/06/2024
6			Ph.D.	Ph.D. completed	Shivaji University Kolhapur	July 2024

Available online at www.sciencedirect.com

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Performance analysis of sodium alanate hydride reactor with different nanofluids

Rahul U. Urunkar^{*}, Sharad D. Patil

Department of Mechanical Engineering, RIT, Rajaramnagar, Affiliated to Shivaji University, Kolhapur, Maharashtra, India

HIGHLIGHTS

- Developed and validated mathematical model of sodium alanate based hydride reactor.
- Used nanofluid as a heat exchange fluid.
- Presented performance for Al₂O₃/HTF, CuO/HTF and MgO/HTF Nanofluids.
- Absorption time is improved by 14% for given conditions.
- Reported up to 10% enhancement in the heat exchange rate for CuO/HTF nanofluid.

ARTICLE INFO

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Nanofluid

ABSTRACT

The thermal management of the hydride based hydrogen storage reactor is the key factor to realize the complete storing potential of hydrides. In this regards a hydride reactor filled with sodium alanate in multiple tubes is numerically analyzed for absorption process. Based on various governing equations, a mathematical model of hydride reactor is developed and validated with the help of ANSYS Fluent. The hydride reactor uses mainly water or oil for heat exchange during hydrogen sorption. In the present study conventional heat transfer fluid (HTF) is replaced with the nanofluid since it has a greater heat exchange properties. The CuO/HTF, Al₂O₃/HTF and MgO/HTF nanofluids are selected based on previous studies and results of numerical experiment are recorded. The outcomes are attained for various parameters such as material and concentration of nanoparticles, supply pressure of hydrogen and inlet temperature of heat exchange fluid. The CuO/HTF nanofluid with concentration of 5 vol% exhibited better rate of absorption in comparison with other vol% concentrations and other selected nanofluids. It shows improvement in hydrogen absorption time up to 14% under selected conditions. Additionally, it is observed that CuO/HTF nanofluid with 5 vol% concentration is thermodynamically superior to other selected nanofluids; as a result it enhances the rate of the heat exchange up to 10% for hydride reactor. It is realized that the performance of CuO/HTF nanofluid with 5 vol% concentration is superior among picked nanofluids. Therefore for the hydride reactor the use the nanofluid is advantageous.

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^{*} Corresponding author.

E-mail addresses: rahul.urunkar1991@gmail.com (R.U. Urunkar), p2sharad@yahoo.com, sharad.patil@ritindia.edu (S.D. Patil).

<https://doi.org/10.1016/j.ijhydene.2023.02.105>

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Rahul Urunkar <rahul.urunkar1991@gmail.com>

[IJAPE] Registration as Reviewer with International Journal of Applied Power Engineering (IJAPE)

1 message

Assoc. Prof. Dr. Tole Sutikno <ijape@iaescore.com>
To: Rahul Uday Urunkar <rahul.urunkar1991@gmail.com>

Fri, Jan 19, 2024 at 12:08 PM

The following message is being delivered on behalf of International Journal of Applied Power Engineering (IJAPE).

In light of your expertise, we have taken the liberty of registering your name in the reviewer database for International Journal of Applied Power Engineering (IJAPE). This does not entail any form of commitment on your part, but simply enables us to approach you with a submission to possibly review. On being invited to review, you will have an opportunity to see the title and abstract of the paper in question, and you'll always be in a position to accept or decline the invitation. You can also ask at any point to have your name removed from this reviewer list.

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Thank you,
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Certificate of Recognition

awarded to

Mr Rahul Uday Urunkar

Assistant Professor
Sanjeevan Engineering and Technology Institute, Panhala.

*in recognition of an outstanding contribution as an **Editor** for the edited book titled*

Futuristic Trends in Renewable & Sustainable Energy Volume 3 Book 6

E-ISBN:978-93-6252-921-3

Print-ISBN:978-93-6252-366-2

Publication Date : 25-February-2024

Publication Date : 30-April-2024

Nanjesh Bennur

Nanjesh Bennur
Director, IIP Series



Indian Institute of Technology (Indian School of Mines), Dhanbad

Dhanbad-826004 (Jharkhand)

CERTIFICATE OF PARTICIPATION



This certificate is awarded to

Rahul Uday Urunkar

For actively participating in the two-day workshop

on

“Adsorption for CO₂ Capture, Green Refrigeration & Energy Storage”

Organized by

Department of Mechanical Engineering

Indian Institute of Technology (Indian School of Mines) Dhanbad, Jharkhand. - 826004, India

Dated 13th-14th April, 2024

Coordinator

Dean (R&D)

Director



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“Employing Industrial Quality Management Systems for Quality
Assurance in Outcome-Based Education (OBE)-2024”

Certificate of Participation

This is to certify that, **Mr. Rahul Uday Urunkar** of **Sanjeevan Engineering and Technology Institute** has successfully completed One Week Faculty Development Program (Hybrid Mode) on “Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024 from 19th June to 24th June, 2024 organized by **Department of Mechanical Engineering, SVERI's College of Engineering, Pandharpur.**

(Mr. S. L. Sathe)
FDP Coordinator

(Dr. N. U. Kautkar)
FDP Coordinator

(Dr. S. B. Bhosale)
Convenor

(Dr. B. P. Ronge)
Principal



Shivaji University, Kolhapur

शिवाजी विद्यापीठ, कोल्हापूर



VC, the Chancellor, Vice-Chancellor
and Members of the Management Council, on
the recommendation of the Academic Council,
confer the Degree of

Doctor of Philosophy

on

Urunkar Rahul Varsha Uday

in the subject **Mechanical Engineering**
under the faculty of **Science and Technology**
for successful defence of his research

on 25th July, 2024

at the 61st Convocation Ceremony

held in the year Two Thousand Twenty Five.

Degree No. : 611026404748

Audhar No. : XXXXXXXX0608

आम्ही, कुलपती, कुलगुरू
आणि व्यवस्थापन परिषदेचे सदस्य,
विद्यापरिषदेच्या शिफारशीनुसार

विद्यावाचस्पती

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विज्ञान आणि तंत्रज्ञान विद्याशाखेअंतर्गत

यांत्रिकी अभियांत्रिकी या विषयात

२५ जुलै, २०२४ रोजीच्या

वशास्वी संशोधन सादरीकरणवाटल

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Registrar / कुलसचिव



Vice-Chancellor / कुलगुरू

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Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
Affiliated to Shivaji University, Kolhapur, MSBTE, Mumbai.

Faculty Achievement

Faculty Achievement						
	Name of Department		Mechanical Engineering		2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Deshmukh Sardar Balaso	Short Term Training Program	Design of Experiment & Optimization	Ashokrao Mane Group of Institutions, Vathar	11-12-2023 to 16-12-2023
2	2023-24	Mr. Deshmukh Sardar Balaso	PhD	Registratered for PhD	Shivaji University, Kolhapur	1/1/2024
3	2023-24	Mr. Deshmukh Sardar Balaso	Faculty Develoment Program	Recent Trends in Mechanical Engineering and Industry 4.0	Sanjay Bhokare Group of Institutes, Miraj	08-01-2024 to 13-01-2024
4	2023-24	Mr. Deshmukh Sardar Balaso	Faculty Develoment Program	IC Engines & Gas Turbines	Indian Institute of Technology, Guwahati	Jan - April 2024



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CERTIFICATE OF PARTICIPATION

This is to certify that,

Prof. Sardar Balaso Deshmukh

has participated in one week short term training program sponsored by
DBATU, Lonere on "**Design of Experiment & Optimization**"
from 11th Dec 2023 to 16th Dec 2023

Dr. H. V. Shete
Dean, R & D

Prof. P. B. Ghewari
I/C Director



ESTD. 1962
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by NAAC(2011)
With CGPA 3.52

DEPARTMENT OF TECHNOLOGY
Shivaji University, Kolhapur-416004
Maharashtra
Phone No: 0231 2609424 & 2609414



Web-site : <http://apps.unishivaji.ac.in> **E-mail :** director.tech@unishivaji.ac.in and
phd_engineering@unishivaji.ac.in

Ref.No. S.U./Ph.D. / DOT / 2023-24 / 5629

Date :- 11/06/2024

To,

Shri Deshmukh Sardar Balaso

At/Po: Jakhale, Tal: Panhala, Dist:
Kolhapur.

