ANNUAL REPORT OF MECHANICAL ENGINEERING DEPARTMENT FOR THE ACADEMIC YEAR 2021-22

It gives me immense pleasure to present before you the annual report of Mechanical Engineering Department.



It includes various achievements of the

students and faculty members and different activities conducted during the academic year 2021-22.

We believe that "Teamwork Divides the Task and Multiplies the Success."

1) ACADEMIC PERFORMANCE:

Our students have shown excellent results in university examination in the academic **year 2020-21**. Result of S.Y, T.Y and B. Tech. classes in the academic **year 2020-21** examination are as follows:

A. Performance in University Exam

Rankers of the Class:

The first five rankers of SY, TY & B. Tech. Mechanical class are as follows.

B. Tech. (Mechanical)

Rank	Name of Student	Percentage CGPA
I	Dindure Kiran Nurandappa	9.85
II	Shrigadi Sagar Purushottam	9.78
III	Kulkarni Shridhar Sanjay	9.78
IV	Tambe Prashant Rajendra	9.76
V	Shaikh Tanveer Tayyab	9.74

TY (Mechanical)

Rank	Name of Student	Percentage
I	Miss Shaikh Muskan Badshah	93.91
II	Kotnur Siddharam Javahar	93.82
	Shaikh Aaquib Awais Nawab	
	Iftekhar	
III	Pratiksha Waghmare	93.73
IV	Kalshetti Revansiddhappa	93.55
	Bhimashankar	
V	Mohini Gilbile	93.45
	Nadaf Jakirhusen Mattu	

SY (Mechanical)

Rank	Name of Student	Percentage
I	Gavali Pallavi Parshuram	95.00
II	Bhalerao Pankaj Jayaram	94.90
III	Salunke Chaitaniya Santosh	93.90
IV	Bagul Pradnya Pradeep	93.60
V	Jakkapure Basavaraj Prakash	93.50

Class wise Passing Results:

S.Y. (Mechanical) –	100%
T.Y. (Mechanical) –	100%
B Tech (Mechanical) –	100 %

Best Outgoing Student of the Institute:

Based on academic performance, co-curricular activities, **Mr Rameshwar S Udgiri** has been selected as the Best Outgoing students from Mechanical Engineering Department **and Best Outgoing students from the Institute** for the academic year 2021-22

B. Success in GATE-2021 Examination Mechanical Engineering Department conducted one month crash course in winter vacations for preparation of GATE2022 examination. We arranged Motivational and informative session by the

experts and previous years GATE qualified students also conducted classes for SY to B. Tech students. Prof. D.D. Bhoge worked as Career Counselling Coordinator for our Department. Also he conducted various seminar on GATE to the Students.

Following are the list of qualified students in GATE-2022

Sr.No.	Name of Student	Score/AIR
1	Mr. Saiprasad Chintakindi (Batch-2021)	AIR-167
2	Mr. Ayan Shaikh (Batch-2021)	AIR-714
3	Mr. Pramodji Bhadkumbe(Batch-2022)	Score-296

Mr. Ayan Shaikh is admitted in **IIT Mumbai for M. Tech in Process Engineering specialization.**

C. Success in GRE/TOEFL/ IELTS Examinations

Following students of Mechanical Engineering Department have qualified IELTS examination for pursuing their Master's Degree in universities abroad. Dr. Shriniwas S. Metan, worked as coordinator and guided these students for exam preparation.

Sr. No.	Name of Student	IELTS Score
1	Mr.Shivkumar Boblade	7.5
2	Mr.Anirudha Shirsikar	6.5
3	Mr.Rameshwar Udgiri	7.0
4	Mr Aaquib Javed	7.0
5	Miss Pallavi Solapure	7.0
6	Mr Santosh Koli	7.0

Admissions to Masters in Universities Abroad:

In the academic year, 2021-22, following two students are going for pursuing their Master's Degree in foreign universities.

- Miss Pallavi Solapure got admission to Master's Program in Operational Excellence at Hof University, Germany for Fall 2022.
- 2. Mr. Shivprasad Bobalde got admission in 4 universities to M.S. Programs, Master of Robotics and Automation Engineering at University of Auckland, Newzeland, Master of Maritime Engineering (Professional) at the University of Tasmania, Australia, MSc Marine Eng. with Specialization in Autonomous Marine Vehicles programme at University of Strathclyde Glasgow, Scotland and MSc Autonomous Systems at University of Plymouth, UK.
- **3.** Mr. Anirudha Shirsikar got admission to MS in Sustainable Technology Management at SRH University, Berlin, Germany.
- **4.** Mr Aaquib Awais Shaikh got admission to MS in Engineering Management at Northeastern University, USA.
- Mr. Rameshwar Udgiri got admission to MS in Engineering Management at Northeastern University, USA.
- 6. Mr Santosh Koli got admission in 4 universities to M.S. programs, Technical University of Hamburg (TUHH) MSc. Mechanical Engineering and Management, University of Siegen- MSc. Mechatronics, Ravensburg Weingarten university of applied sciences MSc. Mechatronics, Freiburg University- MSc. Mechanical and Process Engineering.

2. R&D Activities

2.1 Patent Filing:

In the academic year, 2021-22, total 8 Patents were filed/published by Mechanical Engineering Department faculty members.

 Dr Shriniwas S Metan has filed a Design Patent on "Cost Effective Solar Operated Lantern for Rural Ecosystem" with Application Number 351126-001 Cbr No 208593 dated 11/10/2021.

- Prof. A. S. Kashid has filed a Design Patent on "Simple Pipe and Rod Bending Attachment" with Application Number: 356892-001 Cbr No: 212243 dated: 18/01/2022
- Prof. A. S. Kashid has filed a Design Patent on "Simple Straight Line Gas Cutter Machine" with Application Number: 352041-001 Cbr No: 209158 dated: 26/10/2021.
- 4) Prof. A. S. Kashid has filed a Design Patent on "Hand Operated Water Bottle Crusher" with Application Number: 346886-001 Cbr No: 205704 dated: 28/07/2021.
- 5) Mr Swapnil Bharale, Pranav Harke, Muskan Shaikh, Shiddram Kotnur from TY Mechanical, Parth Lokhande and Bhawana Shinde from B.Tech. Mechanical have filed a Patent on "Note Sanitization Machine" on 02/09/2020 with Design No 332669-001.
- 6) Prof. C.V. Papade has filed a Design Patent on "Solar Powered PV Panel Lamination Machine" with Application Number 361862-001 Cbr No. 200099 dated 04/04/2022.
- Prof. C.V. Papade has filed a Design Patent on "IOT Based Solar Operated Dehydration System" with Application Number 362189-001 Cbr No. 20033 dated 08/04/2022.
- 8) Prof. C.V. Papade has filed a Design Patent on "Solar Cooker Using Nano-Mixed Phase Change Materials" with Application Number 362696-001 Cbr No. 200676 dated 18/04/2022.

2.2 SOLAR RESEARCH CENTER ACTIVITY:

i. On 21st March 2022 Dr Shriniwas S Metan has presented online the Solar Research Center activities, achievements, projects and future plan with MNRE Delegates New Delhi.
 The main agenda was to build the Solar Center of Excellence in our campus with the support of MNRE. Prof

- C V Papae and Prof D D Bhoge were present. From MNRE one scientist and Executive Director were present.
- ii. Cameroun India Initiative: Dr Shriniwas S Metan (Solar Research Center Incharge) presented on Solar Energy Technicians course and briefed about Solar Energy driven products developed for villages. The main objective is to explore for the Training programs for teachers (Train the trainers), technicians in Cameron and Sharing DIY (Do It Yourself) designs so that youths in Cameron can make relevant products for their eco system. The meeting was organised from Paris on Friday, January 21, 2022 12:00 PM-1:00 PM (UTC+01:00) Brussels, Copenhagen, Madrid, Paris. Following delegates were present for the meeting AULAS Marie Pierre; GADGIL, Hemant; GALEA Jean-Marc; Sama Mbang; FOURNIER Grégory.

iii. Research Funds Received for Solar Research Center Phase II from La Fondation Dassault Systemes, Pune.

