

■ **26<sup>th</sup> Advisory Committee Meeting**

The 26<sup>th</sup> Advisory Committee meeting was held in K. K. Wagh Institute of Engineering Education & Research, Nashik on 20<sup>th</sup> December 2014. Chairman Vivek Sawant and other Advisory Committee members were felicitated by Hon. Shri. Balasaheb Wagh, President, K. K. Wagh Education Society. Advisory Committee members Prof. B. M. Naik, Shri. N. A. Joshi, Dr. D. G. Hapase, Dr. U. N. Gaitonde, Dr. D. M. More, and Dr. V. V. Mahajani were present for the meeting. Dr. D. G. Hapase was felicitated on completion of 75 years of age and receiving award from Deccan Sugar Technologist Association. Trustee Shri. Sameer Wagh, Shri. D. S. Shinde, Secretary Prof. K. S. Bandi and Principal Dr. K. N. Nandurkar were present. All Professors, Associate Professors, all HODs of the Institute, Principals and HODs of Polytechnic Institutes and Agriculture allied colleges attended the meeting.

■ **Visit by Dr. Rajderkar, Pro VC MUHS, Nashik**



Visit by Prof. Dr. Shekhar Rajderkar, Pro Vice Chancellor, MUHS

Prof. Dr. Shekhar Rajderkar, Pro Vice Chancellor, Maharashtra University of Health Sciences, Nashik visited our Institute on 4<sup>th</sup> Dec. 2014. A meeting with Hon. Shri. Balasaheb Wagh, Trustees, Principals and HODs was organized in Central Office. He was felicitated by Shri. Balasaheb Wagh. In his speech he narrated his journey towards

becoming Doctor and Professor in Medical College. He appealed that the staff and students of any professional college should take up projects useful for the Society and there should be interdisciplinary approach in executing the projects.

■ **NSS Winter Camp 2014-15**



Inauguration of NSS Winter Camp at Vilholi Village on 26<sup>th</sup> December 2014.

A special winter Camp had been organized for NSS volunteers at Vilholi Village (Tal. & Dist. Nashik) between 25<sup>th</sup> to 31<sup>st</sup> Dec. 2014. Various activities under main theme "Swachh Bharat Abhiyan" were conducted at Vilholi. The camp was inaugurated by Hon. Shri. Sunilji Chandak (Director, Udyogvardhini, Nashik) in the presence of Hon. Trustee Shri. D. S. Shinde, Principal Dr. K. N. Nandurkar, Sarpanch and villagers. During the camp events like: Gram Swachhata Rally, Shramdan, Visit to Goshala and Udyan were conducted successfully. In the series of expert talk Mrs. Jamdade, Mr. Harshad Nere, Mr. Shyam Vispute, Prof. Rupesh Patil, Mr. Bhushan Matkari, Mr. Rajesh Pandi, Prof. Raj Shelke, Shri. Kanthanand Swami, and Jyoti Tai Kale had covered various social topics. Volunteers prepared play grounds of Kabbadi, Kho-Kho for Z. P. School and decorated school with sketches. In this camp eighty boys and forty five girls i.e. total 125 volunteers actively participated and made the camp very successful under the coordination of Prof. N. B. Gurule.

### ■ Visit of Dr. S. S. Mantha, Chairman, AICTE



Personal visit by Prof. Dr. S. S. Mantha, Chairman, AICTE

Personal visit by Prof. Dr. S. S. Mantha, Chairman, AICTE to our campus on his way back to Mumbai from Shirdi on 28<sup>th</sup> December 2014 was organized. On this occasion Hon. President of K. K. Wagh Education Society Shri. Balasaheb Wagh felicitated Prof. Dr. S. S. Mantha. Vice President Shri. Kashinathdada Tarle, Secretary Prof. K. S. Bandi and Principal Dr. K. N. Nandurkar had interaction with Prof. Dr. S. S. Mantha on various issues related to AICTE.