Sub : Provisional Admission and Guide Allotment Letter for Ph.D. Programme.

Sir / Madam,

With reference to your application, I am to inform you that you are hereby provisionally admitted to

Ph.D. programme in Mechanical Engg. in the Faculty of **Science and Technology** for the academic year
2023-24 w.e.f 01/01/2024 under the guidance of **Dr.Amol Subhash Todkar**, subject to
fulfillment of following conditions.

- i) This Guide allotment letter is issued to you after receiving provisional approval from eligibility section and subject to compliance of necessary documents and remission of fee.
- ii) You will have to pay the yearly fee as prescribed by University. If you fail to pay the fee regularly for every year, the fine will be imposed as per University rules.
- iii) You are hereby informed to remit fee as prescribed by University and to submit eight copies of synopsis through the Research Guide to the undersigned within one month from the date of issue of this letter, failing which your admission shall stand cancelled. No separate Communication will be made in this regard.
- iv) The title of your thesis/dissertation will be communicated to you by PGBUTR Section after approval of Research and Recognition Committee.
- v) Successful completion of M. Phil / M.Phil course work / Pre Ph.D. theory course work as per UGC norms shall be pre-requisite for the submission of thesis as per provision of R.R.D. 14.2.

The UGC Regulation on minimum Standards and Procedure for award of M.Phil. and Ph.D. Degree 2016 (date 16 May 2016), amendment of 2018 dated 27th August 2018 and the rules and regulations approved by university authorities, from time to time shall be applicable for M.Phil./Ph.D. Programme.

[Important Note: This admission shall not be treated as final unless final approval to eligibility is granted. Further, this admission will be confirmed only after approval of RAC and RRC. The University reserves its right to cancel this admission.]



Yours faithfully,

Director
Department of Technology
Shivaji University, Kolhapur

[Note:- Pay fee of Rs. 1000/-

(Provisional registration fee Rs. 500/- A.2.R.20. & Library deposit of Rs. 500/- E.2.R.20)]

Copy to:

1. Guide- Dr. Amol Subhash Todkar
Tatyasaheb Kore Institute of Engg. & Techonology
2. PGBUTR Section, Shivaji University, Kolhapur.
3. The Director, Barr. Balasaheb Khardekar Knowledge Resource Centre, Shivaji University, Kolhapur.



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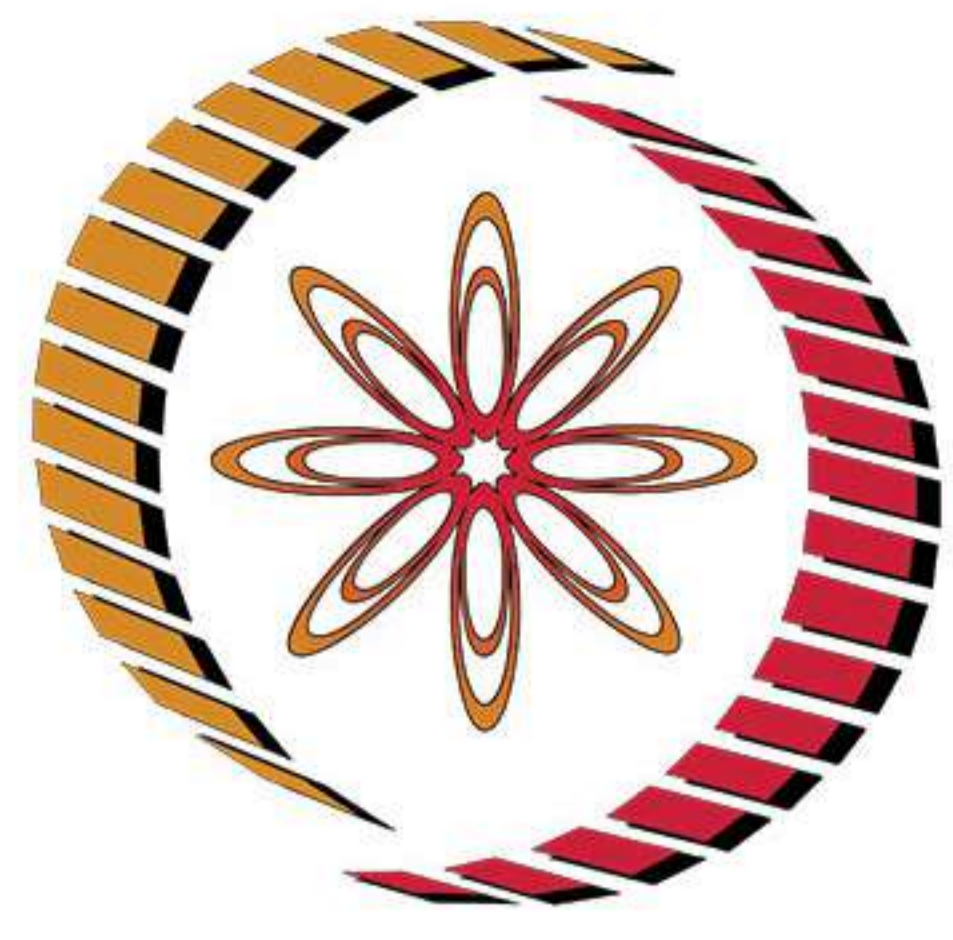
CERTIFICATE

This is to certify that Mr/Ms. **DESHMUKH SARDAR BALASO** has successfully completed ISTE approved Online/SF-STTP/FDP Programme on “**Recent Trends in Mechanical Engineering and Industry 4.0**” held during **08.01.2024 to 13.01.2024** organized by **ATS’s Sanjay Bhokare Group of Institutes, Miraj, Maharashtra.**

Online/P-2024/10603

A handwritten signature in black ink, appearing to read 'Smt. A. S. ...', is written over a horizontal line.

Executive Secretary



NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SARDAR BALASO DESHMUKH

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 70 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



(Jan-Apr 2024)

Roll No: NPTEL24ME38S1159600060

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16th Nov, 2023, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2023



DTE Code : **ENG315**



NAAC Accredited

AICTE ID : 1-8019451

ASST Code : C-11765

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Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
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Faculty Achievement

Faculty Achievement						
Name of Department			Mechanical Engineering		2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Dhananjay Vasantao Patil	Faculty Development Program	Hydrogen and Fuel Cell Technologies for Electric Vehicles	ATAL, KITS college of engineering, Kolhapur	27/11/2023 to 02/12/2023
2			International Conference poster	Chemical synthesis of SnO ₂ nanoparticles for corrosion protection of 304 austenitic stainless steel	IC-NACMBM-2024	12/02/2024 to 14/02/2024
3			Book chapter Publication	Thin Film Metal Oxide Nanocomposite: Synthesis to innovative applications via chemical route	Book Title: Thin Film Nanomaterials: Synthesis, Properties and Innovative Energy Applications Publiher: Benthem Science Publishers.	2024

ATAL/2023/1700730389



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

AICTE Training and Learning (ATAL) Academy

Certificate

*It is certified that **Mr. Dhananjay Vasant Rao Patil, Assistant Professor of SETI, Panhala** has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Hydrogen and Fuel Cell Technologies for Electric Vehicles** at **KOLHAPUR INSTITUTE OF TECHNOLOGY** & **TMS COLLEGE OF ENGINEERING AUTONOMOUS KOLHAPUR** from **27/11/2023** to **02/12/2023**.*

Coordinator

Bureau Head (ATAL)



D. Y. PATIL EDUCATION SOCIETY
(Deemed to be University), KOLHAPUR
NAAC 'A' Grade in 3rd Cycle

Certificate

This is to certify that **Mr. Patil Dhananjay Vasant** of Sanjeevan Engineering and Technology Institute, Panhala, Kolhapur has delivered invited talk/ chaired the session/ presented oral/ presented poster/ participated in the **International Conference on Nanotechnology Addressing the Convergence of Materials Science, Biotechnology and Medical Science (IC-NACMBM-2024)** held at the Centre for Interdisciplinary Research, D. Y. Patil Education Society (Deemed to be University), Kolhapur, Maharashtra, India during 12th to 14th February 2024. His contribution to the conference is highly appreciated.