We have received **Total 34.7 Lakhs Rs** Research Funds from La Fonadation Dassault Systemes to Develop 9 Innovative Solar Products for Rural Ecosystem. Following is the list of the Project-wise funds distribution along with the Coast. Dr Shriniwas S Metan is the SOP for these funds.

Sr. No.	Project Title	Guide	Total Cost
01	Solar Tree for village and remote area electricity needs	Dr. Shriniwas S Metan	₹ 1,180,000
02	Solar operated Automatic Water Sprinkler System for smart agriculture	Prof. Suryaji S Kale	₹ 363,000
03	Solar water purifier for rural masses with zero water reject	Dr.B.K.Sonage	₹ 500,000
04	Solar DC Water Pump	Prof. Chetan V Papade	₹ 350,000
05	Solar Operated Milk Pasteurizing system	Prof. Chetan V Papade	₹ 262,000

06	Solar Dehydration	Prof. Chetan V	₹ 300,000
	System	Papade	X 300,000
07	Solar Panel	Prof. Chetan V	₹ 1,000,000
	Laminating Machine	Papade	X 1,000,000
	Solar Thermoelectric	Prof. Dipak D	₹ 85,000
08	Refrigerator	Bhoge	< 83,000
		Prof.	
	Solar Portable	Samruddhi	₹ 75,000
09	Refrigeration system	Shah	
		Total	₹ 45,50000

This year the department received research funding for Solar Research Center from La Foundation Dassault Systemes, Pune. The funding is given to develop nine Solar Innovative Products for enhancing the Rural Ecosystem especially for farmer community.

Sr. No.	Project Title	Amount in ₹	Project Guide
01	Design and	80,000/-	Dr. Shriniwas
	Development of		S.Metan
	Solar Operated Self		
	Balancing Vehicle		

2.3 FACULTY PUBLICATIONS:

In the academic year, 2021-22, total 10 papers were published from Mechanical Engineering Department faculty members.

- Shrinivas S. Metan, Miss Pallavi Solapure, Shrishti Kumbar, Vaibhav Tati, Yuvraj Pasure, "Comparative Study of Aircraft Wing Orientation", International Journal of Engineering Research and Application, ISSN: 22489622, Volume 12, Issue 04, June 2022, pp 53-62.
- 2. Dr. Basgonda Sonage, Deepak Bhoge, "Heat transfer and Pressure Drop Study in Transition Regime for ZnO-H₂O nano-fluid Synthesized by Green Route", Journal of Emerging Technologies and Innovative Research, 9(5), 2022, PP 72-79. (ISSN-2349-5162).
- Anandrao Kashid, Swapnil Bharale, Muskan Shaikh, Ishwar Konda, Bhavana Yangandul, Balaji Balwatkar,

- "Portable Surface Grinding Machine Attachment on Lathe Machine" in "International Research Journal of Engineering and Technology (IRJET) e ISSN:2395-0056, p-ISSN:2395-0072, Volume 9, Issue 1, January 2022"
- 4. C.V. Papade "Analysis of Solar Dryer Using HTML", Journal of Emerging Technologies and Innovative Research, Volume 9 Issue 03, March 2022.
- C.V. Papade, "Design and Analysis of Solar Operated Solar Panel Laminating Machine", IPASJ International Journal of Mechanical Engineering (IIJME) Volume 9, Issue 9, pp.08-14, September 2021 (Thomson Reuters Indexed)
- 6. Aditya Dhobale, Hardik Madda, Aviraj Kadam, "Challenges Faced While Designing Body in White", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue IX Sep 2021, pp 49-56.
- H. Fayaz, Asif Afzal, A. D. Mohammed Samee
 Manzoore Elahi M. Soudagar Naveed Akram,
 M. A. Mujtaba, R. D. Jilte . Md. Tariqul Islam.
 Umit Agbulut, C. Ahamed Saleel, Optimization of Thermal
 and Structural Design in Lithium-Ion Batteries to Obtain
 Energy Efficient Battery Thermal Management System
 (BTMS): A Critical Review, Archives of Computational
 Methods in Engineering https://doi.org/10.1007/s11831021-09571-0 , 2021, (Springer)
- Asif Afzal, A.D. Mohammed Samee, R.D. Jilte b, Md.
 Tariqul Islam, A. Muthu Manokar, Kaladgi Abdul Razak,
 Battery Thermal Management: An optimization study of parallelized conjugate numerical analysis using Cuckoo search and Artificial bee colony algorithm, International Journal of Heat and Mass Transfer, 166, 2021, 120798.
 (Elsevier).
- Lal A., Magar A., Gamit D., Probabilistic Progressive Failure of Multiwall Carbon Nanotube-Reinforced Composite Plate under Transverse Patch Loading,

- International Journal of Applied Mechanics https://doi.org/10.1142/S1758825122500612 (SCI).
- 10. Prof. B. R. Birajdar "Development of Low-Cost Weedicides Application Module" 2nd International Conference on Advances in Engineering Science and Technology (ICAEST 2022) in association with institute of Scholars.

3. INDUSTRY- INSTITUTE INTERACTION:

3.1 MOU Signed with Industry:

Mechanical Engineering Department has signed MoU with various 15 industries till date, companies like, La Fondation Dassault Systemes Pune, Tata Technologies Ltd Pune, Thermax Ltd Pune, MCCII Mumbai, Precision Camshaft Ltd Solapur, Sourabh Flexipack Ltd Pune, etc.

Following MoUs were signed in this academic year.

1. MOU with K-tech Centre of Excellence in Aerospace and Defense.

MoU is signed with **K-tech Centre of Excellence in Aerospace and Defence**, Bangalore on 24/06/2022 under
Aerospace and Aircraft Centre of Excellence in our campus.
K-Tech Centre will train our students in Aircraft development through internships and funded projects. 21 students and 02 faculty members were trained for one month in "Design and Modelling of Aircraft and Aerospace Engineering". Team Avengineers have undergone 15 days' theory and 15 days' 3D Modelling using 3D Experience Software at **K-tech Centre of Excellence in Aerospace and Defense, Bangalore.** Dr. Shriniwas S Metan is the Coordinator for this MoU and training.

3.2 SPONSORED PROJECTS & INTERNSHIP

Following data shows the sponsored projects & internship from various industries for the academic year 2021-22.

