



**K.K. Wagh Education Society's
K.K. Wagh Institute of Engineering
Education and Research, Nashik.**

September 2022

Vol. : 14
Issue : 9

Lecture on Account of "Teachers Day"



Felicitation of Padmashri Dr. Nivedita Bhide

On occasion of Teachers Day, a speech by Padmashri Dr. Nivedita Bhide was organized in the institute on 5th September 2022. She was felicitated at the hands of Ex. Principal Dr. V. D. Barve. Dr. Nivedita Bhide explained the life of Swami Vivekananda and his contribution to the human development. She elaborated how to leave the peaceful life in simple ways. On this occasion, Principal Dr. K. N. Nandurkar, Heads of department and staff were present.

Engineers Day Function



Engineers Day Function

Every year the 'Engineers Day' is celebrated on 15th September which is the birth anniversary of India's great engineer Sir M. Vishvesvarayya. This year the main programme was held on 19th September 2022. On this occasion the Chief guest was Dr. S. S. Mantha (Former Chairman, AICTE). Dr. S. S. Mantha during his speech explained the various emerging areas of future that can be focused. Principal Dr. K.

N. Nandurkar felicitated Dr. S. S. Mantha. Dr. S. S. Mantha explained the plan of action with good power point presentation. Senior most staff members and staff members who have completed 10, 20, 30 years continuous service were felicitated during program. For this program all staff of the institute were present.



Speech by Dr S. S. Mantha (Former AICTE Chairman)

CII - CEO Connect



CII-CEO Connect program

Our institute in association with CII organized CEO Connect program on 27th September 2022. For this program the Chief Guest was Hon. Mr. Robin Banerjee, MD - Caprihans Ltd. and Vice Chairman of CII, Maharashtra State Council. Principal Dr. K. N. Nandurkar felicitated Chief Guest on this occasion. Dr. K. N. Nandurkar gave brief background of the activities of CII-Industry-Academia connect panel of Maharashtra State Council. Mr. Robin Banerjee gave very good inspirational

speech to students and staff present. He explained about the Positive Attitude, Knowledge of Finance, Operations, Unique selling point, communication, etc for becoming successful person in life. He gave the books (written by him) to students who asked the best questions after his talk.

■ Alumni Meet at Bangalore



Participants of Alumni meet at Bangalore

An alumni meet at Bangalore was organized by our institute on 22nd September 2022. More than 30 alumni participated in the meet. Principal Dr. K. N. Nandurkar and TPO Dr. P. K. Shahabadkar was attended this meet. Alumni members shared their experiences about the institute and agreed to guide the current students in the best possible way.

■ CII Western Region conclave on Higher Education in India



CII Western Region Conclave on "Higher Education in India"

Principal Dr K. N. Nandurkar participated in CII Western Region Conclave on "Higher Education in India" on 24th September 2022 at Vidyalankar College, Mumbai, as a panel member. Other panel members included Mr. S. Dharmarajan, CEO Impact sure Technologies Pvt. Ltd., Mr. Amit Seth. Co-Chairman and Director Aurionpro and Ms. Ranjana Maitra, Country Head, University of New Heaven. The panel was moderated by Mr. Shourya K. Chakravarty, CHRO, Aptech Ltd. The focus of panel discussion was on challenges for higher education with special reference for employability in India.

■ FDP on "Smart Manufacturing"



Participants of One week FDP on "Smart Manufacturing"

One week FDP on Smart Manufacturing was organized under AICTE - IDEA lab of K. K. Wagh Institute of Engineering Education and Research from 12th to 17th September 2022. Around 29 participants from other colleges participated in this FDP. Participants were divided into four groups. Each group completed one project. The FDP was coordinated by Prof. R. V. Bhaskar and Prof. R. D. Rakhade.

■ Avishkar- Project Competition



Participants of College level round of the AVISHKAR Competition

College level round of the AVISHKAR Competition of Savitribai Phule Pune University was conducted on 15th September 2022. Around 140 students presented 29 projects in the competition. These projects are evaluated by industry experts Shri. Prashant Bachhav and Sujata Bachhav (Owner, Arya Technologies, Nashik), Shri. Subodh Malode (Mahindra and Mahindra, Igatpuri), Shri. Sarvesh Sukhatme and Prof. Poonam Fegade. During this competition, students are encouraged to start their own start-up. The competition was coordinated by Dr. Ravindra Munje. The winner groups will participate in the next round of competition to be held at regional level.

Panel Discussions Organized by Departments

Online panel discussions have been organized by all departments on topic “Scope and career in their branch”. Each department invited the Senior Alumni, Industry Personnel for their panel discussion. The panel discussions were organized for the 12th Science students who wish to take the admission to various disciplines of Engineering. It was organized by each department on following dates.

Sr.No.	Name of Department	Date
1.	Civil Department	8 th September 2022
2.	Electrical and MBA department	21 st September 2022
3.	Chemical Department	22 nd September 2022
4.	E & TC department	23 rd September 2022
5.	IT and Robotics & Automation department	24 th September 2022
6.	Mechanical department	30 th September 2022
7.	Computer, AI & DS and CSD	1 st Oct. 2022
8.	MCA department	4 th Oct. 2022

Financial Awareness Session



Session on “Financial Awareness”

MBA department of our institute organized a session on “Financial Awareness” for staff of the institute on 22nd September 2022. Officials of Bank of India introduced the financial schemes/proposals to the teaching and non-teaching staff.