### ■ Industry-Institute interaction organized jointly with CII Nashik on 23<sup>rd</sup> December 2014



CII-Faculty Interactive Session

Training and Placement Cell in association with CII-Nashik arranged an interactive session between Faculty-CII representatives on 23<sup>rd</sup> December-2014 in our Institute to understand the industry expectations from the faculties. It was attended by Mr. Nishikant Ahire-CII-Chairman Nashik and Mr. Shatanu Gune. Vice Principal Dr. S. S. Sane welcomed the guests and Dr. P. K. Shahabdar TPO, started the interactive session with the objective of the session. Around 50 staff members participated in this interactive session. The session ended with the following notes to be practiced by teachers for bridging the skill gap: Teachers to help the students to develop latest skills, Motivate the students to speak in

their mother tongue, practice out of syllabus learning, enhance institute-institute interaction, start industry need courses/training, motivate the students to complete the activities in time and develop the thinking process of students by giving small industry projects.

### ■ Visit of Indian Army Officers



Indian Army officers led by Col Sunil Upadhyay with Trustees

Team of 20 Indian Army officers led by Col Sunil Upadhyay visited KKWIEER during 17/12/2014 and 18/12/2014 to conduct Pool Campus under University Entry Scheme for the third Year Engineering Students from Nashik district. Around 800 students from various Engineering colleges of Nashik district attended this process.

### ■ ISTE online course on 'Control System'

Department of Electrical Engineering of our Institute in association with IIT Kharagpur, Under the National Mission on Education through ICT (MHRD, Govt. of India) organized an ISTE online course on 'Control System' during 2 to 12 December 2014. The faculties of our Institute and various Institutes of Nashik district and Maharashtra attended the workshop.

### ■ National Level Workshop on "Emerging Technologies in Smart Grid"

National level Workshop on "Emerging technologies in Smart Grid" was organized by Electrical Engg. Dept. of our Institute in association with Savitribai Phule Pune University during 26-28 December 2014. Advancement in Power Grid in India and Future scope was discussed. Students, staff and industrial persons got various views of smart grid through expertise. Mr. Rakesh Goyal, Delhi, Mr. J. P. Shah, Nashik, Dr. O. G. Kulkarni, Nashik, Mr. V. L. Sonwane, Mumbai, Mr. P. M. Sonwane, Nashik, Mr. Amrish Gokhale, Nashik, Mr. Prasad Kulkarni, Nashik, Mr. P. G. Joshi, Legrand and Prof. Dr. B. E. Kushare were the resource persons for the workshop.

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### ■ Faculty Development program on “Digital Signal Processing and its Application”

Faculty Development Program on “Digital Signal Processing and its Application” was organized by Computer Engineering department of our Institute during 24-25<sup>th</sup> December 2014. It was inaugurated by the Chief guest Prof. Dr. M. U. Kharat. The Chairman of the function was Principal Dr. K. N. Nandurkar. The experts for the workshop were Prof. N. M. Shahane, Dr. M. U. Kharat and Prof. D. B. Khirsagar.

### ■ “Best accredited Student Branch Award”



Prof. Dr. S. S. Sane, Head of Computer Engineering receiving “Best Accredited Student Branch Award”

“Best Accredited Student Branch Award” by Computer Society of India for the year 2013-2014 has been awarded to CSI Student branch of K. K. Wagh Institute of Engineering Education and Research on 12<sup>th</sup> December 2014 (Friday) at JNTU Auditorium, Jawaharlal Nehru Technological University (JNTU), Kukatpally, Hyderabad. Prof. Dr. S. S. Sane RVP, Region VI CSI, Prof. M. S. Pardeshi and Miss. Sayee Jadhav attended award ceremony. Ms. Sayee Jadhav from BE Computers also received “Highest Committed Student Branch Activist” award for the year 2014 by Computer Society of India.