- The project entitled "Design and Development of Solar Operated Self Balancing Vehicle", was funded from La Fondation Dassault Systems Ltd Pune (80000/-Rs). Dr Shriniwas S Metan is the Project Guide.
- The project entitled "Design and 3D modelling of solar based water purifier", was funded from La Fondation Dassault Systems Ltd. Dr Shriniwas S Metan is the Project Guide.
- 3. The project entitled "Performance Evaluation of Submerged Plate Type Evaporator" "Modelling of experimental setup for testing of submerged plate type of evaporator", under the guidance of Dr. Sonage B.K from La Foundation Dassault Systems Ltd., Pune.
- The project entitled "3D Modelling of Holematro Spreader in Solid Works", was sponsored from CAD infield. Dr N R Patil is the Project Guide.
- 6. The project entitled "Web Page Development for Vishakha Industries", was sponsored from Vertex Technosys. Dr N R Patil is the Project Guide.
- The project entitled "Web Based Application for ATM", was sponsored from Wipro. Dr N R Patil is the Project Guide.
- 8. The project entitled "Integrated Electromotive Wheel Retrofit for Bicycle Electrification", under the guidance of Prof. S S Kale from La Fondation Dassault Systems Ltd Pune.
- Prof. S S Kale has successfully completed project "Solar Operated Automatic Water Sprinkler System for Smart Agricultural" funded by Dassault systems La foundation funding amount – 3.65 lacs Rs.

- 10.Prof. C.V. Papade has successfully completed project on design and development of Solar Panel Laminating Machine funded by Dassault systemes La foundation funding amount 10 lacs Rs.
- 11.Prof. C. V. Papade has successfully completed project on IoT based Solar Dehydration System with Energy Storage Material for Agricultural Products Funded by Dassault systemes La fondation-funding amount 3 lacs Rs.
- 12.Prof. C.V.Papade has successfully completed project on
 Design and Development of Solar Operated Milk
 Pasteurizing System funded by Dassault Systemes La fondation-funding amount 2.62 lacs Rs.
- 13.Prof.C.V.Papade has successfully completed project on Design and development of Solar DC Water Pump funded by Dassault systemes La foundation funding amount 3.5 lacs Rs.
- 14. The project entitled "Welding Fixture Design for Hanger Unit", was funded from Faurecia India Private Ltd. Prof M B Awate is the Project Guide.

4. CO-CURRICULAR COURSES CONDUCTED:

Department of Mechanical Engineering has conducted Ready Engineer program organized by Tata Technologies, Pune which helps to enhance the technical skills of the students to become industry-ready. The Ready Engineer program is an industry-academia interface which enhances design and application skills of engineering graduates to improve their employability and reduces the time and resources spent by companies on training graduate engineers. Prof. S. K.

Khillare has worked as a coordinator for these courses.

Sr. No.	Course	No. of Students	Duration	Clas s
1	Ready Engineer 2.0 Training Program by TTL	42	40 hours per semester	TY Mec h.

5 DIPLOMA CONNECT ACTIVITIES

- Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities After 12th Standard" in *Chhatrapati Shivaji Junior College*, Osmanabad on 28 January, 2022, Total 42 students were present.
- 2. Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities After 12th Standard" in Yashashree Classes, Osmanabad on 28th January, 2022, Friday. Total 125 students were present.
- 3. Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities in Mechatronics, Robotics & Aerospace Domain" for Mechanical, Electronics and Telecommunication & Computer students of SVSMD's K.K.I., Polytechnic, Akkalkot on 24th March 2022. Total 90 students were present.
- 4. Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities in Mechatronics, Robotics & Aerospace Domain" for Mechanical, Electronics and Telecommunication & Computer students of Government Polytechnic Solapur on 21st April 2022. Total 102 students were present.
 - 5. Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities in Mechatronics, Robotics & Aerospace Domain" for 12th CET Passed Students from Solapur in Nirmalkumar Phadkule Hall on 17th November 2021. Total 42 students were present.
- 6. Dr. Shriniwas S. Metan has delivered seminar on "Career Opportunities in Mechatronics, Robotics & Aerospace Domain" for Mechanical, Electronics and Telecommunication & Computer students of VAPM Polytechnic, Alamala, Latur on 22nd April 2022. Total 78 students Mechanical 52 and ENTC 26 TY Class were present.
- 7. Dr. Shriniwas S. Metan has conducted a session on "Mechanical Engineering Department Achievements for TY Diploma Mechanical students of SVIT

- Polytechnic, Solapur on 04/05/2022. Total 42 students were present.
- 8. Dr. Shriniwas S. Metan has conducted a session on "Mechanical Engineering Department Achievements for SY and TY Diploma Mechanical students of Government Polytechnic, Solapur on 30/04/2022. Total 330 students were present.
- 9. Dr. Shriniwas S. Metan has conducted a session on " Career Opportunities in Mechanical Engineering for TY and SY Diploma Mechanical students of SVIT Polytechnic, Solapur on 21/05/2022. Total 62 students were present
- **10.** Dr. Sonage B.K delivered a Session on "Research methodology." for faculty members of Fabtech technical campus, college of Engg. And Research, Sangola as a resource person on 4/07/2022.
- **11.** Dr. Sonage B.K delivered a Session on "Hydraulics." for the SVIT Polytechnic Solapur students.
- 12. Dr. Sonage B.K delivered a Session on "Air Conditioning System." for the SVIT Polytechnic Solapur students.
- **13.** Dr. N. R. Patil conducted a session on "Automotive Control Systems" of TY Mechanical Engineering students from Govt Polytechnic, Solapur on 01/04/2022.
- 14. Dr N R Patil has organized one Day Workshop for SY and TY Diploma Mechanical students of Government Polytechnic, Solapur on Saturday 30/04/2022 SY @150 Students and TY @ 180 Students.
- **15.** Prof. A.S.Kashid delivered a Session on "Theory Of Machine" for the SVIT Polytechnic Solapur students.
- 16. Prof. S S Kale delivered a Session on "Air Conditioning System." for the SES Polytechnic Solapur TY Diploma Mechanical students. Total 45 students were present.

- **17.** Prof. S S Kale delivered a Session on "Recent advances in Automobile Engineering" for the SES Polytechnic Solapur students on date 26/03/2022.
- **18.** Prof. A.S. Dhobale delivered a Session on "Engineer to Entrepreneur" for the Aspiring Engineering students from Government Polytechnic, Osmanabad on 29th March 2022 organized by BOAT Western region.
- **19.** Prof.C.V. Papade conducted the Expert Session on "Fluid power & Hydraulic System" in TE Students on 04/05/2022 at SVIT college Polytechnic, Solapur
- **20.** Prof.C.V. Papade conducted the Expert Session on "Air Conditioning" in TE Students on 21/01/2022 at Maulana Azad Polytechnic, Solapur. Total 42 students were present.
- **21.** Prof. C.V. Papade conducted the Expert Session on "Refrigeration Systems" in TE Students on 14/05/2022 at SVIT college Polytechnic, Solapur
- 22. Prof. C.V. Papade conducted the Expert Session on "Vapour Compression Refrigeration System" in TE Students on 14/05/2022 at SVIT college Polytechnic, Solapur.
- **23.** Prof. C.V. Papade conducted the Expert Session on "Importance of Solar Energy and systems" in TE Students on 26/03/2022 at SES Polytechnic, Solapur
- **24.** Prof. C.V. Papade conducted the Expert Session on "Importance of Solar Energy and Systems" in TE CSE Students on 26/03/2022 at Govt., Polytechnic, Solapur
- **25.** Prof. C.V. Papade conducted the Expert Session on "Importance of Solar energy and systems" in SE & TE Mechanical Students on 30/04/2022 at Govt., Polytechnic, Solapur
- **26.** Prof. D. D. Bhoge has conducted the Session on "How to prepare for GATE 2022" for TE and BE Student of on 7/1/2022 and 24/03/2022.
- **27.** Prof. S.K.Khillare delivered expert session on "Mechanical Measurements" for third year diploma students of Govt Polytechnic Solapur on 30/04/2022.

