



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

December 2021

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■ Congratulations!!

Grant for Autonomy from A. Y. 2022-23



Our Institute has been granted Autonomy by UGC from academic year 2022-23. The institute thanks all its stakeholders for their support.

■ Family Get Together



Hon. President Shri. Balasaheb Wagh entered in his 90th Year of life. On this occasion the Family get together was organized on 24th December 2021 in evening on Lawn Tennis Court of the institute. Hon. Trustee Sau. Shakuntalatai Wagh, Trustee Sameer Wagh, Secretary Prof. K. S. Bandi, Principal Dr. K. N. Nandurkar were present. The families of all the Principals, Heads of departments of various

Colleges of K. K. Wagh Education Society were present for the get together. Principal Dr. K. N. Nandurkar felicitated to Hon. Chairman Shri. Balasaheb Wagh on this occasion. The documentary of Hon. Chairman Shri. Balasaheb Wagh was shown in the program. Hon Trustee Sau. Shakuntalatai Wagh gave speech in the program. Principal Dr. K. N. Nandurkar gave the presentation about the Institute and Society.



Hon. Trustee Sau. Shakuntalatai Wagh gave speech



Cultural program by students of K. K. Wagh Performing arts

■ Installation ceremony of ISTE Core Committee 2021-22

Installation ceremony of ISTE Core committee for AY 2021-22 was organized on 14th December 2021 in the institute. The Chief

guests for the program was Mr. Hrishikesh Wakadkar (Alumnus of the Institute). For this program Principal Dr. K. N. Nandurkar, Faculty Advisor Mrs. D. C. Shimpi, TPO Dr. P. K. Shahabadkar and Prof. Ramesh Bhandare were present.



Installation ceremony of ISTE Core committee for AY 2021-22

First Year induction program and Welcome Function



K. K. Wagh Institute of Engineering Education and Research conducted an Induction program for first year engineering students admitted in academic year 2021-22 as per guidelines and structure of AICTE, Delhi and Savitribai Phule Pune University to develop excellent Indian citizen through human values and education by Applied Science and mathematics department from 11th to 24th December 2021. In this programme, students were guided on the topic “How to make easier journey of engineering education to achieve desired target” by Principal Dr. K. N. Nandurkar, Dean Administration Dr. S. S. Sane, Dean Academics Dr. S. Y. Kute, Dean Admission Dr. D. M. Chandawadkar, T & P officer Dr. P. K. Shahabadkar, Librarian Dr. P. S. Bodake and I/C. HOD Science Dr. S. S. Naik. The students were also guided about scholarship, exam, eligibility and different form filling. Students were also

introduced about career choices, job opportunities, higher education and entrepreneurship by educational counsellor Prof. Dr. L. N. Mittal, Prof. Pratibha Chandak, alumni Mahesh Rasal, Varun Dabake, Uddesh Sonavane and Prasad Wakhare. Speech by Prof. Jalnekar (Director, VIT Pune) was also organized. Mr. Chirag Patil and his team of Art of Living developed natural energy for Education in students. Mr. Mayur Bagul from Traffic Park Nashik guided about traffic rules and safety. On occasion of Mathematics Day on 22nd December Prof. Dr. R. B. Singh from Dr BATU Lonere guided about origin of π (pi) and other constants in mathematics. Students are guided by yoga expert Mrs. Bharati Patil about Yoga and meditation. The effective guidance of human values by Dr. Surendra Pathak from Jeevan Vidya mission Ahmedabad, Financial management by Dr. R. D. Kulkarni and Warli painting by Dweep Aher. The guidance about innovation centre by Dr. R. K. Munje, About Astro Club by Dr. S. P. Ugale, ISTE by Prof. Dipali Shimpi, about workshop by Prof. Rahul Karlekar, Sports by Prof. T. K. Kandekar and about Competitive exams alumni Sumit Jagatap guided very well. On 24th December 2021, the welcome function was organized in respective department for their first year students. In welcome function Heads of department gave information of the department. After that the laboratory facilities available in department were shown to students. Then visit to central library, workshop facilities was organized to students of first year.

Visit of Hon. S. M. Vanarse



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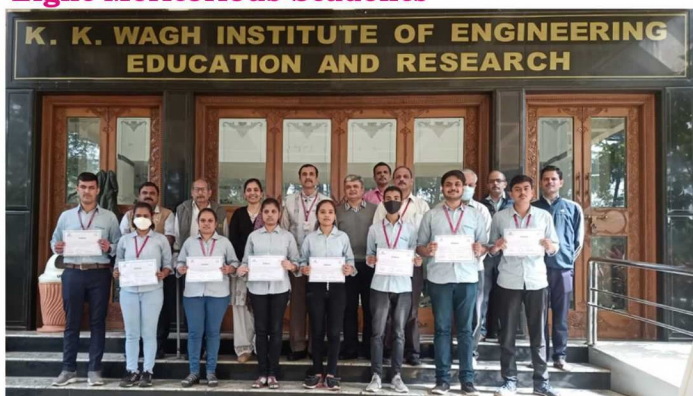