Dr. Jayavant L. Gunjekar

Convener

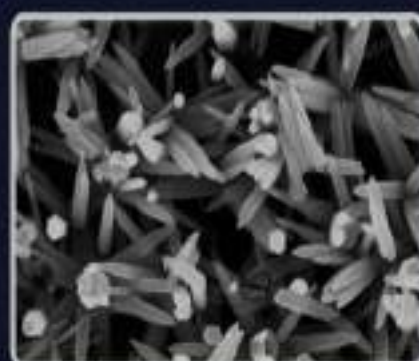
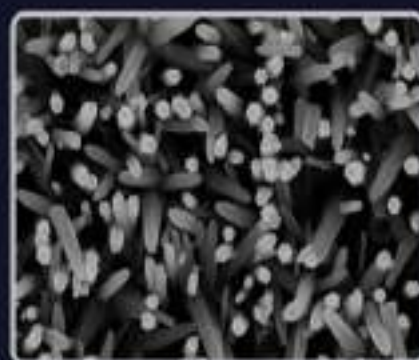
Prof. Meghnad G. Joshi

Convener

Prof. Chandrakant D. Lokhande

Chairman

THIN FILM NANOMATERIALS: SYNTHESIS, PROPERTIES AND INNOVATIVE ENERGY APPLICATIONS



Editors:

Sampat G. Deshmukh

Vipul Kheraj

Kailash J. Karande

Swanand G. Kulkarni

Bentham Books

Thin Film Metal Oxide Nanocomposite: Synthesis to Innovative Applications *via* Chemical Route

Keshav S. Pakhare¹, Sachin S. Potdar^{2*}, Dhananjay V. Patil³, Bharat S. Potdar⁴, and Udaysinh S. Bhapkar⁵

¹ *Anandibai Raorane Arts, Commerce and Science College, Vaibhavwadi, Sindhudurg, MS, India*

² *Department of Applied Science and Humanities, MIT-ADT University, Loni Kalbhor, Pune, MS, India*

³ *Department of Mechanical Engineering, Sanjeevan Engineering and Technology Institute, Panhala, Kolhapur, MS, India*

⁴ *Department of Applied Science and Humanities, Gharda Institute of Technology, Lavel, Chiplun, MS, India*

⁵ *Department of Mechanical Engineering, KITs College of Engineering, Kolhapur, India*

Abstract: Metal-oxide nanocomposites are promising in the fields of nanotechnology and nanoscience for a variety of application purposes, including sensors, supercapacitors, solar cells, etc. The increase in its practical application efficiencies may be due to these increased features. This chapter covers recent research on nanocomposites and their several possible uses. Additionally, metal oxide-based nanocomposite synthesis techniques are gaining popularity because they offer high production rates, high product yields, and minimal toxic waste formation while also being cost-effective and environmentally friendly. Physical and chemical methods have been used to synthesize metal oxide nanocomposites. This chapter provides an overview of the various chemical methods used to synthesize metal oxides. The many reported synthesis methods and prospective applications like solar cells, gas sensors, and supercapacitors of metal oxide-based nanocomposites are discussed in this research.

Keywords: Chemical methods, Nanocomposites, Sensors, Supercapacitors, Solar cells.

INTRODUCTION

Nanotechnology is a branch of science that describes materials at dimensions less than 100 nm. Here, compared to similar bulk materials, particle sizes between 1 and 100 nm exhibit dramatically different chemical and physical properties, presenting

*Corresponding author Sachin S. Potdar: Department of Applied Science and Humanities, MIT-ADT University, Loni Kalbhor, Pune, MS, India; E-mail: sachinpotdar20@gmail.com



Faculty Achievement						
	Name of Department		Mechanical Engineering		2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Praveen Shivaji Atigre	Faculty Development Program	8-day Face-to-Face UHV-II FDP	All India Council for Technical Education (AICTE) at JSPM's Rajarshi Shahu College of Engineering, Pune	17/07/2024 to 24/07/2024
2			Faculty Development Program	"Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education (AICTE)	24/06/2024 to 28/06/2024
3			Faculty Development Program	"Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education (AICTE)	17/06/2024 to 21/06/2024
4			NPTEL FDP	Inspection And Quality Control In Manufacturing	NPTEL-AICTE	Jan-Feb 2024
5			Memorandum of Understanding [MoU]	Memorandum of Understanding [MoU] with Technomac Industries	Technomac Industries, Shiroli MIDC	25/10/2023
6			Memorandum of Understanding [MoU]	Memorandum of Understanding [MoU] with Satyajeet Mechanisms	Satyajeet Mechanisms, Gokul Shirgaon MIDC Kolhapur	14/03/2024
7			Paper Setter	Basic Human Rights	Dr. Babasaheb Ambedkar Technological University	12/12/2023



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Certificate of Participation

This is to certify that **Mr. Praveen Shivaji Atigre** from **Sanjeevan Engineering and Technology Institute, Panhala** has participated and successfully completed the **8-day Face-to-Face UHV-II FDP** organized by **All India Council for Technical Education (AICTE)** at **JSPM's Rajarshi Shahu College of Engineering, Pune** from **17th July to 24th July 2024**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



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Certificate of Participation

This is to certify that **Mr. Praveen Shivaji Atigre** from **Sanjeevan Engineering and Technology Institute, Panhala** 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 **24th June to 28th June 2024**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



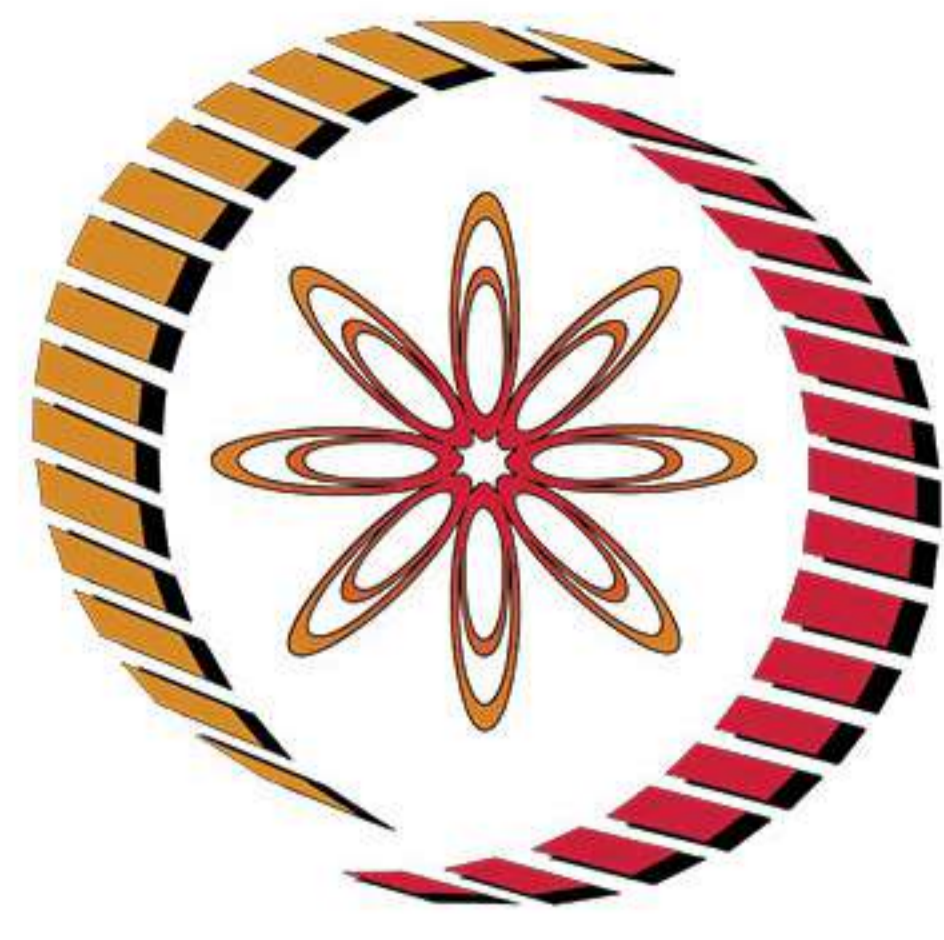
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that **Mr. Praveen Shivaji Atigre** from **Sanjeevan Engineering and Technology Institute, Panhala** 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 **17th June to 21st June 2024**.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE



NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to

PRAVEEN SHIVAJI ATIGRE

for successfully completing the course

Inspection and Quality Control in Manufacturing

with a consolidated score of 80 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



(Jan-Feb 2024)

Roll No: NPTEL24ME10S649900325

Duration of NPTEL course : 4 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16th Nov, 2023, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2023



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
PRAVEEN SHIVAJI ATIGRE
for successfully completing the course



Inspection and Quality Control in Manufacturing

with a consolidated score of **80** %

Online Assignments	23.33/25	Proctored Exam	57/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **950**

Prof. Kaushik Ghosh,
Professor (Chemistry)
Coordinator CEC

Jan-Feb 2024

(4 week course)

Prof. Ranjana Pathania,
Professor (BSBE)
Coordinator (NPTEL)



Indian Institute of Technology Roorkee



Roll No: NPTEL24ME10S649900325

To verify the certificate



No. of credits recommended: 1 or 2

Memorandum of Understanding (MOU)

For Academic & Technical Tie Up

Between

Sanjeevan Engineering & Technology

Institute, Panhala



And

Technomac Industries

Shiroli M.I.D.C. Kolhapur 416122



With Effective from 25th October 2023



PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201





Memorandum of Understanding

This Memorandum of Understanding is executed on **Wednesday, 25/10/2023**

Between

Sanjeevan Engineering & Technology Institute Panhala, here in after referred as "SETI Panhala" (Which term shall so far as the context admits be deemed to mean and include its successors and assignees) of the First Part.

And

Technomac Industries, a Company duly organized and existing under the laws of India having its registered office at Shirol MIDC Kolhapur (C-62 Near MIDC Police Station, Shirol MIDC Kolhapur 416122) (hereafter referred to as "Technomac Industries", which expression shall unless repugnant to the context or meaning thereof, include its successors, legal representative and permitted assignees) on Second Part.

WHEREAS:

1. SETI Panhala is a noteworthy academic institute of Kolhapur region offering U.G. and P.G. programs in Engineering. SETI Panhala is an educational institution affiliated to Dr. Babasaheb Ambedkar Technological University Lonere.
2. SETI Panhala is willing to enter into a Memorandum of Understanding (MOU) with Technomac Industries for the purpose of Students Internship/Industrial Visits/Expert Lectures/Projects/ Students Placement /Faculty Exchange/Engineering Consultancy etc.
3. SETI Panhala and Technomac Industries are desirous of associating with each other to expertise the students of SETI Panhala by providing Student Internships / Industrial Visits / Expert Lectures / Student Placements / Student Projects / Faculty Exchange / Engineering Consultancy etc. Now therefore, in consideration of the premises and the actual covenants herein contained, it is agreed by both SETI Panhala and Technomac Industries as under.

1.0 Definitions and Interpretation

- 1.1 "MOU" shall mean this Memorandum of Understanding executed between **SETI Panhala & Technomac Industries** on **Wednesday, 25/10/2023**.



PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



Page 1 of 6

- 1.2 "Party" or "Parties" shall mean SETI Panhala & Technomac Industries individually and collectively as the context may require.
- 1.3 The headings / subheadings / titles sub-titles are only for the sake of convenience and shall not be interpreted to restrict or otherwise affect the meaning or import of the clauses, which shall be interpreted solely in light of the contents thereof.
- 1.4 Use of words in the singular includes the plural and vice versa and the masculine gender includes the feminine where applicable.
- 1.5 Where a word or phrase is defined, other parts of speech and grammatical forms of that word or phrase shall have the corresponding meanings. Any reference to 'Writing' includes printing, typing, lithography and other means of reproducing words in visible form.

2.0 Focus Area & Objectives

The main intention of this MOU is to expertise the students of SETI Panhala with the help Technomac Industries by providing the students with Internships / Industrial Visits / Expert Lectures / Student Placements / Student Projects / Faculty Exchange / Engineering Consultancy etc. The purpose of this Memorandum of Understanding is to set out the basic consensus about respective roles and responsibilities of the Parties in working cooperatively to develop and carry out collaborative activities in furtherance of the common interest of the institutions by

- a) Exchange of faculty members and students for study and research
- b) Exchange of invitations to scholars for lectures & sharing of experience through faculty exchange, guest lectures etc.
- c) Promote joint research activities and publications
- d) Facilitate training programs, industrial visits & sponsored projects.
- e) Exchange of information on professional experience in fields of interest to both institutions.
- f) Exchange of invitations to scholars to participate in conference and symposium

3.0 Responsibility Structure

- 3.1 SETI Panhala shall provide the infrastructure of systems, LCD projector etc. for the expert lectures. Also the laboratories and other research equipments available in the laboratories.
- 3.2 Technomac Industries shall be responsible for arrangements & coordination for supply of industry experts providing



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Somwar Peth, Panhala - 415 201



training programs, process of necessary appointments with industries for industry internship program, projects, expert lectures as well as visits in coordination with staff of SETI Panhala.

- 3.3 SETI Panhala shall create awareness amongst its students for the promotion of the activity especially Internship Program /Industrial Visits/Projects/Expert Lectures etc.
- 3.4 Each party will nominate one of its members as its representative in charge of the cooperative program. Individual programs of work under this Memorandum will be jointly planned and conducted by the nominees of both parties.
- 3.5 Progress of work by the individual program will be reviewed and approved by designated project officers of both parties. It is anticipated that a detailed plan of joint activities will be completed by the nominees of both parties.
- 3.6 The final approval of any project will be dependent upon the availability of guaranteed support funds.

4.0 Relationship

This MOU relates solely to the intention of the parties, wherein SETI Panhala and Technomac Industries jointly work together and shall not extend to any other activity or create a partnership between the Parties hereto and under any law of any country. The parties agree that it is not their intention to share any loss or profit between them in their respective fields, except to the extent expressly provided herein.

5.0 Authority to Bind

No party shall act on behalf of the other party to contractually bind the other Party under the terms of this MOU having first obtained the other Party's written agreement.

6.0 Intellectual Property Rights:

6.1 Ownership of any intellectual property (including but not limited to confidential information, know-how, patents, copyrights, design rights, rights relating to computer software, and any other industrial or intellectual property rights) developed jointly during the course of this MOU shall be vested in both institutes to this Memorandum.

6.2 Both institutes shall have the joint right to determine the commercial exploitation and disposition of such intellectual property, and both institutes shall make joint applications for the registration of the same.



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PRINCIPAL
Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



Before any registration or commercialization of any intellectual property takes place, the institutes agree to reach a separate agreement covering issues such as exploitation rights and revenue sharing.

6.3 Any publication regarding such intellectual property shall only be possible with the prior written consent of both institutes, such consent not to be unreasonably withheld.

6.4 SETI Panhala shall be free to use perpetually the results arising out of the collaborating activities for its own internal teaching, research, educational, clinical and publication purposes without the payment of royalties or other fees to the other party.

7.0 Validity & Termination

This MOU shall remain in force for a period of three (03) years commencing from effective date. Institute may extend the term by written agreement signed by both after review. During the initial term or any renewal term, either party may terminate this MOU, after mutually agreed days, with prior written notice to the other party.

8.0 Amendment & Modification

This MOU may be amended or modified by a written agreement signed by the representatives of both organizations (SETI Panhala & Technomac Industries).

9.0 Consequential Damages

Other than explicitly mentioned in this MOU, either Party shall not under any circumstances or at any time be liable to the other under or in connection with the MOU for any special or any direct or indirect loss or damage or for any consequential loss or damage, whether direct or indirect, including but without limiting the generality of the foregoing, loss of profits, loss of production, or loss of opportunities.