- **28.** Prof. S.K.Khillare conducted practical session on "Mechanical Measurements" for second year diploma students of SVIT Polytechnic Solapur on 03/05/2022.
- 29. Prof. B. R. Birajdar & Prof. M. B. Awate conducted 2 Days Workshop on "AutoCAD" to Mechanical Engineering students of SVSMD's K.K.I., Polytechnic, Akkalkot on 23 & 24 March 2022. Total 36 students were present.

6. SHORT TERM COURSE / CONFERENCE/ WORKSHOPS ATTENDED / ORGANISED BY FACULTY MEMBERS.

Following faculty members have attended the workshops/ Seminars and conferences

- Dr. Shriniwas S Metan has completed 15 Days online and two-weeks offline training on "Design and Modelling of Aircraft and Aerospace Engineering", at K-tech Centre of Excellence in Aerospace and Defence, Bangalore in February- March 2022.
- Dr. Shriniwas S Metan has completed 5 Days On-line
 Faculty Development Program (FDP) on "FDP
 Introductory Course in Aircraft and Aerospace
 Engineering" organized by K-tech Centre of Excellence in
 Aerospace and Defence, Bangalore during 14/06/2021 to
 18/06/2021.
- Dr. Shriniwas S Metan has completed 2 Days Training in Aircraft Design and Maintenance at HAL Nashik on 23rd and 24th May 2022.
- 4. Dr Shriniwas S Metan has certified as a Professor from NK Orchid Engineering College of Engineering and Technology, Solapur for guiding, mentoring and completing successfully 3 Months Internship for the Project on Design and Development of Solar Operated Self Balancing Vehicle from Connect-Next La Fondation Dassault System.

- 5. Dr Shrinniwas S Metan has organized one day workshop for the First Year students on "Scope and Future Topics of Engineering Graphics in Industry", Mr Yash Dhake (Creative Designer, Dassault System) conducted the session on 8th August. Total 80 students were present.
- 6. Dr Shriniwas S Metan has attended a session "Witness Young Women Entrepreneur's Journey from a Student to a Founder of a start-up in Engineering domain" by La Fondation Dassault Systemes on 8th July 2021.
- 7. Dr Shriniwas S Metan has attended a session by La Fondation Dassault Systemes in ConnectNext for the project funding possibilities and project identifications on 2nd July 2021.
- 8. Dr Shriniwas S Metan has attended a Webinar on World Youth Skills Day to celebrate the strategic importance of equipping young people with skills for employment, decent work and entrepreneurship by La Fondation Dassault Systemes in on 15th July 2021.
- Dr Shriniwas S Metan has attended a Webinar on Implementation of National Education Policy -2020 in Higher, Technical and Agriculture Education by AICTE on 28th July 2021.
- Dr Shriniwas S Metan has attended a Webinar on Industry Connect: Opportunities Collaborate with Industries by AICTE Neat Cell on 9th August 2022.
- 11. Dr Shriniwas S Metan was invited as a MTech Reviewer on Mathematical Modelling, Control and Optimization of Hybrid Electric Vehicle Powertrain for Light Motor Vehicle, K E Societys Rajarambapu Institute of Technology Rajaramnagar.
- 12. Dr Shriniwas S Metan has invited in a Webinar on "SYSTEM ENGINEERING Essential Skill for the Future-New Horizon and Avenue by Pune University and Dassault Systemes, Pune on 17th September 2021.
- 13. Dr Shriniwas S Metan has invited as a Panelist in a Webinar on "Accelerating Design & Innovation for Safe

- & Reliable Batteries for Electric Vehicle" organized by ETAUTO on 24th September 2021.
- 14. Dr Shiriwas S Metan has organized a Session on "Precision Camshafts Entry in Electric Vehicle Segment" by Mr Karan Shah (Executive Director) on 5th October 2021. Total 197 students were present.
- 15. Dr Shriniwas S Metan has invited as an invitee by National Sun Yat-Sen University, Taiwan for the session on "Research Achievements" on 20th February 2022.
- 16. Prof. C.V.Papade has completed 5 Days Workshop on "Inculcating Universal Human Values in Technical Education organized by All India Council for Technical Education (AICTE)" from 18th – 22nd October 2021.
- 17. Prof. S S Kale attended One-week workshop on "Future Perspective of Non-Conventional, Renewable & Clean Energy Resources" Sponsored by ISTE from 9th to 13th May 2022.
- 18. Prof. S S Kale Conducted Workshop on "Recent Advances in Automobiles for Diploma Students" on date 26/03/2022.
- 19. Prof. C. V. Papade has completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Recent Advances and Application of IOT in Renewable Energy Technologies" from 23/08/2021 to 27/08/2021 at School of Engineering and Technology, IGNOU, New Delhi.
- 20. Prof.C.V. Papade has completed 5 Days Workshop on "AI Techniques In Solar Energy Applications" organized by Suryodaya college of Engg. & Tech. Nagpur" from 9th 14th August 2021.
- 21. Prof. A.S. Dhobale organized and conducted One Day workshop on "Autodesk Fusion 360 – Up-skilling and Re-skilling" for Mechanical Engineering department and faculty members from Polytechnic institutes. The workshop was jointly organized by NKOCET and Autodesk on 27th June 2022

- 22. Prof. A.S. Dhobale attended 3 days' workshop on "Translation of books in regional languages" arranged by Faculty Development cell, AICTE at AICTE Head Quarter, New Delhi from 14th to 16th September 2022.
- 23. Prof. D. D. Bhoge was coordinator for All Mech students on Strategy to crack GATE and other Competitive exam in association with ACE Engg Acadmy Hyderabad on 30/03/2022 organized by NKOCET and Chanakya Mandal Parivar Pune.
- 24. Prof. D. D. Bhoge was coordinator for the Online Session for All students on Career Through Civil Services and its Preparation on 14/05/2022 organized by NKOCET and MADE EASY.
- 25. Prof. D. D. Bhoge was coordinator for ONE WEEK
 Workshop on Vehicle Dynamics from 19th Aug to 26th
 August 2021organized by SAEINDIA and NKOCET.
- 26. Prof. D. D. Bhoge has completed 2 Days Training at HAL Nashik on 23rd and 24th May 2022.
- 27. Prof S.K.Khillare attended two-day workshop on 'Introduction to Embedded Systems and Robotics' conducted on June 10th 11th, 2022 held at Indian Institute of Technology, Bombay.
- 28. Prof. B.R. Birajdar Attended three days training at Bangalore on Aerospace from 1st March to 3rd March 2022 at VTU Bangalore.
- 29. Prof. B.R. Birajdar Attended Meet the Foundation program of La Fondation Dassault System Pune on 7th April 2022.
- 30. Prof. B.R. Birajdar Attended two days training at HAL Nashik on Aerospace from 23rd May to 24th May 2022.

7. CONTRIBUTION OF FACULTY MEMBERS IN VARIOUS ACTIVITIES:

Following faculty members have extended Contribution towards department and college activities as additional responsibility.

