



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

September 2016

Vol.:8
Issue:9

■ **Engineer's Day Celebration**



Hon. Shri. Eknathji Dawale his speech

ISTE Chapter of our institute organized Engineer's Day function on 30th September 2016. Hon. Shri. Eknathji Dawale, Divisional Commissioner, Nashik, graced this occasion as chief guest by his presence. Hon. Dr. Omprakash Kulkarni graced this occasion as guest of honor. The president of the K. K. Wagh Education Society Hon. Balasaheb Wagh felicitated both the guests. In this function, faculties were felicitated from different departments for completing their Ph. D. and having highest citation for their research work at the hands of Chief Guest. Along with this, the staff members having special achievement and 100% results in the subjects taught in the institute were also felicitated. On this occasion chief guest expressed his views on impact of Made in India and Make in India on the economy of the country. He expressed his concern transferring Indian economy from the service sector to manufacturing sector. He also focused on the entrepreneurship opportunities in the Start-up-India. He expressed his best wishes to the Institute for future. On this occasion, guest of honor congratulated the institute for encouragement of the staff members. He enlightened the audience on the concept of Make-in-India. On this occasion Trustee Hon. Changdeorao Holkar, Principal Dr. K. N. Nandurkar, all heads of departments and staffs were present.

■ **Teacher's Day Celebration**



Hon. Dr. Vilas S. Sapkal, addressing all staff

Our institute organized Teacher's Day function on 7th September 2016. Hon. Dr. Vilas S. Sapkal, Ex-Vice Chancellor, Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur, graced this occasion as chief guest by his presence. He was felicitated by Principal Dr. K. N. Nandurkar on this occasion. In this function, senior most faculty members from three categories were felicitated. Prof. Dr. B. E. Kushare, Head, Department of Electrical Engg. from teaching category, Mr. M. S. Shirode from non-teaching technical category and Mr. N. M. Tamboli from non-teaching non-technical category were felicitated at the hands of Chief Guest. Along with this, the staff members who completed 30 years, 20 years and 10 years continuous service with the institute were also felicitated. On this occasion chief guest Dr. Vilas S. Sapkal expressed his views regarding the issues of quality in technical education and what are the challenges. He said that duties of only teaching institute and research institutes are different. The research institute should take initiative in research & development and patent generating activity. He also appreciated the efforts taken by K. K. Wagh Education Society to make this institute one of the most renowned institute among the state and country.

■ Installation of ISTE Students' Chapter Committee



Inauguration of ISTE Students' Chapter committee of the institute

An ISTE Students' Chapter committee of K. K. Wagh Institute of Engineering Education and Research for the academic year 2016-17 was officially installed in the presence of honourable chief guest Mr. Shrikant Karode, Principal Dr. K. N. Nandurkar, Training and Placement Officer P. K. Shahabadkar and faculty advisor of ISTE Students' Chapter Prof. Ms. P. S. Vispute. Mr. Shrikant Karode, the chief guest of the event, then enlightened the students on how you should increase the self confidence and grab the every opportunity that comes in your way. He shared his experiences of being associated with several professional organizations like CSI and Rotary Club. He said that students should learn professional practices through such organization. Then paramount part of the event began – felicitation of the current and the new ISTE Students' Chapter committee. The President, Vice President, Secretary, Joint Secretary, Treasurer, Co-Treasurer and core members were felicitated by the chief guest. The event was held on 27th of September and was attended by the first and second year students.

■ Celebration of K. K. Wagh Ganapati Utsav



K. K. Wagh Ganapati Utsav

The K. K. Wagh Ganapati Utsav was organized during 5-15th September 2016. The theme of this Utsav was 'Sadhak Ganesh'. Posters related to

various yoga postures were displayed along with the borders of play ground. The Ganapati Sthapana was done on College ground. During this period the Genesh Idol preparation competition was arranged. Various cultural events were also organized many dignitaries visited the pendol during this period to perform daily Aarti. Gulalalwadi, Nashik Dhol Pathak performed excellent music and action show. All staff and students of the institute visited the Utsav.

■ Poster Competition



Display of Posters

In the light of India's 70th Independence Day, a college level poster making competition was organized in K. K. Wagh Institute of Engineering Education and Research, Nashik by ISTE students' chapter in collaboration with NSS. A tribute was paid to our nation by the participants by making posters on the theme "India After Independence". The competition was organized on 9th and 10th September 2016 under the guidance of Dr. K. N. Nandurkar, Principal, K.K.W. I. E. E. R. This competition was open for all regular UG and PG students. Around 107 posters were received. Due to the overwhelming response, in addition to regular three prizes, additional two consolation prizes were also awarded by the committee.