### ■ Expert Lecture/Seminar/Courses/Worshop Organized:

- Production engineering department organized an expert lecture of Mrs. Sulabha Mhaske on “IT in Project Management and Jobs for Production Engineers in IT Industries” on 22<sup>nd</sup> December 2014.
- Computer engineering department organized an introductory session of TIME on 26<sup>th</sup> December 2014 for TE Students. The session was conducted by Mr. Krunal Dhakate, Director TIME, Nashik Division. Same department organized an introductory seminar about Patenting system in India by Prof. K. P. Birla is conducted for BE computer students on 30 December 2014.

- Mechanical engineering department organized an expert lecture of Mr. Nilesh Salgaonkar on “Industrial Automation”, TACT, Nashik on 30 December 2014 and an Expert lecture of Mr. Kaustubh Tayade & Mr. Atul Wagh from Mahindra & Mahindra on “Fixture design & automotive Component Manufacturing” on 28 December 2014.
- Electronics & Telecommunication department organized a Seminar of Mr. Ranjeet, Talent Spirit, IIT, Hyderabad on “Talent Students” for T. E students on 23 December 2014, organized an Expert lecture of Shri. Krunal Dhakate, TIME, Nashik on “Career Opportunities after Engineering” for T. E. Students on 6 December 2014, organized an expert lecture of Shri. Vishal Jategaonkar, PT Education, Nashik and an Expert lecture on “Communication Skills” for S. E. Students on 26 December 2014. Same department also organized an expert lecture of Prof. A. G. Nandre, MET’s IOE, Bhujbal Knowledge City, Adgaon on “Animation-Imagination to virtual reality” for B. E. students on 27 December 2014.
- Electrical engineering department organized an expert talk of Mr. Ankit Patel & Mr. Akshay Deshmukh on “Havells Products & its Demonstration” on 19 December 2014 and an expert talk of Mr. Rakesh Kumar Goyal on “India’s Vision to Smart Grid” on 26 December 2014.
- Chemical Engineering department organized an expert talk of Mr. Chandrakant Mohikar on “Gas processing and gas based power generation” on 30 December 2014.
- Information Technology Department conducted workshop on “Programming concepts using C++” for SE IT Students on 18 and 19 December 2014. Same department organized half days workshop on “Basics of Processor Interfacing Laboratory” for SE IT students on 19<sup>th</sup> December 2014. Same department organized a seminar on “How to face Campus Interview” by Mr. Shreyas Mandavgane, Senior Developer, TCS, Pune on 26 December 2014.
- MCA department organized an expert lecture on “Opportunities in Banking Sector “ by Mr. Sudarshan Sukre from Sudarshan Sukre & Associate, Nashik on 27 December 2014.

- Training and placement Cell in association with Talent spirit Pune had conducted an Aptitude Test and its Analysis for all TE and MCA students on 23<sup>rd</sup> and 24<sup>th</sup> December 2014. Around 681 students appeared for the test. Analysis done by Talent Spirit team helped students to understand different topics included in Aptitude test and realized the importance of undergoing training and practice to crack the Aptitude test. T & P Cell also conducted workshop by Mr. Subodh Deshmukh, CEO, Rangshastra Textiles, Hyderabad on "Team Building and Motivation" for 2<sup>nd</sup> year students during 29<sup>th</sup> Dec. to 3<sup>rd</sup> January 2015. Around 550 students participated in this workshop. Students were made aware about Placement opportunities and they were also trained for public speaking, group activity and SWOT Analysis.

#### ■ Industrial Training/Workshop/STTP Attended By Staff:

- Principal Dr. K. N. Nandurkar attended one day leadership conclave organized by Indo-US collaboration for Engineering Education (IUCEE) at NMIMS, Vile Parle, Mumbai on 16/12/2014. It was attended by Principals and Directors of various Engineering and Management Institutes in Maharashtra.
- Computer engineering department staff Prof. Rutuja H. Jadhav & Prof. Neha G. Sharma attended Faculty Development program on "Principles of concurrent and distributed programming" at JSPM'S RSCOE, Tathawde, Pune during 16 to 17 December 2014. Same departmental staff Prof. I. Priyadarshini attended Faculty Development Program on "Embedded Operating System" at S. K. N. COE, Pune on 29 December 2014. Prof. Mayuresh S. Pardeshi of same department attended "CUDA and OpenMP" workshop for PL3, Third Year Computer Engineering Programme at SITS, Narhe Campus, Pune during 17 to 21 December 2014. Prof. K. P. Birla attended Workshop on "Patent Information system in India" at RGNIIPM, Nagpur during 1 to 5 December 2014. Mrs. A. V. Taware attended Faculty Development Program on "PL-III" at Raisonni Wagholi Pune during 26 to 27 December 2014.
- Electronics & Telecommunication engineering department staff Prof. V. R. Lele has attended 8 days workshop on RM & IPR, at SITRC, Nashik from 17 to 24 December 2014. 12 Staff