10.0 Severability

If any provision of this MOU or the application thereof to any person, entity or circumstance shall be invalid or unenforceable to any extent, the remainder of this MOU shall not be affected thereby and the application of such provision shall be enforced to the greatest extent permitted by law.



[Signature]
PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Tomwar Peth, Panhala - 416 201



11.0 Dispute Resolution

In case, there be a dispute relating to any aspect of academic cooperation, Principal, Vice Principal of SETI Panhala & Owner of the Technomac Industries will jointly resolve the dispute in a spirit of independence, mutual respect & shared responsibility. If such a settlement cannot be reached, the dispute will be settled in the Courts of Maharashtra (India).

12.0 Notices

12.1 Any notice and other communications provided for in the agreement shall be in writing in English and shall be first transmitted by facsimile transmission and/or by internationally recognized courier service, in the manner as elected by the Party giving such notice:

In case of notices to Technomac Industries:

Reg. Office Address:

Technomac Industries.
C-62 Near MIDC Police Station, Shirol MIDC,
Kolhapur 416122

In the case of notices to SETI Panhala,

College Address:

Sanjeevan Engineering & Technology Institute Panhala,
Sanjeevan Knowledge City, A/P - Somwar Peth, Panhala,
Kolhapur - 416201.

12.2 Either Party may, from time to time, change its address or representative for receipt of notices or other communications provided for in this agreement by giving to the other not less than 15 days prior written notice.

13.0 Entire understanding

This MOU expresses the whole agreement reached between the Parties. Consequently, this agreement supersedes any previous letter or document of whatsoever nature exchanged between the Parties with respect to this agreement.



[Signature]
PRINCIPAL
Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



14.0 Amendment


No amendment to this MOU shall be valid and binding to the parties unless it is made in writing and signed by authorized representative of all parties to this agreement. In witness where of the parties have caused this agreement to be executed by their duly authorized representatives on this 25th Day of October 2023.

ACCEPTED:

For **Technomac Industries**



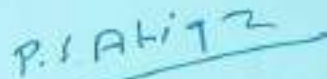
Name: **Mr. Ram Randive**
Designation: H. R. Manager
Technomac Industries
Shirol M.I.D.C. Kolhapur


Witness: **Prof. Dhananjay V. Patil**
Designation: Asst. Professor
Sanjeevan Engineering &
Technology Institute, Panhala

For **SETI Panhala**



PRINCIPAL
Sanjeevan Engg. & Tech. Institute
Name: **Dr. Sanjeev N. Jain**
Designation: Principal
Sanjeevan Engineering &
Technology Institute, Panhala


Witness: **Prof. Praveen S. Atigre**
Designation: Coordinator for
Industry Internship Activity
Sanjeevan Engineering &
Technology Institute, Panhala



**Memorandum of Understanding (MoU)
For Academic & Technical Tie Up**

Between

**Sanjeevan Engineering & Technology
Institute, Panhala**



And

**Satyajeet Mechanisms
Gokul Shirgaon M.I.D.C. Kolhapur - 416234**



With Effective From 14th March 2024


PRINCIPAL
Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201





Memorandum of Understanding

This Memorandum of Understanding is executed on **Thursday, 14/03/2024**

Between

Sanjeevan Engineering & Technology Institute Panhala, here in after referred as "SETI Panhala" (Which term shall so far as the context admits be deemed to mean and include its successors and assignees) of the First Part.

And

Satyajeeet Mechanisms is an ISO 9001:2008 certified company duly organized and existing under the laws of India having its registered office at W-15, Gokul Shirgaon MIDC, Kolhapur-416234, Maharashtra, India (hereafter referred to as "Satyajeeet Mechanisms", which expression shall unless repugnant to the context or meaning thereof, include its successors, legal representative and permitted assignees) on Second Part.

WHEREAS:

1. SETI Panhala is a noteworthy academic institute of Kolhapur region offering U.G. programs in Engineering. SETI Panhala is an educational institution affiliated to Dr. Babasaheb Ambedkar Technological University Lonere.
2. SETI Panhala is willing to enter into a Memorandum of Understanding (MOU) with Satyajeeet Mechanisms for the purpose of Students Internship/Industrial Visits/Expert Lectures/Projects/ Students Placement /Faculty Exchange/Engineering Consultancy etc.
3. SETI Panhala and Satyajeeet Mechanisms are desirous of associating with each other to expertise the students of SETI Panhala by providing Student Internships/Industrial Visits/Expert Lectures/Student Placements /Student Projects/ Faculty Exchange/Engineering Consultancy etc. Now therefore, in consideration of the premises and the actual covenants herein contained, it is agreed by both SETI Panhala and Satyajeeet Mechanisms as under.

1.0 Definitions and Interpretation

- 1.1 "MOU" shall mean this Memorandum of Understanding executed between SETI Panhala & Satyajeeet Mechanisms on **Thursday, 14/03/2024**.



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[Signature]
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Sanjeevan Engg. & Tech. Institute Page 1 of 6
Somwar Peth, Panhala - 416 201



- 1.2 "Party" or "Parties" shall mean SETI Panhala & Satyajeet Mechanisms individually and collectively as the context may require.
- 1.3 The headings/subheadings/titles sub-titles are only for the sake of convenience and shall not be interpreted to restrict or otherwise affect the meaning or import of the clauses, which shall be interpreted solely in light of the contents thereof.
- 1.4 Use of words in the singular includes the plural and vice versa and the masculine gender includes the feminine where applicable.
- 1.5 Where a word or phrase is defined, other parts of speech and grammatical forms of that word or phrase shall have the corresponding meanings. Any reference to 'Writing' includes printing, typing, lithography and other means of reproducing words in visible form.

2.0 Focus Area & Objectives

The main intention of this MOU is to expertise the students of SETI Panhala with the help Satyajeet Mechanisms by providing the students with Internships / Industrial Visits / Expert Lectures / Student Placements / Student Projects / Faculty Exchange / Engineering Consultancy etc. The purpose of this Memorandum of Understanding is to set out the basic consensus about respective roles and responsibilities of the Parties in working cooperatively to develop and carry out collaborative activities in furtherance of the common interest of the institutions by

- a) Exchange of faculty members and students for study and research
- b) Exchange of invitations to scholars for lectures & sharing of experience through faculty exchange, guest lectures etc.
- c) Promote joint research activities and publications
- d) Facilitate training programs, industrial visits & sponsored projects.
- e) Exchange of information on professional experience in fields of interest to both institutions.
- f) Exchange of invitations to scholars to participate in conference and symposium

3.0 Responsibility Structure

- 3.1 SETI Panhala shall provide the infrastructure of systems, LCD projector etc. for the expert lectures. Also the laboratories and other research equipments available in the laboratories.
- 3.2 Satyajeet Mechanisms shall be responsible for arrangements & coordination for supply of industry experts, providing



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Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201

Page 2 of 6



training programs, process of necessary appointments with industries for industry internship program, projects, expert lectures as well as visits in coordination with staff of SETI Panhala.

- 3.3 SETI Panhala shall create awareness amongst its students for the promotion of the activity especially Internship Program / Industrial Visits / Projects / Expert Lectures etc.
- 3.4 Each party will nominate one of its members as its representative in charge of the cooperative program. Individual programs of work under this Memorandum will be jointly planned and conducted by the nominees of both parties.
- 3.5 Progress of work by the individual program will be reviewed and approved by designated project officers of both parties. It is anticipated that a detailed plan of joint activities will be completed by the nominees of both parties.
- 3.6 The final approval of any project will be dependent upon the availability of guaranteed support funds.

4.0 Relationship

This MOU relates solely to the intention of the parties, wherein SETI Panhala and Satyajeeet Mechanisms jointly work together and shall not extend to any other activity or create a partnership between the Parties hereto and under any law of any country. The parties agree that it is not their intention to share any loss or profit between them in their respective fields, except to the extent expressly provided herein.

5.0 Authority to Bind

No party shall act on behalf of the other party to contractually bind the other Party under the terms of this MOU having first obtained the other Party's written agreement.

6.0 Intellectual Property Rights:

6.1 Ownership of any intellectual property (including but not limited to confidential information, know-how, patents, copyrights, design rights, rights relating to computer software, and any other industrial or intellectual property rights) developed jointly during the course of this MOU shall be vested in both institutes to this Memorandum.