Prize Winners with guests

The prize distribution ceremony was held on 10th Sept 2016. For this function chief guest Mr. Mandar Parashare, Head, Human Resources Department, Kirloskar oil Engines Ltd., Nashik, Dr. Aniruddha Dharmadhikari, Director, Shree Saibaba Heart Institute & Research Centre,

Mr. Ajinkya Wagh with Dr. K. N. Nandurkar, Principal, K.K.W.I.E.E.R., Prof. Prajakta Vispute, Faculty Advisor, ISTE students' chapter and Prof. Nanasahab Gurule, NSS Program Officer and were present. Mr. Mandar Parashare appreciated the concept and creativity of the participants and had an open interaction with all present for the function. The event also witnessed some valuable books being donated to the college library by Prof. Sunil Kute. The posters were judged by Prof. Sunil Kute, Mr. Gokul Suryavanshi and Mr. Sanjay Durgawad. In this competition Ms. Akanksha Gadakh and Ms. Pavitra Deore win the 1st prize of Rs. 750/- and Mr. Kunal Bhavsar won second prize of Rs. 500/-.

An Expert talk by Lt Colonel Ashish Kumar Dube

Lt Colonel Ashish Kumar Dube, from Artillery Centre, Nasik Road Camp visited our campus on 21st (Wednesday) September-2016. He delivered a motivational talk titled as "Life and Career Opportunities in Indian Army". This talk was organized in Dr. P. C. Ray Seminar Hall for engineering students by the Dr. A P J Abdul Kalam Career Development Centre. Around 250 students and 5 staff members attended this programme. This talk was aimed at creating awareness about Indian army and career options in Indian army.

Lecture on "Autonomy Awareness"



Felicitation of Dr. Ms. Shubha Pandit

Dr. Shubha Pandit, Principal, K. J. Somaiya College of Engineering, Vidya Vihar, Mumbai delivered a expert talk on Autonomy on 28 Sept 2016 at P. C. Ray Hall, Chemical Engineering Department. It was organized by Department of Electrical Engineering. She shared her experience in process of autonomy at her Institute. She elaborate bottlenecks, plan of action, preparation and challenges in autonomy process. She also cleared doubts of audience and guided to form an autonomous institute. All HOD and staff members of institute were present for the function. Dr. R. K. Munje introduced the guest and welcomed by Prof. Dr. Shirish S. Sane.

Expert Talk by N. Krishnamoorti on 'Universal Brotherhood'



Expert Talk by N. Krishnamoorti

NSS unit of this institute organized an expert talk on 'Universal Brotherhood' on 22nd Sept. 2016 at P. C. Ray Hall, Chemical Department. The talk was delivered by N. Krishnamoorti (Life Worker of Vivekanand Kendra, Kanyakumari). He elaborated the need of Universal Brotherhood and peace. Around 140 NSS volunteers attended this talk. Prof. Vilas K. Patil welcomed the guest and Prof. Swanand Dongare introduced the guest. After the talk N. Krishnamoorti met Hon. Shri. Balasaheb Wagh, President K. K. Wagh Education Society.

'National Karting Racing' Event



Winners of 'National Karting Racing'

The team of students of Mechanical department from our institute participated in National Karting Racing Event organized by NKRC Virtulist Motor Sports, Indore at Kolhapur from 29th Sept. to 3rd Oct. 2016. Our team secured the first rank at National level among 250 Teams in designing vehicle and got the prize for the virtual round. They also performed well in event, cleared all technical inspection test, acceleration test, brake test, skid pad, auto cross, traction test. In Endurance race, they performed well. Our vehicle stood first in slot among 25 teams. Our team was selected in top 5 innovations of the event which included our vacuum operated fuel pump.

continued on page 4

■ Sport Activities

- Inter-collegiate chess tournament was organized at Pharmacy College, SNJB Chandwad, Nashik. 180 students from 45 Colleges participated in the tournament. 04 students of our Institute secured prizes.
- Inter-collegiate Basketball Men tournament was organized at JMCT National College, Nashik on 4 and 5 September 2016 . Out of 18 colleges, 12 students of our College stood runner-up.
- Inter-collegiate Basketball Women tournament was organized at Guru Govind Singh College of Engg., Nashik on 14 September 2016 . Out of 11 Colleges, our institute Won the first prize.