attended FDP for TE (E&TC) at Pune Conducted by University of Pune during 10 to 13 December 2014. Same department staff Prof. M. P. Satone & Prof. S. R. Zambre attended FDP at Bangalore sponsored by KPIT on 'AUTOSAR and Infotainment' during 16 to 21 December 2014. Prof. K. Nirmalakumari, Prof. S. R. Zambre & Prof. P. J. Mondhe of same department attended Two week online workshop on 'Control Systems' at KKWIEER, conducted by IIT, Kharagpur during 2 to 12 December 2014.

- Electrical engineering department staff Prof. S. S. Kale attended Two-week ISTE Workshop on Control Systems Conducted by IIT Kharagpur under the National Mission on Education through ICT (MHRD, Govt. of India) during 2 to 12 December, 2014.
- Chemical engineering staff Prof. G. N. Patil & Prof. N. A. Sharma attended Two week online workshop on 'Control Systems at KKWIEER, conducted by IIT, Kharagpur during 2 to 12 December 2014. Prof. G. N. Patil also attended one week STTP on "Application of Bioprocess & Nanotechnology in Chemical Engineering" organized by SGGS IE & T Nanded & sponsored by TEQIP II during 18 to 22 December 2014.
- MCA department staff Prof. M. E. Maniyar attended Two week Faculty Development Programme on 'Entrepreneurship' organized by Maharashtra Centre For Entrepreneurship Development (MCED), Nashik in collaboration with NDMVP'S Samaj KBTCOE, Nashik under sponsorship of Department of Science & Technology (DST), New Delhi and EDII, Ahmadabad from 18 to 30<sup>th</sup> December 2014.

#### ■ Industrial Visits Organized For Students:

Date	Class	Name of Company
04/12/2014-12/12/2014	BE (E & TC) & TE (E & TC)	Bharat Electronics Ltd., Chandigadh
08/12/2014-16/12/2014	BE (Electronics) & TE (Electronics)	Bharat Electronics Ltd., Chandigadh
09/12/2014	BE Electrical	Crompton and Greaves, Power Transformer manufacturing, Bhopal
12/12/2014	TE Chemical & BE Chemical	Rise Chemical Industries, Delhi

#### ■ Books Purchased in Central Library : Dec. 2014

Sr.No.	Name of Dept.	Total No. of Books purchased
1	MBA	06

### ■ Training & Placement :

Name of Company	Name of the Dept.	No.of students selected
Aress Software, Nashik	Computer Engg.	04
	IT	04
FIN IQ, Pune	Mechanical Engg.	04
	IT	02
	E & TC Engg.	01
Rishabh Instrument	Mechanical Engg.	03
	E & TC Engg.	01
Freshrop, Nashik	Electronics Engg.	02
	MBA HR	01

### ■ Paper Presented by Students

11 students presented paper in various national and state level competitions. Out of which

- Mr. Shreeneet Rathi, Final year Production engineering student won the "Best Paper Award" for his paper "Development of an Expert System for Fatigue Design of Weld Joints" in National Conference on Industrial Engineering & Technology Management (NCIETM-14) held at National Institute of Industrial Engineering (NITIE- Autonomous Institute under MHRD), Mumbai on 28<sup>th</sup> -30<sup>th</sup> of Nov. 2014.