6.2 Both institutes shall have the joint right to determine the commercial exploitation and disposition of such intellectual property, and both institutes shall make joint applications for the registration of the same.



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PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Path, Panhala - 416 201

Before any registration or commercialization of any intellectual property takes place, the institutes agree to reach a separate agreement covering issues such as exploitation rights and revenue sharing.

6.3 Any publication regarding such intellectual property shall only be possible with the prior written consent of both institutes, such consent not to be unreasonably withheld.

6.4 SETI Panhala shall be free to use perpetually the results arising out of the collaborating activities for its own internal teaching, research, educational, clinical and publication purposes without the payment of royalties or other fees to the other party.

7.0 Validity & Termination

This MOU shall remain in force for a period of three (03) years commencing from effective date. Institute may extend the term by written agreement signed by both after review. During the initial term or any renewal term, either party may terminate this MOU, after mutually agreed days, with prior written notice to the other party.

8.0 Amendment & Modification

This MOU may be amended or modified by a written agreement signed by the representatives of both organizations (SETI Panhala & Satyajet Mechanisms).

9.0 Consequential Damages

Other than explicitly mentioned in this MOU, either Party shall not under any circumstances or at any time be liable to the other under or in connection with the MOU for any special or any direct or indirect loss or damage or for any consequential loss or damage, whether direct or indirect, including but without limiting the generality of the foregoing, loss of profits, loss of production, or loss of opportunities.

10.0 Severability

If any provision of this MOU or the application thereof to any person, entity or circumstance shall be invalid or unenforceable to any extent, the remainder of this MOU shall not be affected thereby and the application of such provision shall be enforced to the greatest extent permitted by law.



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PRINCIPAL
Canjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



11.0 Dispute Resolution

In case, there be a dispute relating to any aspect of academic cooperation, Principal, Vice Principal of SETI Panhala & Owner of the Satyajeet Mechanisms will jointly resolve the dispute in a spirit of independence, mutual respect & shared responsibility. If such a settlement cannot be reached, the dispute will be settled in the Courts of Maharashtra (India).

12.0 Notices

12.1 Any notice and other communications provided for in the agreement shall be in writing in English and shall be first transmitted by facsimile transmission and/or by internationally recognized courier service, in the manner as elected by the Party giving such notice:

In case of notices to Satyajeet Mechanisms,

Reg. Office Address:

Satyajeet Mechanisms.

W-15, Gokul Shirgaon MIDC, Kolhapur.

Pin Code - 416234, Maharashtra, India.

In the case of notices to SETI Panhala,

College Address:

Sanjeevan Engineering & Technology Institute Panhala,

Sanjeevan Knowledge City, A/P - Somwar Peth, Panhala,

Kolhapur - 416201.

12.2 Either Party may, from time to time, change its address or representative for receipt of notices or other communications provided for in this agreement by giving to the other not less than 15 days prior written notice.

13.0 Entire understanding

This MOU expresses the whole agreement reached between the Parties. Consequently, this agreement supersedes any previous letter or document of whatsoever nature exchanged between the Parties with respect to this agreement.



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PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



14.0 Amendment

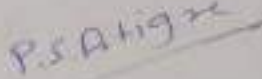
No amendment to this MOU shall be valid and binding to the parties unless it is made in writing and signed by authorized representative of all parties to this agreement. In witness where of the parties have caused this agreement to be executed by their duly authorized representatives on this **14th Day of March 2024**.

ACCEPTED:

For Satyajeeet Mechanisms



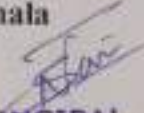
Name: Mr. Anuj Patil
Designation: H. R. Manager
Satyajeeet Mechanisms
Gokul Shirgaon M.I.D.C. Kolhapur



Witness: Prof. Praveen S. Atigre
Designation: Coordinator for
Industry Internship Activity
Sanjeevan Engineering &
Technology Institute, Panhala



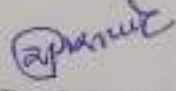
For SETI Panhala




PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201

Name : Dr. Sanjeev N. Jain
Designation: Principal
Sanjeevan Engineering &
Technology Institute, Panhala



Name: Dr. Suhas G. Sapate
Designation: Vice Principal
Sanjeevan Engineering &
Technology Institute, Panhala



Witness: Prof. D. V. Patil
Designation: Asst. Professor
Sanjeevan Engineering &
Technology Institute, Panhala



DTE Code : **ENG315**



NAAC Accredited

AICTE ID : 1-0019451
MSR Code : 1-1165

HOLYWOOD ACADEMY'S
SANJEEVAN

ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA

Sanjeevan Knowledge City, Somwar Peth-Inside, Panhala, Tal. Panhala, Dist. Kolhapur
Pin- 416 201 (Maharashtra) Phone : 9146999500

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra & DTE
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raichur

Faculty Industrial Visit Report

Title of the Activity	Industrial Visit of Faculties For Signing MoU with Satyajeet Mechanisms Pvt. Ltd.
Industry Visited	Satyajeet Mechanisms Pvt. Ltd.
Address	W-15, Gokul Shirgaon MIDC, Kolhapur-416234, Maharashtra
Day & Date	Thursday, 14/03/2024
Time	4:00 pm Onwards
Faculty Members	1 Prof. Praveen S. Atigre (Mechanical Engineering Department) 2 Prof. Vikas D. Thorat (Mechanical Engineering Department)
Organized By	Mechanical Engineering Department



Sanjeevan
PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201

DTE Code : **ENG315**



NAAC Accredited

AICTE ID : I-0016451
DTE Code : I-11965

HOLY-WOOD ACADEMY'S

SANJEEVAN

ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
Sanjeevan Knowledge City, Somwar Path, Injale, Panhala, Tal. Panhala, Dist. Kolhapur
Pin- 416 201 (Maharashtra) Phone : 9146999500

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra & DTE
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad

Activity Report

Industrial Visit of Faculties For Signing MoU with Satyajeet Mechanisms Pvt. Ltd.

Industry Visited	:	Satyajeet Mechanisms Pvt. Ltd.
Address	:	W-15, Gokul Shirgaon MIDC, Kolhapur-416234, Maharashtra
Day & Date	:	Thursday, 14/03/2024
Time	:	4:00 pm onwards
Faculty Members	:	1 Prof. Praveen S. Atigre (Mechanical Engineering Department) 2 Prof. Vikas D. Thorat (Mechanical Engineering Department)

1 Introduction:

A Memorandum of Understanding (MoU) is a formal agreement between two or more parties. The purpose of MoU is to have mutual understanding and intentions to work together on projects required for industries and research needs. With learned faculties of good industrial experience and promising students, both parties (In our case in between Industry & Engineering College) jointly agree to exchange their expertise for mutual benefit and growth, on the areas specified below:

1. Industrial Visits
2. Internships & Special Technical Training to make the students industry-ready
3. Guest Lectures
4. Mini Projects and Main Project Work
5. Research & Development
6. Problem Solving
7. Studies & Survey
8. Placements
9. Establishing Advanced Labs




PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Path, Panhala - 416 201

DTE Code : **ENG315**



NAAC Accredited

AICTE ID : 1-9008431
AISE Code : 1-1105

HOLA WOOD ACADEMY'S
SANJEEVAN

ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
Sanjeevan Knowledge City, Sonwar Path-Bajir, Panhala, Tal. Panhala, Dist. Kolhapur
Pin- 416 201 (Maharashtra) Phone : 9140995500

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra & DTE
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad

An Industrial visit at Satyajeet Mechanisms Pvt. Ltd. was organized by Mechanical Engineering Department. The industrial visit was witnessed by the two faculty members namely Prof. Praveen S. Atigre and Prof. Vikas D. Thorat.

2 Purpose of the Visit:

- 1) To strengthen our Institute-Industry Interaction Activities
- 2) Signing MoU for Institute-Industry Interaction
- 3) To gain first-hand information about the industry and the work environment.
- 4) To understand various real time problems faced by industry & their requirements.
- 5) Finding solution pertaining to the problem through Internship, Projects of the UG students.