Sr. No	Name of Faculty Members with Additional Responsibility
	Dr. S. S. Metan
1	Head of Department, Study Abroad Cell, Solar Research Center Incharge, SAE Solapur Chapter head, NBA Institute Level Point No 05 Coordinator, Coordinator, Member College Development Committee, Role holders Committee, Member of Anti Ragging Committee, Dassault System and Precision Camshaft Ltd SPO, Diploma Connect Coordinator, Team Avengineers Mentor.
	Dr. B.K. Sonage
2	NBA/NAAC/IQAC coordinator, Member College Development Committee, Member Role holders Committee, Research Grants, Consultancy Work
	Prof A S Kashid
3	R O water Incharge, Antiragging coordinator, NAAC V coordinator, NBA VII coordinator, Term Work coordinator.
	Prof. S. S. Kale
4	Boys Hostel, Department Academic Coordinator, PG Coordinator, ASHRAE collegiate club Faculty Advisor, M.Tech. admission Coordinator, Member of Anti ragging committee.
	Prof. N. R. Patil
5	DSE admission officer, NIRF coordinator, NBA coordinator, Proctor coordinator
	Prof. Y. B. Patil
6	Fire Fighting, Direct Second Year Admission Coordinator, MESA, Faculty Advisor
7	Prof.C.V. Papade
	R&D, Project Coordinator, Attendance Monitor, Time Table, Solar Ready Engineer Course Coordinator, Equal Opportunity Center Mechanical Coordinator
8	Prof. V.V. Birangane
0	Faculty & Staff, Meeting, NPTEL

	Prof. D. D. Bhoge
9	ICE Innovation Lab, Career Counseling Cell Coordinator, SAEINDIA Student Collegiate Club, SAEINDIA Student convention Solapur Co-coordinator
10	Prof. S. K. Khillare
	Ready Engineer Coordinator, Website
1.1	Prof. M. B. Awate
11	Sports, Coordinator, Stationary Incharge, Test Coordinator, Discipline.
	Prof. B.R. Birajdar
12	Magazine/News, Publicity, Parent Meet Coordinator, Suggestion Box Incharge
13	Prof. A. B. Magar
13	Library, Expert Lecture, NBA coordinator.
	Prof. A.S. Dhobale
14	PMK, Training & Placement, Spoken Tutorial, 3DPLM, DAB CoCoordinator, CII Departmental Coordinators.
	Prof. S.V. Kumbar
15	CII Coordinator, Alumni Coordinator
	Prof. A.H. Kamble
16	NSS, Self-Learning, Industry, Visit, Seminar, Conference
	Prof. V.P. Kulkarni
17	Laboratory In charge, AUTO DESK SOP, Incubation, Patent, EDP Cell
1.0	Prof. M.S. Dafedar
18	Workshop In charge, Research Grants
	Prof. P.N. Kulkarni
19	Annual Report, POE Coordinator, Students Competitions, Robo-Club Department Coordinator
20	Dr.S.M. Biradar
	Department Filing System, Archives
	Prof. K.A. Shaikh
21	CII Coordinator, Alumni Coordinator

- 8. AWARDS WON AND SPECIAL ACHIEVEMENT BY THE STUDENTS AND FACULTY MEMBERS:
- Dr Shriniwas S Metan have received The Most Influential Professor Award by World Education Congress at Hotel Taj Land Ends Mumbai on 6th July 2022. One of the Proud Moment being a Teacher to get this Prestigious Award.
- 2. Dr Shriniwas S Metan have received "The Best NGO Professor" award by the hands of Dr Anand Deshpande (CEO Persistent Systemes, Pune) in the Connecting Startups with Corporates Conference organised by J4E and DeAsra in Pune on Saturday 16th July 2022. He received the award for his contribution in educating and guiding the students for their Higher Education Abroad selflessly. He was also Guest of Honour and shared a round table with Dr Anand Deshpande.
- 3. Team Mechanizer's from Mechanical Engineering Department Won the National Competition Aakruti 2021. More than 3500 participants from various reputed Engineering Colleges across the Nation have participated in this event. Students received 1.5 Lakhs Cash Prize, 6 Lakhs Rs worth Solidworks Certificate Courses, Internship in Dassault Systemes. Team members are Miss Pradnya Bagul, Mr Pratmesh Thakare, Mr Aditya Metan, Miss Pratima Gophane and the team mentor and guide: Dr.Shriniwas S Metan.
- 4. Students from Mechanical Engineering Department have ranked 3rd in Sustainability in the "PROJECT OF THE YEAR 2022" competition from Dassault Systemes, Pune. Team members, Chaitanya Salunke, Pradnya Bagul, Prathmesh Thakare, Pallavi Gavali and Madhav Suttraway. Project Guide Prof P N Kulkarni.
 - Dr Shriniwas S Metan is acknowledged in Silver Jubilee Celebration of SAEINIDA in ARAI Chakan on 18th July

- 2022 by the Hands of Dr. Pavan Goenka (Ex. MD of Mahindra and Mahindra) for his Contribution in SAEINIDA from last 15+ years.
- Dr Shriniwas S Metan was the Convener for the Second National Level SAEINDIA STUDENTS CONVENTION 2021 organized by SAEINDIA Western Section.
- 7. Dr Shriniwas S Metan was invited as a Keynote Speaker in online National Webinar on "IMPACT OF COVID-19 ON ENGINEERING STUDENTS" under Azadi Ka Mahottsav on 75th Anniversary of Indian Independence on 16th July 2021, organized by ASPIRE, New Delhi. Smt Pamela Tikku ICAT International Automotive Technology, India and Dr A. Garg were panelist along with Dr Shriniwas Metan. Total 350 students across India were present.
- 8. Two Teams from Mechanical Engineering Department won the Prizes in the **International Project of the Year**Competition by Dassault Systemes on 09/07/2022.
- Project: Solar Krishi Yantra, Student: Pratmesh Thakare,
 Pradnya Bagul, Parth Lokhande, Chaitanya Salunke,
 Project Guide: Prof P N Kulkarni.
- ii. Project: E Vehicle Solution to Pollution, Students: Parth Lokhande, Pradnya Bagul, Prathmesh Thakare, Abhishek Kalkokul, Project Guide: Dr Shriniwas S Metan.
- Three Teams from Mechanical Engineering Department won the Prizes in the KPIT Sparkle 2022 Competition Team Mechanisers Aakruti 2021 Winners and Prof A B Magar will be student and faculty supporting team.
 - i. Project: Design and Development of Community Based Solar Charging Station, Student: Pratmesh Thakare, Madhav Suttrave, Pradnya Bagul, Pallavi Gavali, Chaitanya Salunke, Project Guide: Dr Shriniwas S Metan. This project was shortlisted in the Final for top the 10 Incubation Support Team. ii. Project: Solar PV Panel

Lamination Machine, Students: Shubham Igole, Satish Adam, Aditya Giakwad, Shubham Bhore, Project Guide: Prof.C V Papade.

- iii. Project: Hybrid Energy Generation Through Solar and Fast Moving Vechicles, Student: Ishwar Konda, Pratmesh Thakare, Madhav Suttrave, Pradnya Bagul, Chaitanya Salunke, Project Guide: Prof. B.R. Birajdar.
- 10. For Dassault Systemes "Aakruti 2022". Our Institute is the nodal center for creating awareness and promoting Aakruti 2022 in and around Maharashtra State. Dr.Shriniwas S Metan is nominated as a Faculty Ambassador for Aakruti 2022.
- 11. Dr Shriniwas S Metan was one of the speaker in "Meet

La Fondation" program of La Fondation Dassault Systems across globe on April 7, 2022. From INDIA, France and USA one project each was nominated for the presentation. We have represented India and presented Solar Research Center: Context and Challenges on a Global Platform. Prof C V Papade, Prof S S Kale, Prof B R Birajdar, Prof D D Bhoge were the team members for displaying the Solar Research Center Products in Dassault Systemes Pune. Mr Hariba Pangale and Mr Ganesh Khaiyyawale along with 22 students worked for the Solar Project Display.

