



K.K. Wagh Education Society's

K.K. Wagh Institute of Engineering Education and Research, Nashik.

Department of Mechanical Engineering

Vol.: 1, Issue:7

Semester I of AY 2019-20

TECHNICAL NEWS LETTER

Semester I of AY 2019-20

■ Vision of the Department

To impart quality education to the students in the areas of Mechanical Engineering and expose them to world of work.

■ Mission of the Department

M1: To impart analytical skills through adequate exposure to theory.

M2: To provide exposure to engineering practices.

M3: To inculcate professional ethics and provide necessary inputs for the development of overall personality.

It's a great pleasure to present our newsletter for the semester I of AY 2019-20. Department of Mechanical Engineering has been consistently endeavoring to upgrade the skills and performance of students and staff members through various ventures.

■ Expert Lectures Organized

- Mr. Suhas Bhavsar, Director, Quality Training Centre Nashik, delivered an expert talk on the topic "Metrology and Quality Control" on 01st & 2nd July 2019.
- Mr. Krishna, Director, Gate Forum Nashik, delivered an expert talk on the topic "Higher Studies - GATE Awareness" on 03/07/2019.
- Mr. Suhas Bhavsar, Director, Quality Training Centre Nashik, delivered an expert talk on the topic "Process Planning, System design and Quality Control in Industry" on 06/07/2019.
- Mr. B. S. Dalvi, Engineer, CTR Ltd Ambad Nashik, delivered an expert talk on the topic "FEA, Industrial Design" on 13/07/2019.
- Mr. Vishal Jategaonkar, Director, T.I.M.E. Nashik, delivered an expert talk on the topic "Higher studies - Management" on 19th & 31st July 2019.
- Mr. Amit P. Joshi, Senior Executive Engineer, Tyson online Pvt. Ltd, delivered an expert talk on the topic "FEA of Cantilever Beam using Ansys Workbench" on 20/07/2019.
- Mr. Anand Thakar, Senior Consultant, CAD/ CAM Guru, Pune, delivered an expert talk on the topic "Electric Vehicles Design Challenges" on 30/07/2019.
- Mr. Abhijeet B. Gosavi, Lecturer, N. B. T. Law College, Nashik, delivered an expert talk on the topic "Empowering through social media" on 19/08/2019.
- Mr. Santosh D. Chavan, Manager, HAL, Nashik, delivered an expert talk on the topic "Basic

Aerodynamics & Aeroengines" on 25/09/2019.

- Mr. Abhijeet Khatri, Director, Harshda Composite Solutions Ltd, Nashik delivered an expert talk on the topic "Composite Materials" on 04/10/2019.

■ FDP/STTP/Workshops Organized or Attended:

- Prof. N.V.Patil attended AICTE sponsored One week STTP on "Finite Element Analysis and It's Field Application" at KITCOE, Kolhapur, from 11th June to 15th June 2019.
- Prof. A.D.Bhagure attended AICTE sponsored One week STTP on "Finite Element Analysis and It's Field Application" at KITCOE, Kolhapur, from 11th June to 15th June 2019.
- Prof. S.D.Barahate attended "Science plus Conference" at Pune (ICMAPE-2019), on 19 June 2019.
- Dr.P.B.Kushare attended Syllabus Implementation workshop for subject "Systems in Mechanical Engineering" at GGS COE, Nashik, on 19th July 2019.
- Prof.A.S.Patil attended Syllabus Implementation workshop for subject "Systems in Mechanical Engineering" at GGS COE, Nashik, on 19th July 2019.
- Prof.M.S.Sonawane attended Syllabus Implementation workshop for subject "Systems in Mechanical Engineering" at GGS COE, Nashik, on 19th July 2019.
- Prof.P.B.Ranade attended Syllabus Implementation workshop for subject "Systems in Mechanical Engineering" at GGS COE, Nashik, on 19th July 2019.
- Prof.C.D.Valunj attended Syllabus Implementation workshop for subject "Systems in Mechanical Engineering" at GGS COE, Nashik, on 19th July 2019.
- One day workshop was organized on "Advances in Heat Transfer" for TE Mechanical Students on 23rd September 2019. Resource Persons: Prof (Dr.) S. L. Borse, Imperial COE, Wagholi, Prof (Dr.) S. B. Sonawane, KBTCE Nashik and Prof. S. V. Kasar, SITRC, Nashik
- One day workshop was organized on "Vibration-Based Health Monitoring of Mechanical Systems" on 10th October 2019, Resource Person: Mr. Akshay Khade, SKF Ltd.Pune.
- Prof. A.S.Patil attended Syllabus Implementation workshop on "Engineering Graphics" at SNJB, COE Chandwad, on 11 December 2019.
- Prof. R.V.Bhandare attended One week training program on "Vibration Analysis Category II" at

Lemon tree Hotel Hyderabad, from 15th December to 21st December 2019.

- Prof. G.R.Rayjade attended One week training program on “Vibration Analysis Category II” at Lemon tree Hotel Hyderabad, from 15th December to 21st December 2019.
- Prof. C.S.Mhasde attended “Capacity Building Workshop-Bridging gap between Academia & Industry” organized by GIZ and MSME Dept GOI at Lonavala, Pune, from 18th December to 20th December 2019.
- Two day workshop was organized on “Role of Condition Monitoring for Industry 4.0” from 28th December to 29th December 2019, Resource Person: 1.Mr. Sanjeev Kamble, Sr. Engineer,RCF Ltd. Mumbai. 2. Mr. Hemant Bari, LM Condition Monitoring society of India. 3. Dr. V.M.Phalle, VJTI Mumbai. 4. Dr. Sangram Patil, Mumbai.