### ■ Other Achievements

- Principal Dr. K. N. Nandurkar was invited as resource person on 9<sup>th</sup> December 2014 for one week content updating programme organized by K. K. Wagh Polytechnic, Chandori. He conducted a session on 'Statistical Quality Control' for staff members from various Polytechnics in the region. Principal Dr. K. N. Nandurkar was also invited as Guest of Honor by Dhanashree School, Pathardi Phata for inauguration of 'Anand Mela' for school children on 27<sup>th</sup> December 2014. Librarian Dr. P. S. Bodke and Prof. N. B. Gurule were also present on this occasion.
- Principal Dr. K. N. Nandurkar was invited as Guest of Honor on 17<sup>th</sup> December 2014 for inauguration of two days Science Exhibition organized by K. K. Wagh Polytechnic, Nashik for School Children.
- K. K. Wagh Institute of Engineering Education and Research, Nashik has been recognized as "MEC Community Partner" by Microsoft Research Lab India Pvt., Ltd. Head of computer engineering department Prof. Dr. S. S. Sane and Prof. Rutuja H. Jadhav are awarded as "MEC Champion Faculty" for contributing their efforts in conducting screen sessions and questionnaire updation for the subject "Design and Analysis of Algorithms" on mocr.org.

- Electronics & Telecommunication engineering department staff Dr. M. D. Kokate has delivered seminar on 'Career opportunity' at Ethape Polytechnic, Sangamner on 24 December 2014.
- Electrical engineering department Head Prof. Dr. B. E. Kushare offered Energy Audit services to Times of India Lucknow and Times of India Hyderabad. He also delivered lecture in one day workshop on Energy Management for TOI, Lucknow for Technical Staff and one day Training on Energy Management on 24<sup>th</sup> December 2014.
- Information Technology department Head Prof. Dr. Preeti D. Bhamre has received "Active Participation Award" (Women Member) by Computer Society of India at the Annual convention 2014, Hyderabad on 12<sup>th</sup> December, 2014.

### ■ Launching Karmaveer Talent Search Exam

#### Karmaveer Talent Search Exam 2015 (KTSE-2015)

K. K. Wagh Education Society, Nashik is organizing K. K. Wagh Talent Search Examination 2015 (KTSE) for students of HSC/12<sup>th</sup> standard who are eligible for JEE (Main) 2015. The Mock Test offered by us is similar to the pattern of JEE (Main) exam. This online test not only offers the best of the JEE mock test but also helps the students to check their level of preparation for the exam. There is no 'Registration Fees' for this exam and toppers will be given fee concession if admitted to any institute run by K. K. Wagh Education Society.

### ■ Abstracts of papers presented during Dec. 2014:

#### Development of an Expert System for Fatigue Design of Weld Joints

Mr. Shreeneet S. Rathi & Prof. N. B. Gurule  
(Presented in National Conference on Industrial Engineering & Technology Management (NCIETM-14) held at National Institute of Industrial Engineering (NITIE- Autonomous Institute under MHRD), Mumbai on 28<sup>th</sup>-30<sup>th</sup> of Nov. 2014) (Received Best paper award)

**Abstract:** Fatigue analysis of weld joints is highly complex activity. Effective fatigue assessment requires mature understanding of many inter related design domains. Any negligence in design may result in fracture of member or even collapse of the entire structure. Fatigue design guidelines are numerous; yet for design engineers to perform effective fatigue analysis, sufficient expertise, deep subject knowledge and significant field experience is required. Thus, fatigue resistant designs and its implementation usually

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demands consultation of specialized design experts. After rigorous review of available design tools and methodologies; Rule-based Expert Systems (ES) or Knowledge Based System (KBS) in artificial intelligence are found to be versatile in fatigue assessment of weld joints. This paper presents an expert system for fatigue design of weld joints, with knowledge base adopted from fatigue design recommendations of IIW 1823-07 document, published by International Institute of Welding (IIW). Expert system is developed with user friendly interface in Microsoft Office-Excel's spreadsheets.