- 12. Dr Shriniwas S Metan was invited as a Solar Research Center Incharge to present the "Solar Research Center Work and its Future Scope" in 3D Experience Forum on 15th September 2021. Mr Bernad Charles, Vice Chairman and CEO, Dassault Systems acknowledged the work on International Platform.
- 13. On 9th June 2022, Seven Innovative Products developed in the Solar Research Centers were displayed and presented to Dassault Systemes Executives from India, France, USA and employees in Dassault Systemes Pune campus. It was great experience and exposure for our 20 students. The encouragement and support from their team and visitors on the stalls really boosted the student's

- confidence. Dr Shriniwas S Metan, Prof C V Papade, Prof D D Bhoge with their project students displayed their project. All the students and Mr Hariba Pangale, Mr Ganesh Kayyawale have worked hard for this Project Exhibition. Thanks to La Fondation Dassault Systemes Pune and Mr Sameer, Mrs Bhagyashree and Shri Hemant Gadgil Sir for their support.
- 14. Dr.Shriniwas S Metan is nominated as a Committee Member of the Education and Students Engagement National Committee of "ASPIRE" (Automotive Solutions Portal for Industry, Research & Education) under Department of Heavy Industry (DHI), Govt. of India.
- 15. Dr.Shriniwas S Metan is recognized as," Ph.D Guide of DBATU, Lonere" under the faculty of Engineering and Technology by the approval of academic council of DBATU, lonere.
- 16. Dr Shriniwas S Metanwas invited as a Panel Member on "University Collaborations for Emerging Technologies and Future Skilling between India and French Universities" organised in collaboration with French Embassy and Dassault Systemes India on 22nd October 2021.
- 17. Dr Shriniwas S Metanwas invited as a Panel Member on "**Team and Culture Building**" organised by J4E Organisation on 5th February 2022. Dr Anand Deshpande was the Key-note Speaker.
- 18. Dr Shriniwas S Metan was invited in Deep Dive Panel Discussion by Dassault Systemes on 15th November 2021 by Dassault Systemes USA.
- 19. Dr Shriniwas S Metan was invited as a Key note Speaker at SAE L.D. College of Engineering, Ahmedabad on "UMANG 21", National Event on 1st November 2021.
- 20. Mr Pankaj Bhalerao of 3rd Year Mechanical Engineering class is the Winner of Tara 30 Days Challenge from Konnect and TTL Pune.

- 21. Mr. Ayan Shaikh (2020-21 Batch) is the first students from Mechanical Engineering Department for being selected for M Tech in Process Engineering specialization in the department of Metallurgy at IIT Bombay. He secured AIR- 167 in GATE-2022.
- 22. Mr. Saiprasad Chintakindi (Batch-2021) got admission at NITIE Mumbai for Postgraduate Programme. He secured AIR-714 in GATE-2022.
- 23. Dr. Sonage B.K. is nominated as a "Member of Doctoral Committee" for Ph.D programme of School of Technology at Sanjay Ghodawat University, Kolhapur.
- 24. Dr Sonage B.K is nominated as examiner for Ph.D thesis evaluation for Savitribai Phule Pune University, Pune.
- 25. Dr. Sonage B.K is working as a reviewer for Journal of "Energy" published by Elsevier Publishers.
- 26. Dr. Sonage B.K. Worked as an Academic advisor of External Academic Audit Committee of DBATU, Lonere.
- 27. Prof. A.S. Dhobale worked as Translator for translation of English books into regional languages as a part of NEP 2020 an initiative by AICTE. He translated the Engineering Graphics (for Diploma) book into Marathi and soon the book will be published by Khanna Publications as AICTE recommended the book.
- 28. Prof. C.V. Papade received "National Charmkar Teacher Federations (Maharashtra State) Best Professor Award on 21st November, 2021.
- 29. Prof. C.V. Papade is appointed as Technical Consultant for Yashorath Electronics Systems Ltd Pune for A.Y. 2021-22.
- 30. Prof D D Bhoge is acknowledged in Silver Jubilee Celebration of SAEINIDA for his Contribution in SAEINIDA in last 10+ years in ARAI Chakan on 18th July 2022 by the Hands of Dr. Pavan Goenka (Ex. MD of Mahindra and Mahindra).

- 31. Prof. S S Kale received "Best Faculty Member Award of NK Orchid college of Engg. and Tech., Solapur for academic year 2020-21", on 5th September, 2021.
- 32. Prof. Vaibhav Kulkarni is Nominated as Innovation Ambassador by MHRD MIC Institute Innovation Council for Year 2020-2021.

9. NEW INITIATIVES:

- Dr Shriniwas S Metan organized one Day Training on 21st August 2021 on "Aircraft Design and Maintenance for Team Avengineers at Carver Airport Baramati. students were trained in Basics of 2 Seater Aircraft, Design and purchasing of various components, Aircraft Engine design and Maintenance, Flight Control and functions of various controls on Dashboard.
- 2. Project Solar Operated Self Balancing Vehicle was amongst the Top 04 Projects by La Foundation Dassault Systems, India in as a part of Connect Next International Program. The session is arranged on Worlds Youth Skill Day on 15/07/2021, Thursday at 4:30PM across the globe. Our students and project guide got an opportunity to present their work. Dr Shrinniwas S Metan was the Project Mentor and Guide for this project.
- 3. One Day Workshop was organized on Aakruti-2022 3D Experience Platform Hands on Training on 12/07/2022 at ARC Hall. Two experts Mr Aniket Bhange and Mr Milind Desai. from Dassault Systems delivered the session. Total 216 students from all branches were present. Dr Shriniwas S Metan has organised this event. Prof A B Magar and Team Mechanizer's winners of Aakruti-2021 Coordinated the event.
- 4. Dr.Sonage B.K. qualified two papers of National certification examination for energy managers and energy auditors in December 2021 as an initiative to

- enhance professional qualification for fetching consultancy projects
- Dr.Sonage B.K. submitted two first examination reports of filed patents i.e Mechanized cloth duster, Purification of impotable and waste water as an initiative of patenting, IPR and startup.
- 6. Prof. S S Kale organized project exhibition for the firstyear student under the subject of Basic Mechanical Engineering on date 18/07/2022.
- 7. Under the guidance of Prof. S S Kale project titled "Solar Operated Automatic Water Sprinkler System for Smart Agricultural" received third prize in the department level project competition.
- 8. Prof Vaibhav Kulkarni worked as the Resource Persons for 5 days (6th September 10th September 2021) Online FDP on "Innovation Management" under AICTE Training and Learning (ATAL) Academy Programmes organized by Dr. Babasaheb Ambedkar Technological University, Lonere.
- 9. Through ConnectNext Internship program from La Fondation Dassault Systemes a "Integrated Electromotive Wheel Retrofit for Bicycle Electrification." was allotted to Prof S S Kale and 04 students from Final Year Students.

10. PARTICIPATION IN NATIONAL LEVEL TECHNICAL COMPETITIONS:

- Mr. Aditya Gaikwad, Shubham Aigole, Satish Adam
 & Shubham Bhore participated in National Level KPIT
 - Sparkle Competition. Their Project "Solar Operated Domestic Grain Grinding Machine" was shortlisted amongst the top 100 Projects. Prof.C.V.Papade was the Project Guide.
- Mr. Onkar Pawar, Swami Vijaykant, Shubham Bollu and Isargunde Sagar participated in Reginal Level Project Competition, organized by DTE, at VIT Pune

And presented the Project "Solar Operated Milk Pasteurization System" Prof. C.V.Papade was the Project Guide.

