

Mechanical Engg Dept. Annual report 2020-21

1. Awards received by faculty members and researchers: 04 nos.

- 1.1. National Productivity Award 2021 (Platinum category), received by Dr. Subhash K. Mahajan (faculty), Dr. Santosh B. Rane (faculty) and, Mr. Bhaveshkumar N. Pasi (researcher).
- 1.2. National Productivity Award 2021 (Gold category), received by Dr. Subhash K. Mahajan (faculty), Dr. Santosh B. Rane (faculty) and, Dr. Prathamesh R. Potdar (researcher).
- 1.3. Best Thesis Presentation Award, received by Mrs. Shivangi Thakker (researcher, under the guidance of Dr. Santosh Rane)
- 1.4. Best Paper Presentation Award, received by Mr. Yogesh Kishor Mogal (researcher), along with Co-authors: Dr S.K Mahajan, Dr Santosh Rane.

2. PhD receivers: 03 nos.

- 2.1. Dr. Shivangi Viral Thakker (under the guidance of Dr. Santosh Rane)
- 2.2. Dr. Prathamesh R. Potdar (under the guidance of Dr. Santosh Rane)
- 2.3. Dr. Yahya AM Narvel (under the guidance of Dr. Santosh Rane)

3. Patents received: 01 no.

- 3.1. Santosh B. Rane, Bhaveshkumar N. Pasi and Subhash K. Mahajan (2021), "A Method for Performing Forging Operation: A Perspective of Industry 4.0", DOI:10.2174/2212797614666210120110548, Recent Patents on Mechanical Engineering, 2021, 14, 00-00 Bethemscience Publications.

4. Faculty achievements:

- 4.1. Dr. Sudhakar Umale has been working as Advisory Committee Member in Student Convention SAEINDIA Western section from 21 Dec. 2020.
- 4.2. Dr. Sudhakar Umale has worked as Judge in "Final Round of Technology Innovation Forum for Agricultural Nurturing (TIFAN) – A SAEINDIA National level student competition for Design Jan-Feb. 2021, and as a Judge for evaluation of divisional level Rise Competition of Mahindra and Mahindra conducted on March 15, 2021 at Kandivali Plant, Mumbai.
- 4.3. Dr. Sudhakar Umale has acted as an Advisory Board Member in virtual International Conference on "Research Outlook, Innovations and Research Trends (ICRORT-2020) on August 29-30, 2020.
- 4.4. Dr. Kiran Bhole has obtained a grant of Rs. 93000/- for conducting AICTE's ATAL sponsored faculty development program on "Micro-electromechanical Systems".
- 4.5. Prof. Sachin Vankar's abstract has been accepted by MECHCOMP7 – 7th International Conference on Mechanics of Composites in Porto (Portugal) organized by Instituto da Construção, Porto (Portugal). An online presentation is scheduled on 1-3 Sept, 2021.
- 4.6. Prof. Kunal Y. Bhavsar was elected as Youth Chair in ISHRAE Mumbai Chapter for Society Year 2020-21.

- 4.7. Prof. Kunal Y. Bhavsar was elected as Young Engineers In ASHRAE for ASHRAE Mumbai Chapter for Society Year 2020-21.
- 4.8. Prof. Megha Janbandhu has successfully submitted her Ph.D. pre-synopsis.
- 4.9. Prof. Parag Muley has successfully Delivered presentation on Professional Etiquettes as invited panel discussion speaker in Webinar Professional Etiquettes Development by National Institute of Technical Teachers' Training & Research (NITTTR), Bhopal, 16 /07/2020 [On-line].

5. Notable mentions of publications in Reputed Journals:

- 5.1. Makrand Patil and Balwant Bhasme, "Effect of Various Parameters on the Performance of Helical Coil Heat Exchanger-a Numerical Investigation", *Journal: Reliability Theory and Applications*, Special Issue No 1 (60), Vol 16, January 2021, pp 1-15.
- 5.2. Bharatbhushan Kale, Kiran S. Bhole, Sanket S. Devkare and Chetna Sharma, "Simulation of Viscous Fingers Developed in Lifting Plate Hele-Shaw Cell in Volume of Fluid Model", *International Journal of Advanced Science and Technology*, Vol. 29, No. 3, (2020), pp. 14867 – 14874.
- 5.3. Research paper Muley P K , Bapat S L and Atrey M D 2020 Development of a Helium recondensing cryostat on Ph.D. program at IIT Bombay published in June 2020 in IOP Conference Series: Materials Science and Engineering, Volume 755, Advances in Cryogenic Engineering: Proceedings of the Cryogenic Engineering Conference (CEC) 2019, 21-25 July 2019, Hartford, Connecticut, USA. DOI: 10.1088/1757-899X/755/1/012040 .
- 5.4. Chetan Prakash Chaudhari, Kiran Bhole and Jayram Gholave, "Review on Banana Fibre-Reinforced Composites" Springer Book Chapter, Advances in Manufacturing Processes, Lecture Notes in Mechanical Engineering, Proceedings of RAM 2020, pp. 359-379.
- 5.5. Materials Today: Proceedings "Simulation based characterization of recycled carbon fiber reinforced plastics in a rod specimen". Tanmay Tarkar, Het Padachh, Haseen Shaikh. <https://doi.org/10.1016/j.matpr.2020.10.802>

6. Faculty achievements summary:

- 6.1. No. of webinars and workshops conducted for the students: 25
- 6.2. No. of training/faculty development programs attended: 11
- 6.3. No. of webinars/interactive sessions participated in: 15
- 6.4. No. of short-term courses attended: 20
- 6.5. No. of expert lectures delivered: 29
- 6.6. No. of courses completed by faculty members on Swayam/NPTEL portal: 2
- 6.7. No. of courses coordinated: 1
- 6.8. No. papers published in national and international journals, peer-reviewed publications: 74
- 6.9. No. of workshops attended by faculty members: 13