Visit of Hon. Shri. S. M. Vanarse and Mrs. Vanarse

■ Visit of Hon. S. M. Vanarse

On 27th and 28th December 2021, Hon. Shri. S. M. Vanarse (Director, Vansum Industry Pune) and Mrs. Vanarse visited our institute. On 27th December 2021 Hon. Shri. S. M. Vanarse interacted with Hon. President of K. K. Wagh Education Society Shri. Balasaheb Wagh. On this occasion Hon. Vanarse gave the Silver Coin in memory of Silver Jubilee year of his industry and also gave the books written by Mrs. Vanarse to Hon. Chairman. Principal Dr. K. N. Nandurkar gave presentation about the K. K. Wagh Education Society. Hon. Shri S. M. Vanarse appreciated the development of K. K. Wagh Education Society.

■ Neeraja Trust has Awarded Scholarship to Eight Meritorious Students



Winners of scholarship along with Mr. Vasant Marathe, Trustee, Neeraja Trust International Neeraja Trust has awarded Scholarship to eight meritorious and financially weaker students of our institute for A.Y. 2021-22. Certificates to selected students were distributed at the hands of Mr. Vasant Marathe, Trustee, Neeraja Trust. Following are the students who were awarded the Neeraja Trust Scholarship.

| Sr. No. | Name of Student | Class | Branch | Scholarship Amount |
|---------|--------------------------|-------|------------|--------------------|
| 1 | Shruti Tukaram Gurule | SE | AI & DS | 50000.00 |
| 2 | Rutuja Kishor Saindane | SE | Civil | 39396.00 |
| 3 | Warungase Kaushal Uttam | SE | Electrical | 50000.00 |
| 4 | Atharva Jayant Chaudhari | SE | Computer | 50000.00 |
| 5 | Pratham Rajendra Vidhate | TE | Civil | 44621.00 |
| 6 | Mosmee Santosh Patil | TE | IT | 55000.00 |
| 7 | Sairaj Deepak Dixit | BE | Computer | 50000.00 |
| 8 | Dhanashee Pradeep Thorat | BE | Mechanical | 50000.00 |

■ ASM- Material Camp

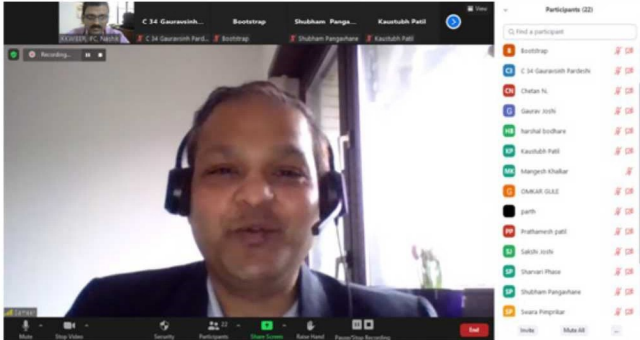
ASM International, India Chapter and K. K. Wagh Institute of Engineering Education and Research, Nashik had jointly organized a Four days Material camp for 11th standard (Science) students during 28th to 31st December 2021. The camp had hands on experiments and demonstrations in various laboratories of the institute which was followed by industrial visit to three different Industries in Nashik. Total 35 students of 11th Science of three K.K Wagh Junior colleges at Kakasaheb Nagar, Saraswatinagar and Pimpalas participated in this Materials Camp. Materials Camp began with inauguration ceremony and felicitation of guests and dignitaries. For the inauguration ceremony Hon. Mr. Kiran Mathure (HR Manager, Art Rubber Pvt. Ltd) was invited as a Chief Guest who addressed about the various engineering activities and upcoming career opportunities in various industry sectors. Principal Dr. K. N. Nandurkar welcomed to Chief Guest and all dignitaries. He briefed about objectives of organizing such Materials Camp. Hon. Mr. S. S. Sabnis (Chairman, Materials Camp, ASM International, India chapter) introduced about the various activities run by ASM International India Chapter. Dr. S. R. Gangurde has given brief introduction about Robotics and Automation Department. This inauguration ceremony is concluded with vote of thanks by Dr. N. B. Gurule.



ASM- Material camp participants

■ International Facilitation Centre (IFC) Activities

IFC Centre of our institute organized an Online Guidance Session on “Preparatory requirements for Higher Study in Germany” on 13th December 2021 by Mr. Sameer Khara, SAP Consultant, Germany and an alumnus of KKWIEER, Nashik. Also IFC Centre organized Interaction session of Ms. Shraddha Singaurey, Sr. Recruitment Advisor, Wayne State University, Detroit, USA with the Head of Departments on 15thDecember 2021.