Inter-Collegiate Basketball Women winner team with Prof. T. K. Kandekar

■ 'Research Grants sanctioned by University'

Savitribai Phule Pune University, Pune sanctioned the research grants for the period 2016-2018. The details of the topic and principal investigators is given below

Name of Principal Investigator	Title	Sanction Amount
Dr. Prashant B. Kushare	Experimental investigation of a novel configuration of a two lobe journal bearing.	Rs. 2,60,000/-
Vaibhav V. Khond	Design, Optimization and Development of 3D printing machines.	Rs. 1,80,000/-
Sandip B. Gunjal	Experimental investigations with Magnetic Abrasive Finishing (MAF) process for Nano-Matrix surface finish of Hard to Machine metals	Rs. 1,70,000/-
Ms. Smita T. Patil	A visual motivation aid for preiodontitis patients.	Rs. 1,00,000/-
Mrs. Dipali C. Shimpi	Design of High Performance Phase Locked loop for UHF Band in 120nm CMOS Technology	Rs. 1,40,000/-
Ms. Snehal D. Patil	Monitoring Deforestation in Forests Using Wireless Sensor Network.	Rs. 1,00,000/-
Mrs. Mayuri P. Joshi	FPGA Based Creative Transceiver With Dynamica Adaptability for Realizable Software Defined Radio	Rs. 1,40,000/-
	TOTAL	Rs. 10,90,000/-

■ Other Achievements

- Prof Dr. Keshav N. Nandurkar and Prof. Dr. Pramod K. Shahababkar visited Enerson Company, Ambad on 08/09/2016 for the inauguration of their new unit. Company

management thanked our institute for co-operation extended in starting the new unit.

- Prof. Dr. Keshav N. Nandurkar, Prof. Dr. Shirish S. Sane and Prof. Dr. Dinesh M. Chandwadkar attended meeting with Texas Instruments officials body at Savitribai Phule Pune University for setting up labs in our institute in association with Texas Instruments on 14/09/2016.
- Prof. Dr. Keshav N. Nandurkar was invited as Chief Guest for felicitation of some Ideal Teachers by Rotary Club of India, Nashik at Rotary Club Hall, Nashik on 27/09/2016.
- Prof. Dr. Keshav N. Nandurkar visited Prasuram Saikhedkar Natyamandir on 12/09/2016 to invite Hon. Padma Vibhushan Anil Kakodkar for felicitation in the month of December 2016.

■ Expert Lecture/Seminar/Courses/Worshop Organized:

- Computer engineering department organized Expert talk on "Network Design" by Mr. Dhanajay Patankar on 8th September 2016, One day training program on "Soft Skill Development" by Mr. Devdatta Gokhale on 9th and 10th September 2016 and Expert talk on "Customer Relationship Managements" by Mr. Sanjeev Mishra on 13th September 2016. Same department also organized Expert talk on 'Storage System' by Mr. Chandrashekhar Dahale on 17th September 2016 and Expert Lecture on "MEKA & MULAN" by Ms. Prajakta Choudhary on 22nd September 2016.
- Production Department organized an expert talk on "Entrepreneurship Development" by Mr. Yogeshwar Himmatrao Shirsath, CEO of Serene Care, Nashik, on 3 September 2016, expert talk on "Career Opportunities Abroad" by Mrs. Smita Bhamare, Step Ahead Study Abroad Consultancy, Nashik. Same department also organized expert talk on "Tools for Manufacturing Industries" by Mr. Anil Ambarsing Jadhav, Asst. Manager, Research & Development, CTR Manufacturing Ltd., Ambad, Nashik on 10 September 2016 and expert talk on the topic "Road Safety" by Mr. Joseph Samson, Road Safety Expert & Trainer, Mahindra & Mahindra, Nashik on 27 September 2016.
- Electrical Department 1st shift organized Expert lecture on "Cyber security world" by Mr. Patel Shoab on September 02, 2016, Expert lecture on "GATE Exam Preparation and Guidance" By GATE FORUM on September 16, 2016 and Two Days Workshop

continued on page 5

on "Technical Writing with LaTeX" by Mr. P. S. Londhe Prof. P. M. Sonawane and Prof. Dr. R. K. Munje from 25 to 26 September, 2016. Electrical Department 2nd shift organized three days workshop on PLC SCADA by Mr. S. P. Gawade from 30 September 2016 to 2 October 2016, Expert lecture on PI skills by Mrs. Nandita Ray on 2 September 2016 and Expert lecture on Project management by Mr. Gourang Ambulkar on 27th September 2016.