11. MECHANICAL ENGINEERING STUDENTS ASSOCIATION (MESA):

A) Following students were elected as the office bearers of MESA for the academic year 2021-22.

Post	Name of Student	
President	Reyaan Riyaz Shaikh (BE A)	
Secretary	Pratiksha Iresh Mabrukhane (BE B)	
Vice-President	Sanskruti Mohan Sarwade (BE A)	
Joint- Secretary	Pallavi Gavali(TEA)	
Treasurer	Prashant R. Tambe (TEB)	
MESA Cultural	Pradnya Bagul (TEA)	
Coordinator		
MESA Technical	Prathamesh Thakare (TEA)	
Coordinator		
MESA Sports	Chaitanya Salunke (TEA)	
Coordinator		
Food Coordinator	Anant Mude (TEB)	
Discipline	Devraj D. Solankar (TEA)	
Coordinator		
	Aditya Metan (SEA)	
V-1	Pratima Gophane (SEA)	
Volunteer	Jayshankar Donge (SEA)	
	Mayur Katgaonkar (SEA)	

A) Expert Lectures Arranged by MESA

Event	Date	
•		
Personality Development by		
3	05/09/2021	
•		
•		
•		
Mr.Huzefa Salim, Director	15/09/2021	
and Specialist, Academic		
Programs, Dassault		
Systemes		
Session on GATE preparation &	11/09/2021	
strategy by Prof.D.D.Bhoge	11,00,2021	
Session on "Precision Camshaft's		
Entry in Electric Vehicle Segment"		
by Mr. Karan Shah, Executive	05/10/2021	
Director Precision Camshaft's Ltd,		
Solapur		
SEM-II		
A Session on "Career		
opportunities in Design Sector"	74h Amril 2022	
by Mr.Dharmesh Tank, Head	7th April 2022	
BRDS Solapur.		
A Expert Session on "Career		
through Civil Services and its		
preparation" by Mr. Mayur Patil,	14 th May 2022	
Senior faculty, Chanakya Mandal		
Pariwar Pune.		
A Expert Session on "Road Map	aard x r	
to Academic Success" (For SY)	23 rd May 2022	
	Personality Development by Mr. Shivnath Bhujbal, Primary Teacher, Munjewadi, Ahmednagar A expert session on "How can I become an Innovator – Aspects for Innovation" by Mr.Huzefa Salim, Director and Specialist, Academic Programs, Dassault Systemes Session on GATE preparation & strategy by Prof.D.D.Bhoge Session on "Precision Camshaft's Entry in Electric Vehicle Segment" by Mr. Karan Shah, Executive Director Precision Camshaft's Ltd, Solapur SEM-II A Session on "Career opportunities in Design Sector" by Mr.Dharmesh Tank, Head BRDS Solapur. A Expert Session on "Career through Civil Services and its preparation" by Mr. Mayur Patil, Senior faculty, Chanakya Mandal Pariwar Pune. A Expert Session on "Road Map	

		By Prof. I. I. Mujawar, Dean	
		Student counseling & Welfare	
		A Expert Session on "Road Map	
0	to Academic Success" (For TY)	3 rd June 2022	
	8	By Prof. I. I. Mujawar, Dean	3 June 2022
		Student counseling & Welfare	

A) Expert Lectures Arranged by Department

Sr. No.	Name Expert	Topic and Date		
S Y				
	Miss. Nanda Bhattad,	"Basic Human		
1	Owner, Disha	Rights" on		
1	Institute Commerce,	16/03/2022.		
	Solapur.	(2 Hours).		
TY				
		"Advanced		
	Mr. P. K. Das Ex.	Thermodynamics"		
2	General Manager	12/10/2021 (03		
	Thermax Ltd. Pune	Hours)		
		Mathematics for		
3	5 7 1 61 111	GATE students.		
	Dr.I.A.Shaikh Solapur.	03/01/2022 to		
		14/01/2022 (18		
		Hours).		
B.Te	ch	1		
		"Mechatronics"		
	Mr. Amol Kshirsagar,	13/12/2021 to		
	Owner, A.K.Electronics,	21/12/2021 (6		
4	Solapur			
		Hours)		
	Mr.Shankar Kulkarni Ex			
	Associate Manager,	"Wind Energy"		
	Thermax Ltd. Pune			
		11/12/2021 to		
5	Consultant Thermax &			
5	Consultant Thermax & Other Companies	31/12/2021 (11		
5		31/12/2021 (11 Hours)		
5		31/12/2021 (11		
	Other Companies	31/12/2021 (11 Hours)		
5	Other Companies Dr.I.A.Shaikh	31/12/2021 (11 Hours) Mathematics for GATE students. 03/01/2022 to		
	Other Companies	31/12/2021 (11 Hours) Mathematics for GATE students.		

A) Industrial Visits:

Sr.	Class &	Class & Industrial	
No.	Subject	visit	Accompanied by
1	TE- A&B Refriger ation and Air Conditio ning	Doodh Pandhari, Kegoan Plant, Solapur (07-05-2022)	Prof D D Bhoge, Prof C.V.Papade Prof. S. S. Kale Prof. S. K. Khillare Prof. M. B. Awate
2	SE- A&B Manufa cturing Processe s- I	Thirumala Precicasts, Ule Solapur (16-06-2022 & 20-06-2022)	Prof. A. B. Magar Prof. S.K. Khillare Prof. B.R. Birajdar
3	TE- A&B IC Engine	MSRTC Workshop, Solapur (21 & 23 June 2022)	Prof. D. D. Bhoge Prof. V. V. Birangane Prof. C. V. Papade Prof. M. B. Awate
4.	TE- A&B Metrology & Quality Control	Laxmi Drucken Kompoents, Pvt. Ltd., Chincholi MIDC, Solapur (24-06-2022)	Prof. A. S. Kashid Prof. D. D. Bhoge

B) Team Avengineers:

Team Avengineers comprises of 21 students from Mechanical Engineering Branch dedicatedly working for the development of 2 Seater Aircraft in the campus. Till date they have undergone various trainings.

Dr Shriniwas S Metan is the Team Mentor.

1. On Saturday 21st August 2021, Team Avengineers* visited to Academy of Carver Aviation, Baramati for one- day training in Aircraft Building. *Total 18 students and 1 Faculty Member were present.

- In the visit students were trained in Basics of 2 Seater Aircraft, Design and purchasing of various components, Aircraft Engine design and Maintenance, Flight Control and functions of various controls on Dashboard.
- 2. 11th October 2021, Team Avengineers have successfully conducted a Flight Test of RC Aircraft (6 feet Wings and5 Feet Fuselage) in front of Parents, Teachers and Media at 10:45am.
- 3. Team Avengineers successfully completed one-month Training from K-Tech A&D from Bangalore in "Aircraft and Aerospace Design and 3D Modelling" in the month of February and March 2022.
- 4. Team Avengineers successfully completed two days Training at HAL Nashik Division "Design and Development of Fighter and Domestic Aircrafts" in the month of May 2022.
- 5. Team Avengineers organised 2 Days Workshop on "RC Aircraft Training" for Mechanical and First Year Engineering Students. Total 15 teams with each teams 4 members total 60 students developed 4 feet fuselage and 5 feet Wings and successfully taken the test flight.
- 6. Team Avengineers conducted session on "Journey of Team Avengineers RC Aircraft" for TY Diploma Students of SVIT Polytechnic, Solapur on 04/05/2022.
- Team Avengineers has conducted Aircraft Awareness and Design and Development of RC Aircraft in A D Joshi College on 6/5/2022. Total 78 students were present for the same.