**Formation and characterization of Mechanically Induced MZI in Optical Fiber**

Dr. S. A. Patil and Prof. S. S. Dongare

(Presented in 2<sup>nd</sup> IEEE International Conference on ET2ECN - 2014, at SVNIT, Surat during 26 to 27 December 2014)

**Abstract:** The LPFG, apodized LPFG and MZI are mechanically induced in communication grade fiber and characterized experimentally. The spectral response of mechanical MZI, plain LPFG and apodized LPFG are compared.

**Performance Comparison of PI/PID Controllers for DC Motor**

Prof. R.K.Munje, Prof.P.P.Shinde & Prof.S.S.Kale

**Abstract:** In this paper, different Proportional-Integral-Derivative (PID) controller tuning techniques are investigated for DC motor. Initially PID controller parameters for various tuning techniques are determined and then applied to the DC motor model for speed control. Simulation results are generated, using these controllers, under the same transient conditions and performances are compared.

**Index Terms-**DC motor, PID controller, PID tuning.

**Challenges and opportunities of affordable fuel cell for distributed generation**

Dr. V. S. Mane & Prof. G. B. Daware

(Presented in National Conference ENACT 2014 organized by Dr. BATU, Lonere during 19 to 20 December 2014)

**Abstract:** Due to the rapid increase in global energy consumption and the diminishing of fossil fuels, the customer demand for new generation capacities and efficient energy production, delivery and utilization keeps rising. Utilizing distributed generation, and energy storage can potentially solve such problems as energy shortage and global warming. Especially Proton Exchange Membrane (PEM). Fuel Cell and Solid Oxide Fuel Cell (SOFC) have been considered as the top candidate as compared to other fuel cells because of various factor such as enhanced efficiency, negligible emission, high reliability and simple construction. PEMFC & SOFC can be

used to bridge the gap between the rapidly increasing demand and the unavailability of resources to sustain them. In this paper we are focusing on cost reduction technology and the contamination issues of Proton Exchange Membrane fuel cell and Solid Oxide Fuel Cell.

**Keywords:** Fuel cells, Proton Exchange Membrane Fuel Cell (PEMFC), Solid Oxide Fuel Cell (SOFC), Sustainability, Cost reduction technology.

**Thermal energy storage- a review**

Prof. Daware G. B., Prof. Derle S. N. & Prof. Shinde S. S.

(Presented in National Conference ENACT 2014 organized by Dr. BATU, Lonere during 19 to 20 December 2014)

**Abstract:** This paper presents a comprehensive and state of art review of thermal energy storage. At present sensible heat storages are widely used across the world, with water as the chief storage medium. Latent heat storage and thermo chemical storage are looked upon by world as a potential technology for peak load shaving. India's energy system faces multitude of challenges. Energy density offered by phase change materials (PCM) and thermo chemical material (TCM) such as salt hydrides, zeolite-H, O etc are higher than that offered by sensible heat storages. TES systems enhance the energy efficiency and balance the mismatch between supply and demand. Comparison between different TES is done on the basis of cost, power, capacity, storage period etc. Utilization of waste heat and cold in industry (eg. glass, cement, incineration plants etc) saves cost of utility and energy with proper application of TES. The application of energy storage technologies allows the scheduling of renewable energy generation is expected to play a crucial role in increasing the share of renewable energy in the global energy mix.

**Keywords:** thermal energy storage (TES); phase change material (PCM); thermo chemical storage (TCS); underground thermal energy storage (UTES)

**Synthesis of Photonic Crystal waveguide based Bandpass filter**

Prof. Dr. Preeti D. Bhamre

(Presented in 12<sup>th</sup> International Conference on Fibre Optics and Photonics during 13 to 16 December 2014 organized by IIT, Khargpur)

**Abstract:** A systematic approach for designing a photonic crystal waveguide based bandpass filter with desired response is proposed. It is shown that more than one defect combinations are possible for the desired filter characteristics.

**Keywords:** Photonic Crystals; Photonic Integrated Circuits

Prof. Dr. K. N. Nandurkar

PRINCIPAL