3 About the Company:

Satyajeet Mechanisms Pvt. Ltd. is an ISO 9001:2008 certified company duly organized and existing under the laws of India having its registered office at W-15, Gokul Shirgaon MIDC, Kolhapur-416234 Maharashtra. Satyajeet Mechanisms Pvt. Ltd. is known as one of prominent manufacturers, exporters and suppliers of optimum quality automobile parts and machine tool parts. The major activity of Satyajeet Mechanisms Pvt. Ltd. is manufacturing of diverse parts and accessories of automobiles as well as machine tools. The manufacturing is carried out using the best grade raw material and latest techniques in accordance with international quality standards.



[Signature]
PRINCIPAL
Sanjeevan Engg. & Tech. Institute
Panhala - 416 201



HOLYWOOD ACADEMY'S
SANJEEVAN

ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
Sanjeevan Knowledge City, Somwar Peth, Triloka, Panhala, Dist. Kolhapur,
Pin- 416 201 (Maharashtra) Phone : 9146999500

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra & DTE
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad

DTE Code : **ENG315**

NAAC Accredited

AICTE ID : 1-001451
AISE Code : 0-0105

4 Visit Photographs:



Shirol, Maharashtra, India
Q779, FHP, C-62, MIDC, Shirol, Maharashtra 416122, India
Lat 16.783427°
Long 74.273617°
14/03/24 04:39 PM GMT +05:30

Signing MOU with Satyajee Mechanisms Pvt. Ltd.



Gokul Shirgaon, Maharashtra, India
W-16, MIDC, Gokul Shirgaon, Maharashtra 416234, India
Lat 16.64397°
Long 74.287241°
14/03/24 04:43 PM GMT +05:30

Visit to Production Department of Satyajee Mechanisms Pvt. Ltd.



Sanjeevan
PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



HOLY-WOOD ACADEMY'S
SANJEEVAN

DTE Code : **EN6315**

NAAC Accredited

AICTE ID : 1-809433
AICTE Code : C-10165

ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
Sanjeevan Knowledge City, Somwar Peth-Dajale, Panhala, Tal. Panhala, Dist. Kolhapur,
Pin- 416 201 (Maharashtra) Phone: 9146991000

Approved By AICTE, New Delhi Recognized by Govt. of Maharashtra & DTE
Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad

5 Outcomes of the Visit:

- 1) A Memorandum of Understanding (MoU) was signed for future interaction with industry
- 2) Company strongly agreed for giving internship as well as projects to our UG students.
- 3) Discussion on various real time problems faced by industry & possible solutions to overcome these problems was held.

6 Report Prepared By : Prof. Praveen S. Atigre

Prof. Praveen S. Atigre *P.S. Atigre*
Prof. Vikas D. Thorat *V. Thorat*
Mechanical Engineering Department

V. H. Deokar
Dr. V. H. Deokar
H.O.D.

Mechanical Engineering Department

S. N. Jain
Dr. Sanjeev N. Jain

Principal

S.E.T.I. Panhala



S. N. Jain
PRINCIPAL

Sanjeevan Engg. & Tech. Institute
Somwar Peth, Panhala - 416 201



Date -07.08.2024

CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr.Ajinkya Dinesh Gade, student of Sanjeevan Engineering & Technology Institute, Panhala, has successfully completed his industrial training during 02 July 2024 to 29 July 2024 in our organization.

We appreciate the efforts for the training and wish him best in his future works.

Thanking You.

For, *SATYAJEET MECHANISMS PVT.LTD.*

Mr. Anuj S. Patil

(Human Recourses)





AN ISO 9001-2015, AS 9100 D

Satyajeet Mechanisms Pvt. Ltd.

VGP GROUP OF COMPANIES

W-15, MIDC, Gekol Shirgaon, Kolhapur. 416 234
Ph.: (0231) 2672222, 2671116 Email: info@vgpgroup.in
www.vgpgroup.in

Date -07.08.2024

CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr.Satyajeet Vilasrao Patil, student of Sanjeevan Engineering & Technology Institute, Panhala, has successfully completed his industrial training during 02 July 2024 to 29 July 2024 in our organization.

We appreciate the efforts for the training and wish him best in his future works.

Thanking You.

For, SATYAJEET MECHANISMS PVT.LTD.

Mr. Anuj S. Patil

(Human Recourses)





Dr. Babasaheb Ambedkar Technological University

Lonere-402103 Tal-Mangaon ,Dist Raigad(M.S) India.

Order Type:Supplymentary Winter-2023

From: The Controller of Examinations, Dr. Babasaheb Ambedkar Technological University,
Lonere

No:DBATU/EXAM/Supplymentary Winter-2023/No-2989

Date:12/12/2023

To,
Prof. Praveen Shivaji Atigre
I am directed to inform you that Dr. Babasaheb Ambedkar Technological University has appointed you as **Paper setter** in the following subject (s). The Question Paper should be set on the all units of the syllabus. .

Season	Supplymentary Winter-2023
Branch Name	MECHANICAL ENGINEERING/MECHANICAL ENGINEERING(SANDWICH)/Automation and Robotics/Robotics/AUTOMOBILE ENGINEERING/MECHATRONICS ENGINEERING/PRODUCTION ENGINEERING
Subject Code	BTHM403
Subject Name	Basic Human Rights

Note:

1. Once order is received kindly upload Question Paper with solution set within 3 days.
2. Kindly mention proper details in Question Paper as Season, Branch Name, Subject Code, Subject Name and Date
3. Kindly check the exam date and Syllabus on "dbatu.ac.in" website and date should be update the same on Question Paper.

Provided a child, a near relation of dependent of yours is not appearing or likely to appear at the Examination in the subject for which an invitation is now being offered to you. Also provided that you are not an author or co-author of a book and that book is prescribed/reference book for the said examination.

Guide lines for Paper Setters:

1. Stick to the syllabus. Include the questions from all units.
2. Prepare the question paper in a word file as advised by CoE/ACoE. The question paper should be in a ready to print format..
3. Check whether all necessary data/information is provided in all questions.

INSTRUCTIONS FOR PAPER SETTERS:

1. If there are figures/tables in the question paper the same must be inserted at appropriate space with clarity. All dimensions of the figure should be legible for the students.
2. Please clearly indicate the marks for each question and internal distribution of marks for sub- questions.
3. It is **mandatory to submit 01** sets of question paper not in duplicate in accordance with the syllabus.
4. You are also requested to submit the **solution of entire paper along with the marking scheme**.The Paper setter should submit the soft copy of question paper and model answer.

50% questions should be for average students, 25% for above average and 25% should be out of box questions. Please strictly follow the guidelines.

Please reply your acceptance/ not acceptance within 48 hours.

Guide lines for Subject Chairmen / Moderators:

1. Please collect the question papers given by paper setters.
2. Check whether question paper is of standard level or not. Also check whether questions are from all units of the syllabus or not. If needed, modify the paper. Please stick to max.20% modification.
3. Check whether necessary data, diagrams, charts, tables, chemical structures etc. are provided in the question paper. If not, please try to include or communicate to paper setter and CoE/ACoE.
4. Please check whether diagrams / chemical structures are legible or not. If not, ask the paper setter to re-submit the paper with proper data.
5. Chairman can set the paper by following all the given instructions when paper setter in the panel is one.
6. The Chairman will be the final authority for the quality of the question paper.

You are requested to keep your invitation strictly confidential.

As per Maharashtra University Act 2016, Section 48(4), It shall be obligatory on every teacher and on the non-teaching employee of the University, affiliated, conducted colleges, community colleges or recognized institutions to render necessary assistance and service in respect of examinations.

Yours faithfully,

Controller of Examinations (I/c)
Dr. Babasaheb Ambedkar Technological University, Lonere

A handwritten signature in black ink, possibly reading "Maha", is located in the top right corner of the page.