Guidance Session by Mr. Sameer Khara, SAP Consultant, Germany



Interaction session of Ms. Shraddha Singaurey

■ Visit of Dr. Arun Purandare (Structural Consultant)

Dr. Arun Purandare, Structural Consultant (M.S. Imperial College of London) visited our institute on 9th December 2021. He gave expert talk to student of Civil Engineering department on the topic "New Methods in Composite Construction for Housing."



Dr. Arun Purandare delivering an expert talk

■ File (Field and Institute Liaison in Education)-2021

E-Conference: FILE-2021 was organized on 17th December 2021 under the aegis of Water Resource Department, North Maharashtra Region, Nashik in association with K. K. Wagh Institute of Engineering Education and Research, Nashik. The e-conference started with Inaugural speech by Chief guest Dr. Abhay Wagh, Director, DTE, Maharashtra. 80 participants from Civil department of Engineering colleges and WRD officers from all over Maharashtra attended the conference. From Konkan 8 participants, North Maharashtra and Nashik region 33 participants, Pune region 21 participants, from Aurangabad, Nanded, Latur 13 participants, Nagpur and Amravati 05 participants attended the conference. The conference concluded with words of wisdom of Prof. Milind Sohoni, UMA, CTARA, IIT Bombay. Present conference FILE-2021(Field and Institute Liaison in Education) aims to bridge the gap between Field and Institute through Liaison by establishing the links for implementation of actions. The proposed liaison will be explored initially for water resources Projects and expanded to other sectors of field over a time.



Screenshots of e-Conference FILE-2021

■ Webinar on “Challenges for Women in STEM”

Webinar on “Challenges for women in STEM” was organized by E & TC department of our institute by speaker Dr. Julie Desai, Lawyer, Mentor & Human Rights Activist on 8th December 2021. All Lady staff and Girl students attended the same.



Webinar on “Challenges for women in STEM”

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■ **Menstrual Health and Hygiene Session**

An online session on “Menstrual Health and Hygiene” was conducted on 16th December 2021 at 3:00pm for girl students of KKWIEER, Nashik. 95 participants had joined the session. The session was coordinated by Internal Complaint Committee, KKWIEER, Nashik. The session was organized by Global Hunt and their corporate partner Unicharm India. The session was conducted by Ms. Ankita Sukhwai, CSR Executive from Unicharm India. She holds an experience of conducting more than 500 community trainings with adolescent girls and women on menstrual health and management. She brings an experience of working with some of the international not-for-profit as community mobilizer on health issues.

■ **Visit of Alumni of 1994-95 Batch**

Alumni of 1994-95 batch visited our institute on 18th December 2021. They appreciated the development of the institute. They also agreed to contribute at their level for the junior students for placement and in the form of Guests lecture etc. Principal Dr. K. N. Nandurkar and Dr. P. K. Shahbadkar (TPO) were present on this occasion.



Visit of Alumni of 1994-95 batch

■ **Congratulations**

Mechanical Engineering department of our institute got NBA accreditation status for period of three years from NBA New Delhi. The NBA Committee Visit was organized in blended mode during 12- 14 November 2021. Expert committee were Prof. Dr. Sanjay Ghosh, Chairman (IIT, Roorkee) and Prof. Dr. Sushil Sharma, Subject expert (Retired Professor, BHU Banaras).

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

- Computer Engineering Department has organized mini project competition for the course “Database Management System Lab” on 11th December 2021 and mini project competition for the course “Object Oriented Programming & Computer Graphics” on 18th December 2021.

- Civil Engineering Department organized Expert Lecture of Dr. Arun Purandare, Senior Consultant on 09/12/2021 and Expert Lecture on “MPSC Preparation” by Ganesh Academy Nashik on 30/12/2021.
- Production Department organized expert talk on “Advanced Product Quality Planning” by Mr. Pradip Sharma, JP Enterprises, Nashik on 14/12/2021.
- Chemical Engineering Department organized Expert Talk on “Pumps and NPSH” by Dr. R. K. Haribabu, Assistant Professor, Department of Chemical Engineering, National Institute of Technology Calicut, Kozhikode, Kerala on 03/12/2021, Expert Talk on “Flow Chemistry” by Dr. Makarand Pimplapure, Founder and Managing Director, MakSpeed Technologies, Pune on 04/12/2021 and Expert Talk on “Importance of data science and Analytics in Chemical Engineering” by Gautam Seth, Chief Technology Officer, ThinkZy Tech, Mumbai on 10/12/2021.