Two day workshop on “Role of Condition Monitoring for Industry 4.0”

■ Publications in International Journals:

- Dr. S.D.Barahate published a paper entitled "Film cooling performance measurement over a flat plate for a single row of holes embedded in an inclined trench" in International Journal of Thermal Sciences on Science Direct <https://doi.org/10.1016/j.ijthermalsci.2019.106215>/ISSN1290-0729
- Prof. G.R. Rayjade published a paper entitled "Honeycomb Sandwich panel analysis-Analytical and FEA approach" in International Journal of Current Engineering and Technology /E-ISSN 2277 – 4106, P-ISSN 2347 – 5161/ Vol.9, No.4 (July/Aug 2019)
- Prof. P.B.Ranade published a paper entitled "Defect Analysis and Implementation of DMAIC Methodology for Defect Reduction in Tyre Manufacturing" in International Journal of Innovative Research in Applied Sciences and Engineering, Volume 3, Issue 5, DOI: 10.29027/IJIRASE.v3.i5.2019, 479-482, September 2019

■ Publications in International Conference:

- Dr. P. B. Kushare published a paper entitled “Thermal analysis of two lobe non-recessed hybrid journal bearings” at 10th International Conference on Industrial Tribology, IISc Bangalore 1-4 Dec 2019.
- Prof. R. V. Bhandare published a paper entitled “Experimental investigation of multi-lobe hydrodynamic journal bearing” at 10th International Conference on Industrial Tribology, IISc Bangalore 1-4 Dec 2019.

- Prof. M. R. Pardeshi published a paper entitled “Study and analysis of wear plate material for sliding mechanism of drill rig” at 10th International Conference on Industrial Tribology, IISc Bangalore 1-4 Dec 2019.
- Prof. V. K. Patil published a paper entitled “Effect of Die Surface Roughness on The Properties of Metal Composite Material” at 10th International Conference on Industrial Tribology, IISc Bangalore 1-4 Dec 2019.
- Prof. A. S. Patil published a paper entitled “Effect of laser surface textured dimples on the frictional behavior of piston ring and cylinder liner interface in a reciprocating bench test” at 10th International Conference on Industrial Tribology, IISc Bangalore 1-4 Dec 2019.
- Dr. V. S. Patil and Dr. M. N. Shelar published a paper entitled “Experimental Investigation on Optimization of Injection Temperature of Karanj Oil (Pongamia Pinnata) as a Substitute for Diesel in C. I. Engines” at 7th International Conference on Advances in Energy Research (ICAER 2019 IIT Bombay).
- Prof. S. V. Kadbhane published a paper entitled “Convective Heat Transfer Enhancement of Fe3O4-Water Nanofluid Flowing through Pipe Under the effect of External Magnetic Field and Twisted Tape Insert” at 4th International Conference on Emerging technologies: Micro to Nano (ETMN 2019) SPPU, Pune 2019

■ Industrial Visits:

Several industrial visits were organized during the semester for enhancing the conceptual understanding of the students. Industries like Indian Tools, Wezmann Tools, B Catma, SMP AutoTech, Patnson, Jadhav Casting, Fortuna Engg Pvt. Ltd, Art Rubber Industries Ltd. Ambad, Shivam Technoplast Pvt. Ltd, Lalit Hydraulics, DTPS Dahanu, Adnani Electricity Ltd Mumbai, Shalaka Shaft Pvt Ltd, Strama-Summit Machinery Pvt. Ltd, Vaishnavi Auto Pvt. Ltd, , etc. were visited. Prof. P.R.Rahane, V.V.Khond, V.D.Nichit, P.D. Ahire, C.S.Mhasde, G.R.Rayjade, S.D.Mate, B.G.Patil, S.V.Kadbhane, M.V.Bhadak, N.V.Patil, P.S.Pillai, M.N.Shelar S.S.Kale, P.R.Beldar, P.K.Kavale, M.R. Perdeshi, R.V.Bhandare, A.D.Bhagure, N.S.Dixit, M.P.Panchbhai, R.V.Bhaskar, P.B.Ranade, Y.V.Borse and Dr. P.B.Kushare assisted and guided the students during the visits



Vaishnavi Auto Pvt. Ltd.





Vaitarna Hydroelectric Power Plant, India.



Adani Dahanu Thermal Power Plant

■ Achievements

■ Faculty

Prof. V. S. Patil has completed Ph.D. from Mechanical Engineering Department of IIT Bombay. The title of thesis is “Experimental investigation of heat transfer characteristics of circular Jets Impinging onto a concave surface with and without coolant ejections”

■ Student

- Akshay Pimpale and Pooja Gite, BE Mechanical - stood first and second position respectively in IRL – Senior Robo Race category in Times TechnoXian [5th International Robotic League & World Robotics Championship] held at Thyagaraj Stadium, New Delhi (India) Sept 2019.
- Team “NIKOLA” stood first prize for 'Best Design' in SAE ETWDC (Electric Two Wheeler Design Competition) – September 2019 at Bannari Amman Institute of Technology, Sathy, Erode, Tamilnadu India.