- Civil Engineering Department organized Expert Lecture by Nilkanth Kshirsagar on 21 September 2016.
- Chemical Engineering Department organized Expert Talk on "Scope of Chemical Engineering- Career Guidance" by Mr. Prashant Urkudey, Director, Information Technology, Targus Ltd., California, USA on 02 September 2016 and Expert Lecture on "Safe Net Surfing" by Mr. Wasim Pathan, Hackers Hook E-Learning on 03 September 2016. Same department also organized Expert Talk on "Membrane Technology and Transport Phenomena" by Dr. Ajit Rathod, VNIT, Nagpur, Maharashtra, India on 09 September 2016 and Expert Talk on "An Overview of Infrared Spectroscopy" by Dr. Santosh S. Chhajed, MET's Institute of Pharmacy, Maharashtra, India on 27 September 2016.
- Information Technology Department organized a seminar on "Abhasi Samanata" by Priyadarshini Hinge, Column writer for Loksatta Paper on 3rd September 2016, 05 days workshop on "Development of Aptitude and Soft Skills" by Mr. Shankar Nair, Mr. Shridhar Sethe and Mr. Ishant Shrivastava, Universal Education, Bangalore during 9th to 13th September 2016. Same department also organized seminar on "Websites, Servers & Cloud Computing: A Practical Approach" by Mr. Vivek Muthal, Project Manager, Dreamwares Pvt., Ltd., Nashik on 23rd September 2016.
- MCA department organized Expert Lecture on "Opportunities for MCA students in Industry" by Mr. Tushar Maheshwari, Web Developer, Pune on 10 September 2016 and Expert Lecture on 'Big Data and Hadoop' by Mr. Jayant Shripati, System Engineer, TCS, Mumbai on 17 September 2016.

■ Seminars/Workshop/Training attended by Staff:

- Computer engineering department staff Prof. M. P. Mahajan, Prof. K. F. Alfatmi, Prof. N. S. Sonawane, Prof. S. T. Patil and Ms. J. R. Rahatal attended two day workshop on 'InteliDemics' on 22nd and 23rd September 2016.

■ Student Achievements:

- Chemical Engineering Students Mr. Sandip Shukla & Ms. Swapnali Wagh has won Second Prize in paper presentation at "SCHEMCON 2016" organized by Indian Institute of Chemical Engineers in Collaboration with Anna University, Chennai during 10 to 11 September 2016. Their topic of the paper was "Magnetic field effect on Plant growth in hydroponic farming".

■ Industrial Visits Organized For Students:

Date	Class	Name of Company
02/09/2016	T.E. Chemical	Kadawa Sahakari Sakhar Karkhana, Dindori
06/09/2016	B.E. I shift Electrical	TAAC, Satpur, Nashik
06/09/2016	T.E. Civil (I st & II nd Shift)	Manmad Railway Station
07/09/2016	S.E. I shift Electrical	Gogate Electro System Pvt., Ltd., Satpur, Nashik
08/09/2016	T.E. Mechanical, A-Div.	Shalaka shaft Pvt., Ltd., Nashik
08/09/2016	BE II shift Electrical	Times of India, Airoli
08/09/2016	BE II shift Electrical	HVDC Padghe
10/09/2016	T.E. I shift Electrical	Traction Machine Workshop, Nashik Road
17/09/2016	B.E. I shift Electrical	Times of India, Airoli-Mumbai
19/09/2016	SE II shift Electrical	Rishab Instruments
20/09/2016	T.E. I shift Electrical	132 kV, EHV Sub-station, Takali-Nashik
21/09/2016	T.E. I shift Electrical	SPARK Electricals, Ambad-Nashik
22/09/2016	T.E. Production	Atlas Copco (I) Ltd., Satpur, Nashik
22/09/2016	T.E. Production	Sharda Motor Industries Ltd., Satpur, Nashik
22/09/2016	T.E. Production	Sipra Engineers Pvt., Ltd., Nashik
23/09/2016	T.E. Civil (II nd Shift)	Mumbai Port Trust, Mumbai
27/09/2016	T.E. Civil (I st Shift)	Mumbai Port Trust, Mumbai & Bhatsa Dam
27/09/2016	SE II shift Electrical	OM Enterprises, Ambad, Nashik
28/09/2016	T.E. Civil (II nd Shift)	Vaitarna Hydro power station
29/09/2016	T.E. Civil (I st & II nd Shift)	MERI at Maharashtra pratikruti
27/09/2016	T.E. Mechanical Div-A & B	Nash Robotics, Satpur, Nashik
28/09/2016	T.E. Mechanical Div-C	Nash Robotics, Satpur, Nashik