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

- Computer engineering department staff Prof. M. P. Mahajan has attended AICTE ATAL FDP on “Computer Vision: Past, Present and Future” from 6th to 10th December 2021. Prof. C. R. Patil attended AICTE ATAL FDP on “Cyber Security and Block chain Awareness, Use cases and Challenges” from 6th to 10th December 2021.
- Chemical Engineering staff Prof. Tejmal B. Mahale attended the FDP on “Recent Trends in Green Technology and Materials” organized by Singhad College of Engineering Pune from 20-24 December 2021.
- Information Technology Departmental staff Yogita Shewale successfully completed 5 days AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “IoT in Health Care” from 12th to 16th December 2021.

■ **Other Achievements**

- Principal Dr. K. N. Nandurkar conducted an online session on 15th December 2021 on “Simulation for experimentation in Research” during the one week ATAL FDP organized during 13-17th December 2021 by Government Polytechnic Nashik on topic “Simulation Research Methodology and Optimization”. Also Dr. P. J. Pawar (Head of Production Engineering Department) conducted session on 13th

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December 2021 on topic "Optimization Technique- Applications in Engineering" during same program.

- Principal Dr. K. N. Nandurkar and Prof. Dr. S. S. Sane attended the meeting of Principals in Nashik and Nagar region for planning of policy for Honors Degree in Engineering to be implemented under Savitribai Phule Pune University.

■ Training & Placement :

| Name of Company | Name of the Dept. | No. of students selected |
|------------------------------------|-------------------|--------------------------|
| Altmetrik India Pvt. Ltd. | IT | 01 |
| Atos Syntel, Pune | IT | 07 |
| | Electrical Engg. | 04 |
| Infovision labs | MCA | 03 |
| Capgemini | MCA | 01 |
| Druva Data Solution Pvt. Ltd, Pune | MCA | 01 |
| TCS | Electrical Engg. | 11 |
| Wipro Technologies, Pune | Electrical Engg. | 08 |

■ Abstracts of papers presented during Dec. 2021 Selection of 3D Printer for Innovation Centre of Academic Institution Based on AHP and TOPSIS Methods

Prof. R. D. Rakhade, Prof. N. V. Patil, Prof. M. R. Pardeshi, Prof. B. G. Patil

(Paper Published in International Journal for Research in Applied Science & Engineering Technology, Volume 9, Issue XII, Dec. 202, ISSN: 2321-9653)

Abstract: This paper describes a computer-based tool for the selection of 3D printer for educational propose by using Multi Attribute Decision Making (MADM) strategies particularly Analytic Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). In education, 3D printing technologies facilitate improved learning, skills development, and increased student and teacher engagement with the subject matter. Furthermore, 3D printing sparks greater creativity and collaboration in solving problems, to settle on a best option for teaching learning process tasks into account. MADM methods are interpretative processes which are well suited in choice of different 3D printers. This work suggests AHP and TOPSIS to judge 3D printer alternatives for choice of method, based on the AHP and TOPSIS methodology, ranks available techniques by a score resulting from the composition of priorities at different levels, each considering

homogeneous and independent evaluation criteria. In this work proposes a comprehensive list of key factors that have a significant influence on 3D printer selection. In this work type of material used for printing considered as common for all printers such as ABS (Acrylonitrile Butadiene Styrene), PLA (Polylactic Acid), PET or Polyethylene terephthalate etc. A total of 09 sub-criteria have been identified and grouped under three main criteria, namely, (i) Physical Characteristics (ii) Economic consideration, (iii) Operational Requirements. These entire criteria area unit extracted from on-line literature and skilled opinion. Result of study shows that 3D Printer one (ET4 PRO 3IDEA model) was designated because the best suited for Innovation Centre Academic Institution.

Keywords: 3D printer, MADM method, AHP method, TOPSIS method, Innovation Centre, Academic Institution

■ Robust Observer-based Sliding Mode Control of a Pressurized Water Reactor

Prof. Soubhagia Suheesan, Prof. Dr. Ravindra Munje

(Conference: IEEE India Conference (INDICON), December 2021)

Abstract: Approximations and uncertainties in system modeling lead to inaccurate state estimation and thereby the failure of systematically designed control techniques. A robust control technique is therefore needed for state estimation and control when the system is complex and is accompanied by uncertainties. One of the robust control techniques is sliding mode control (SMC). Sliding mode control is a non-linear control technique with remarkable properties like robustness and insensitive to disturbances. Hence, it is highly recommended for the control of extremely complex plants, like nuclear reactors. However, chattering is one of the main disadvantages that arise while using a sliding mode control. In this paper, a sliding mode technique is used for estimating neutron precursor density, xenon, and iodine concentrations which otherwise are very difficult to measure, and then a sliding mode controller with a reduced chattering effect is proposed for pressurized water reactor (PWR). Stability analysis of the system is carried out using the Lyapunov approach. Simulation results are presented to show the efficiency of the proposed system.

Prof. Dr. K. N. Nandurkar
PRINCIPAL