C) SAE INDIA CHAPTER

 One-week workshop on "Vehicle Dynamics" through SAEINDIA Collegiate Club in association with SAEINDIA WS and NB Technologies Pune was conducted on 19, 20, 26 and 27 Aug 2021. Mr. Ravindra Kolhe (Director, NBT Pune) has given practical training in fundamentals of Vehicle Dynamics & know how of vehicle engineering along with knowhow of Hybrid / Electrical Vehicle Design. Total 55 participants (Student, Industry Professional and Faculty) attended the above workshop. Prof D.D Bhoge was the coordinator for this workshop.

1. Four Team members from Team Avengineers have attended the 2nd Edition of AeroCON 2022 held on 2nd and 3rd June at HAL Management Academy Bangalore, India organised by SAEINTERNATIONAL. Mr Aditya Metan, Mr Mayur Katgaonkar, Mr Rishikesh Marathe and Mr Vinit Kamble from S E Mechanical Engineering Department attended the AeroCON 2022.

17. TRAINING & PLACEMENT:

Placement is one of the very important activities of the department. The placement season of department started with preparation for placement drives of MNCs like TCS, Wipro, Infosys with rigorous efforts on aptitude and programming. In-spite of after effects of COVID restrictions all our training activities were conducted in excellent way that includes the Pre-Placement workshop of one and half month and a test series of around 100 tests.

Department continues its tradition of excellent placements in this academic year too in IT MNCs like TCS, Wipro and Infosys and also in core companies like Advik Hi-Tech Pvt. Ltd. Pune, HP Pelzer Pune. Our students got placed in reputed industries like TCS, Infosys, Wipro. Campus placement drives of many companies from different sectors were organized for students in which they proved their strength and bagged total **121 offers** till 02nd June 2022.

The placement drives are still going on for these students. For every drive company specific training is arranged in which students are given the exposure to relevant subjects to revise the basic concepts and increase the chances of selection.

From last consecutive Four Academic Years Mechanical Engineering Department placements are above 110 Numbers.

Following table shows placements till date. Many companies are still in pipeline and they will be conducting their placement drives in coming days. The average CTC for this year is Rs.3.00 Lakh per Annum and we have total 78 offers which are of 3.5 Lakh per Annum and above. Our 39 students got selected in Wipro in National Level Talent Hunt recruitment process.

_		No. of	СТС
Sr.	Company Name	students	
No.		Selected	LPA
1	Tata Consultancy Services	18	3.5
2	Wipro	39	3.5
3	Pentagon Space, Bangalore	1	Free Training
4	Q-Spiders	6	Free Training
5	Faurecia	1	4.5
6	Jaro Education	1	7
	HP Pelzer Automotives Pvt.	11	
7	Ltd. Pune		2.16
	Accurate Industries Pvt. Ltd.	12	
8	Pune		1.92
9	Capgemini	11	4
10	Infosys	8	3.6
11	Dynomerk Controls	3	2.16
12	Pracyva	6	2
	Advik Hi-Tech Pvt. Ltd.,	1	
13	Pune		3.5
14	Aqua-Chill	3	2.4
	Total	121	Average
			3LPA

18. NPTEL COURSES

During July- October 2021, NPTEL conducted various online courses. Out of that, 6 courses were selected for Mechanical Engineering students. For each course, faculties were assigned as mentor for respective students. Total 13 students from TY opted for NPTEL courses for minor degree in Computer Science Engineering and appeared for the exam of three NPTEL courses.

For the current semester (Jan- Apr 2022) 6 courses were shortlisted for SY & TY. Total 10 students appeared for exam of different NPTEL courses.

This year one student from BE completed all the 5 course required for Minor Degree in Computer Science. He will be awarded the Minor degree in CSE. Three students from BE availed the credit transfer facility from DBATU. They appeared for exam of NPTEL courses. They need not attend university exam of DBATU for these subjects.

19. PARENT MEET

First Parent-Teacher Association (PTA) meet for academic year 2021-2022 was held on 29th August 2021. HOD briefed about our college achievement for academic year 2020-21, review of the activities & happenings in Mechanical Engineering Department for academic year 2020-21, and about Study Abroad Cell. The Parents meet was conducted for S.Y class on, 14th May 2022 (Saturday) from 10am to 1pm. Total 52 parents and 6 Faculty member were present for meeting & for T.Y. class, on 04th June 2022 from 10am to 2pm. Total 74 parents and 6 Faculty members were present for meeting.

There was at length discussion about students' performance in this semester and students' appreciation for good results in exam from their parents. Also, Parents were briefed about the placement activity during

academic year 2021-22 and discussed about detail schedule of PPW session & test to enhance the skills of the students. Was shared with parents.

In the suggestion and feedback session, parents asked queries about job opportunities in different sectors. Parents were happy about efforts taken by Mechanical Engineering department about students Industrial

Training & Placement activities. They assured that in future the relation between the college and parents will give fruitful result to the students. HOD has briefed about Department Achievements and Future Plans. Prof A S Dhobale briefed about TNP Achievements and Future Plans. Prof D D Bhoge briefed about GATE Achievements and Future Plans. Team Avengineers presented their Journey and future plans. Prof. B. R. Birajdar coordinated all the Parents meet with respective class coordinators.

20. DEPARTMENT ADVISORY BOARD (DAB):

The aim of DAB is to review and enhance the quality of Curricular, Co-curricular, Extra-Curricular Activities, Student Internships and Placements.

DAB meetings are conducted in online as well as offline mode to take valuable suggestions from DAB members. Important points of discussion were Vision, Mission, PEOs and PSO statements of department, placements and internships.

Members of DAB committee are as follows:

Sr. No	Name of Member	Designation	Company
01	Mr. Hemant Gadgil	Executive Director	La Fondation Dassault, Systemes, Pune
02	Mr. Karan Shah	Executive Director	Precision Camshaft Ltd, Solapur
03	Mr. Shankar Kulkarni	Technical Consultant	Thermax Ltd, Pune
04	Mr. Ramesh Kotanur	Manager, SCM and Vendor development	Mahindra and Mahindra, Pune
05	Mr. Pradeep Kataria	CEO	Sourabh Flexipack Ltd, Pune
06	Mr. Sanjay Mane	General Manager	Cummins India Ltd, Pune
07	Mr. Somnath Rangrej	3D Modelling QA Engineer	Dassault Systemes Solution Lab Pvt, Ltd, Pune
08	Mr. Chaitanya Kulkarni	Project Engineer	Vander land Industries, Pune
09	Mr. Anand Dulange	Asst. Manager	Johnson Controls, Pune
10	Miss Madhurima Neel	Asst. Manager	KSB Pump

21. WORKSHOPS CONDUCTED FOR

MECHANICAL ENGINEERING STUDENTS

- 1. Prof. M. B. Awate conducted a session on "Styling" for TY RE students under TTL, Pune.
- 2. Prof. M. B. Awate conducted company specific training for Triveni Turbines (MD-II).
- 3. Prof. B. R. Birajdar conducted a session on "DESIGN &

DEVELOPMENT" for third year RE students under TTL.

4. Prof. C. V. Papade Conducted a One Day Workshop on "Solar PV panel installation" for Govt.ITI Students and Faculty members, Solapur, on 25/6/2022

Department Various Initiatives Activities and Achievements are Possible Due to the Efforts taken by all the Faculty Members, Lab Assistants, Menial Staff and Also the Students. Enlisted in this Report.

(**Dr. Shriniwas. S. Metan**)
Head Department of Mechanical Engineering