■ Training & Placement :

Name of Company	Name of the Dept.	No. of students selected
Konark Engineering	Electrical Engg.	01
	Mechanical Engg.	01
	Production Engg.	01
L&T InfoTech	Computer	05
	IT	01
	E&TC	01
	Electronics	01
FIN IQ	Computer	06
	Electrical	01
	IT	02
	ME Computer	01

continued on page 6



Name of Company	Name of the Dept.	No. of students selected
Bombardier	Electronics	01
	Computer	01
	IT	01
TCS Innovators	Computer	01
	Electronics	01
Torrent Power (Batch 2015-16)	Electrical	02
Polycab (Batch 2015-16)	Electrical	03
KSB Pumps	ME Electrical	01

■ **Abstracts of papers presented during Sept.2016:**
Spatial Power Control of Singularly Perturbed Large Nuclear Reactor

Dr. R. K. Munje (Published in International Journal of Control Engineering and Applied Informatics)

Abstract: Controlling of large nuclear reactors is a challenging task due to simultaneous presence of both the slow and the fast varying dynamic modes. This paper presents the design of linear quadratic regulator for spatial power control of a large Advanced Heavy Water Reactor (AHWR). The AHWR system is represented by 90 first order nonlinear differential equations with 5 input and 18 output variables. After linearization, the original ill-conditioned system of AHWR is represented into standard singularly perturbed two-time-scale form and then it is decomposed into two comparatively lower order subsystems, namely, 'slow' subsystem and 'fast' subsystem of orders 73 and 17 respectively. Two individual optimal controllers are developed for both the subsystems and then a composite controller is obtained for original higher order system. This composite controller is applied to the vectorized nonlinear model of AHWR. From dynamic simulation of the nonlinear model of the reactor in representative transients, the suggested control scheme is found to be superior to other methods.

■ **Multi Response Optimisation of Powder Mixed EDM Process Parameters by Grey Relational Analysis**

■ Prof. N. B. Gurule and Prof. Dr. K. N. Nandurkar (Published proceedings of an International Conference at RIT, Sangli)

Abstract: Electrical Discharge Machining (EDM) can be used to machine electrically conductive hard materials and producing complex shapes in die, mould and tool manufacturing which demand for high material removal with low surface roughness. To fulfil this, a new advancement in EDM is the addition of powder in dielectric. Optimization of PMEDM process parameter is essential to arrive for best quality products at low cost. Taguchi method is effectively used for improving product quality. However, it is difficult to optimize multi-response in complex process only by Taguchi method. Grey relational analysis (GRA) has become a powerful optimisation tool for the processes with multiple performances. GRA with Taguchi method represents

a new approach to optimization of process parameters for multiple performances. In the present study, the GRA approach in association with Taguchi orthogonal experimental design L_{27} has been proposed to the optimisation of seven PMEDM process parameters for multiple responses (viz. MRR, RWR and SF). Then by Taguchi analysis and ANOVA; the significant parameters affecting for grey relation grade are identified. This study shows the improvements in the measured mean value at optimal parameters for MRR, RWR and SF.

Keywords: Taguchi method, orthogonal design, GRA and multiple response optimization.

■ **Forthcoming Event**

• **“National Power, Energy and Control Conference (NPECC-2016)**

Department of Electrical Engineering is Organizing “National Power, Energy and Control Conference (NPECC-2016)” on December 23-24, 2016 in Association with BCUD Pune and IET Nashik Local Network. PG students, Research Scholars, faculty members and industry professionals are encouraged to participate in this conference and share their research with other researchers. Key Note of the conference will be delivered by Dr. A. P. Tiwari, Outstanding Scientist, Bhabha Atomic Research Centre, Mumbai.

• **“International Conference on Manufacturing Excellence (ICAMAX-2017)**

Department of Production Engineering is organizing an “International Conference on Manufacturing Excellence (ICAMAX-2017) during 3-4 March 2017. This conference is sponsored by Savitribai Phule Pune University. The objective of this conference is to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of sustainable manufacturing. It also provides the premier interdisciplinary forum for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns, practical challenges encountered and the solutions adopted in the field of Manufacturing. Keynote addresses will be delivered by Dr. Ateekh-Ur-Rehman (King Saud University) and Prof. Indra Gunawan (The University of Adelaide). Few sessions with US professors will also be organized through video conferencing. All interested are invite to participate in this event.

Prof. Dr. K. N. Nandurkar
PRINCIPAL