Blood Donation Camp



Blood donation camp on 7th September 2022

NSS unit of our institute organized blood donation camp in association with Nashik Vibhagiya Sandarbh Seva Rugnalaya, Smart

Management Interface Local Exchange and Spinach Centre of Excellence on 7th September 2022. Total 117 blood bags were collected in camp.

Workshop on “Creo Parametric”



Mechanical Engineering Department of K. K. Wagh IEER in Collaboration with IET Nashik Local Network successfully organized Two Days Hands-on workshop on “Creo Parametric” by Access-CADD, Nashik on 2nd and 3rd September 2022.

Congratulations to winners of Smart India Hackathon



Winners of Smart India Hackathon

Team Adhaar and team Netra2k22 secured first prize (Rs. 1 lac) in the software and hardware category respectively. Prof. Priya Rakibe, Prof. Yogita Shewale and Prof. J. P. Shah guided the students. For this achievements, the students were felicitated at the hands of Hon Chairman Shri Sameer Wagh and Principal Dr. K. N. Nandurkar.



■ **Congratulations!!**



Prof. Dr. P. J. Pawar, Head of Robotics and Automation department received 'Best Teacher Award' of Panchavati Sarvjanik Vachanalaya, Nashik at the hands of Shri. Suresh Bhatevara (Sr. Journalist) and Dr. Sunil Dhikale (President, MVP, Nashik) on the occasion of Teachers Day

■ **Expert Lecture/Seminar/Courses/Workshop Conducted:**

- Computer engineering department had organized an online workshop on “Parallel Programming through Data Parallel C++” by Mr. Shrirang Korde and Mr. Yashvant Kanetkar on 8th September 2022 and hands-on workshop on “Git and Github” on 12th September 2022
- Mechanical Engineering department had organized an Expert Lecture on “Corporate Quality” on 06/09/2022, Expert Lecture on “Opportunities through GATE Exam” on 07/09/2022 and an Expert Lecture on “Design of SPM in Industry 4.0” on 10/09/2022.
- Information Technology department had organized an online session on “Career Opportunities in Cyber Security and Placement Tips” by Mr. Pratik Kadam, Software Developer - II, Security Labs Quick Heal Technologies Ltd, Pune on 17/09/2022.
- Department of AIDS had organized Expert Lecture on “Javascript and React JS web application development” by Mr. Deepakkumar Shinde on 23rd September 2022.

■ **Abstracts of papers presented during Sept 2022**
Optimal Drilling Sequences for Rectangular Hole Matrices Using Modified Shuffled Frog Leaping Algorithm

Prof. Dr P. J. Pawar

(Paper published in International Journal of Industrial Engineering & Production Research 2022 Vol. 33, No. 4: 1-10)

Abstract: engine blocks, moulds, automotive parts, dies, etc., require many holes to be machined into them. Similarly, applications like processing separators in the food industry, printed circuit boards, drum and trammel screens, boilerplates, etc., also contain a large matrix of holes. Many

machining operations, such as drilling, tapping, and reaming, are needed to achieve the required hole diameters, which various operational sequences can produce. One of the biggest hassles with hole-making operations is optimizing the sequence of operations to achieve minimal tool travel time. This is essential in reducing the overall processing costs associated with hole-making operations. The present work attempts to minimize the total tool travel time for hole-drilling operations by employing a relatively new nature-inspired optimization algorithm - the modified shuffled frog leaping algorithm (SFLA). The modifications in SFLA are introduced using three positive parameters to broaden its search capacity. This paper considers three case studies of a rectangular matrix of holes to explain the proposed procedure. The outcomes of the optimization using modified SFLA are compared to those obtained using a genetic algorithm and the ant colony algorithm. Additionally, a higher dimensional problem of a 20x20 rectangular matrix of holes is considered in this work.

■ **Ecofriendly synthesis of pure and modified CuMnO₃: It's application as gas sensor**

Prof. Ganesh Dabhade, Dr. Gaurav Daware & Dr. Yennam Rajesh

(Published in Materials Today proceeding, Volume 68)

Abstract: Recently, novel materials like gas-sensing metal oxides, mixed metal oxides, and modified mixed metal oxides have attracted great attention owing to their key roles in monitoring environmental pollution, security in hospitals, homes, and public places, and hazardous emissions from industries and automobile exhaust. Initially, the mechanochemical (MCh) method was employed for the synthesis of the CuMnO₃ catalyst and then the modification of CuMnO₃ through the hydrothermal route. These synthesized catalysts were characterized by Ultraviolet Violet-Diffused Reflectance (UV-DRS) spectroscopy, Fourier Transform Infrared Spectroscopy (FTIR), and Scanning Electron Microscopy (SEM). The average particle size obtained for 3 % Fe/CuMnO₃ was found to be 14–28 nm. The present work proclaimed that among all the synthesized 1,3,5 % Fe/CuMnO₃ materials, the 3 % Fe modified CuMnO₃ material shows significant gas sensing properties towards highly toxic H₂S gas released from sewage plants, oil, and natural gas industries, among NH₃, CO₂, H₂S, H₂, CO₂ and Cl₂ with moderate temperature requirements and excellent selectivity.

Keywords: Mixed metal oxide, Mechanochemical, Hydrothermal route, Gas sensor

Prof. Dr. K. N. Nandurkar
PRINCIPAL