IMPORTANT INSTRUCTION TO THE PAPER-SETTER

Your kind attention is invited to the following: As per section 32(5) (g) of the Maharashtra University Act, 1994, Examination Work is Compulsory.,



Faculty Achievement						
Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Amol Shivaji Katkar	Faculty Development Program	Curriculum Development aligned with NEP 2020	National Institute of Technical Teachers Training and Research, Chandigarh	01/07/2024 to 05/07/2024
2			Faculty Development Program	Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024	College of Engineering, Pandharpur	19/06/2024 to 24/06/2024



Certificate No: ICT-5338/24

**National Institute of
Technical Teachers Training and Research
Chandigarh**

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

Certificate

This is to certify that

AMOL SHIVAJIRAO KATKAR

**SANJEEVAN ENGINEERING AND TECHNOLOGY INSTITUTE PANHALA,
PANHALA
MAHARASHTRA**

Participated in the AICTE Recognized Faculty Development Programme

on

Curriculum Development aligned with NEP 2020

Conducted by

Curriculum Development Centre Department

from

01/07/2024 to 05/07/2024 (One Week)

at

NITTTR, Chandigarh




Coordinator


Director



3.46/4.00 CGPA



BAND OF 151-300



Years of Excellence



Shri Vitthal Education & Research Institute's
College of Engineering, Pandharpur
(An Autonomous Institute)
Department of Mechanical Engineering

One Week Faculty Development Program (Hybrid Mode) on
“Employing Industrial Quality Management Systems for Quality
Assurance in Outcome-Based Education (OBE)-2024”

Certificate of Participation

This is to certify that, **Mr. Amol shivajirao katkar** of **Sanjeevan Engineering and Technology Institute** has successfully completed One Week Faculty Development Program (Hybrid Mode) on “Employing Industrial Quality Management Systems for Quality Assurance in Outcome-Based Education (OBE)-2024 from 19th June to 24th June, 2024 organized by **Department of Mechanical Engineering, SVERI's College of Engineering, Pandharpur.**

(Mr. S. L. Sathe)
FDP Coordinator

(Dr. N. U. Kautkar)
FDP Coordinator

(Dr. S. B. Bhosale)
Convenor

(Dr. B. P. Ronge)
Principal

DTE Code : **ENG315**



HOLY-WOOD ACADEMY'S
SANJEEVAN
GROUP OF INSTITUTIONS, PANHALA
 Sanjeevan Knowledge City, Somwar Peth-Tajale, Panhala, Tal. Panhala, Dist. Kolhapur.
 Pin- 416 201 (Maharashtra) Phone : 9146999500
 NAAC Accredited
 AICTE ID : 1-8019451
 AISHE Code : C-11165

Approved By AICTE, New Delhi
 Recognized by Govt. of Maharashtra, DTE, DOA
 Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad
 Affiliated to Shivaji University, Kolhapur., MSUTU, Mumbai.

Faculty Achievement						
Name of Department		Mechanical Engineering			2023-24	
Sr. No.	Year	Name of the Faculty	Event Name	Title	Journal/college/university Name	Date
1	2023-24	Mr. Vikas Dhula Thorat	Faculty Development Program	Recent Trends in Mechanical Engineering	Sanjay Bhokare Group of Institutes Miraj	08/01/2024 to 13/01/2024
2			Crash Course	30-Days Excel Crash Course	Learn More Pro- Skill Course	03/02/2024 to 06/03/2024
3			Faculty Development Program	Outcome Based Education and Application of Generative AI in Teaching and Research	Sri Padmavati Mahila Visvavidyalayam, Tirupati	18/03/2024 to 23/03/2024
4			Crash Course	Automotive Industrial Engineering	COURSERA	22/04/2024 to 06/05/2024
5			Course	GCC-TBC English 30	Maharashtra State Council of Examination , Pune GCC-TBC	2024



Shri Ambabai Talim Sanstha's
Sanjay Bhokare Group of Institutes Miraj



Approved by A.I.C.T.E., New Delhi, Recognized by Government of Maharashtra and DTE, Mumbai
Affiliated to-Shivaji University Kolhapur, Dr. Babasaheb Ambedkar Technological University, Lonere and MSBTE, Mumbai
Awarded with "Emerging" Integrated Campus by ISTE New Delhi

Certificate

of
Participation

This is to certify that, **Mr. THORAT VIKAS DHULA**, Faculty of SANJEEVAN ENGINEERING AND TECHNOLOGY INSTITUTE, PANHALA, KOLHAPUR, has participated in One Week Online **Faculty Development Program (FDP)** on "**Recent Trends in Mechanical Engineering**" from 8th to 13th January 2024, in collaboration with ISTE New Delhi, organized by Department of Mechanical Engineering of ATS SBGI, Miraj.

Mr. A.T.Kadam
Co-Convener

Dr. M.A.Bote
Convener & Head of the
Department

Dr. S.N.Hublikar
Dean Engineering

Dr. A.C.Bhagali
Director



CERTIFICATE

of Course Completion

This is to certify that

Vikas Dhula Thorat

Has Successfully Completed The E-Learning Course Of

30-Days Excel Crash Course

On March 6, 2024



Student Signature

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

Satish Dhawale
Director of CoursePe



SRI PADMAVATI MAHILA VISVAVIDYALAYAM (SPMVV)

(Women's University)
Tirupati, Andhra Pradesh-517502, India

ACCREDITED WITH 'A+' GRADE BY NAAC

ISO 9001:2015 CERTIFIED

ipsr solutions ltd
redefining excellence

Certificate

This is to certify that

Vikas Dhula Thorat , Asst. Professor

Department of Mechanical Engineering, Sanjeevan Engineering & Technology Institute Panhala Kolhapur

has participated in the **One Week National level Online Faculty Development Program**

on **Outcome Based Education and Application of Generative AI in Teaching and Research,**

organised by the **DST-CURIE-AI center of Sri Padmavati Mahila Visvavidyalayam (SPMVV University), Tirupati,**

in association with **ipsr solutions limited** from **18 March 2024** to **23 March 2024**

and has successfully completed all the tasks, assignments and assessments and secured an **A grade.**



Certificate ID: Mj5TqwvF0S

Prof. S. Jyothi

Coordinator, DST-CURIE-AI Centre
Sri Padmavati Mahila Visvavidyalayam
Tirupati

Dr. Mendus Jacob

M.D & C.E.O - ipsr solutions limited
Professor & Director, MCA
Marian College, Kuttikkanam (Autonomous)

STARWEAVER®

May 6, 2024

VIKAS DHULA THORAT

has successfully completed

Automotive Industrial Engineering

an online non-credit course authorized by Starweaver and offered through Coursera

Lluís Foreman

COURSE
CERTIFICATE



Verify at:

<https://coursera.org/verify/2BBXQ4KSBDZB>

Coursera has confirmed the identity of this individual and their participation in the course.



MAHARASHTRA STATE COUNCIL OF EXAMINATIONS, PUNE

GOVERNMENT CERTIFICATE IN COMPUTER TYPING BASIC COURSE (GCC-TBC)

ONLINE RESULT

CANDIDATE'S NAME	THORAT VIKAS DHULA		
MOTHER'S NAME	KALPANA		
EXAMINATION HELD IN	Walchand College Of Engineering	MONTH/YEAR: JUNE 2024	
CENTER CODE: 4304	SEAT NO: 4304151041	INSTITUTE CODE: 431530215135	

NAME OF THE SUBJECT		SEC.I Objective	SEC.II Practical				TOTAL	GRADE
			Email	Letter	Statement	Speed Passage		
GCC - TBC English 30 wpm	MAXIMUM MARKS	25	05	15	15	40	100	A
	MINIMUM MARKS	10	14			16	40	RESULT
	MARKS OBTAINED	16	33			20	69	PASS

A+ Grade: 75% & Above
A Grade: 60% To 74.99%
B Grade: 50% To 59.99%
C Grade: 40% To 49.99%
@ RESERVE :-

DATE OF RESULT: 16-08-2024

- छात्रों को श्रेणीकरण के आधार पर नतीजा देना है। नतीजा 14 फीसदी से अधिक है तो छात्र को श्रेणीकरण के आधार पर नतीजा देना है।
- दो चरों के साथ नतीजा देना है। नतीजा देना है।
- नतीजा देना है।
- नतीजा देना है।
- नतीजा देना है।
- नतीजा देना है।

खर्च

श्रेणीकरण के आधार पर नतीजा देना है।