



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

February 2012

**Vol.:4  
Issue:2**

TECHNICAL NEWS LETTER

**Guest Lecture on Software Engineering and Management Information System**



Dr. S.A. Kelkar, From IIT Bombay delivering Lecture on SE & MIS organized by Dept. of Computer Engineering

Dr. S.A. Kelkar, From IIT Bombay was invited to deliver Guest Lecture on Software Engineering and Management Information System for TE Computer Engineering Students. First session started with Introduction to software engineering followed by process management, second session was on Project and IT management ended with quality management. On the second day session first started with requirement analysis and elicitation followed by data models in second session. Around 120 Third Year Computer Engineering Students and faculty members were present for workshop. Mr. Kushal Birla and Mr. T. T. Tambe coordinated the event.

**Lecture by Dr. Vijay Bhatkar**

Speech by Padmashri Dr. Vijay Bhatka was organized on 25<sup>th</sup> Feb. 2012 in the Institute. Dr. Bhatkar took a review of major scientific development which took place in last 500 yrs. He said that the equation  $E=mc^2$  and invention of transistors was a major breakthrough. We have taken up the challenge to educate our people. Now teachers and students have to learn simultaneously. He highlighted the importance of Cognitive Technology and solving problems of agriculture. He asked the management to encourage research and innovation towards sustainable development. It should result in more research papers in International Journals by our staff and students. Hon. Shri. Balasaheb Wagh, Trustees, Principals of various Institutes, staff members and students were present for this lecture.

**Seminar on 'Mobile Application Development'**

The Dept. of Information Technology had organized a seminar on "Mobile Application Development" by Mr. Sandip Chavarkar, Director Redlogic, Mumbai on 13<sup>th</sup> Feb., 2012 for the students of IT and E& TC. He discussed the future scope for Mobile application development. Along with him Mr. Swapnil Mohite and Mr. Ronit Bhattacharya guided the students with demonstrations on Application development for Android operating System.

**Soft Skill Programme By Electrical Department**



Electrical Engineering Department of K. K. Wagh Institute of Engineering Education & Research, Nashik organized two 5 days workshops on "Soft skills Development" for students 7<sup>th</sup> to 11<sup>th</sup> Feb. 2012. Total of 103 students in Electrical Engineering took training for Personality development with Communication Skills, Presentation skills, Group Discussions & Personal Interview techniques. Kanchan Mandnekar & Mahesh Joshi of "Step Up Training Solutions" and Dipali Salve & Amit Mishra of "D Source" Nashik conducted the workshops Prof. T. N. Date from Electrical Engineering Department coordinated the workshop with encouragement & support of Hon. President Shri. Balasaheb Wagh, Principal Dr. K. N. Nandurkar & Head of Electrical Department Prof. Dr. B. E. Kushare.

**NSS Winter Camp 2012**



Inauguration function of NSS Winter Camp at Babhleshwar site

NSS Unit of our institute had organized special Camp during 6<sup>th</sup> to 12<sup>th</sup> Feb. 2012 at Mohagaon (Tal. & Dist. Nashik) village which is 16 Km away from this place. Total 125 volunteers including 75 boys and 50 girls have actively participated in this camp. "Total Development of village through NSS" was the main theme for this year. Under this theme volunteers have performed various activities like: family survey, health & education awareness, women upliftment via Bachatgat, water & soil testing, etc. In the camp Lecture Series various speakers guided the volunteers regarding History of India, personality development, career guidance, pollution & environment, Agro moll, etc. Through this camp volunteers came to know the problems and life style of villagers. Sarpanch and other members appreciated for the activities during the NSS Camp. Valedictory function of NSS Camp was held on 12/02/2012 in presence of Mr. M. Y. Inamdar (Ex. ACP) who spoke on career guidance for competitive exams.

### ■ Felicitation of Hon. Shri Balasaheb D. Wagh



Felicitation of Hon. Shri. Balasaheb D. Wagh during inaugural session of Maharashtra Vigyan Samelan at Dr. Moonje Institute by Dr. Vijay Bhatkar.

### ■ Stall by Institute at Nima Index

Our Institute was participated in Nashik Industries Manufacturer Association (NIMA-Index 2012) exhibition during 24-26, Feb. 2012 at Dongare Vasatigruha, Nashik. During this exhibition large number of visitors from Industries visited the stall. Institute is helping to the Industry in their problem by providing Testing & Consultancy Services.

### ■ Safe Driving Programme



NSS Unit of this Institute has organized a safe drive test competition for students, in association with Hero Group of Industries on 28<sup>th</sup> Feb. 2012. About 200 students participated in this activity.

The prizes were sponsored by Hero Group. This programme was arranged to create the awareness of safe driving among the budding engineers.

### ■ CONDOLENCE



Late Shri. S.S.Pujar

The Prof. Dr. Shankarappa S. Pujar, Professor in Mathematics, Science Dept. of this Institute expired on 17<sup>th</sup> Feb. 2012. He completed his Ph.D. from Karnataka University in 1978 and worked as Graduate Teaching Assistant in Michigan State University for one year. Since 1980 he was teaching at various engineering colleges. He joined this institute in January 2010 and was active in guiding the students till the last day.

### ■ Visit to Institute by Students of Kendriya Vidyalay, Nashik.

Fifty students of 11<sup>th</sup> & 12<sup>th</sup> standard from Kendriya Vidyalaya, Nashik Road along with three staff members visited our Institute on 04<sup>th</sup> Feb. 2012. This visit started with a small function where Prof. Dr. K. N. Nandurkar gave information about the Institute to the Students which was followed by the video session of this Institute.

They visited various departments like Electrical, Computer, Mechanical, Workshop and Central Library. Workshop department had given the demonstration of working of Lathe Machine. The purpose of their visit was to know the working of Engineering College & branches run by Institute & to know the basic difference between various branches in order to choose the correct branch of their interest as a career.

### ■ Visit By Prof. G. Sabnis, Howard University, U.S.

A lecture of Prof. Gajanan Sabnis (Howard University, U.S.A.) was organized for Civil Engineering students on the topic "Infra-Structure" on 04<sup>th</sup> Feb. 2012. Prof. Sabnis presented a detailed survey carried out for evaluating the infrastructure including Dams, Roads, Bridges, Parks, Drinking Water, Solid Waste management for U.S. The survey pointed out that the gradation of infrastructure in U.S. belongs to D grade and there is a need to upgrade it immediately. This was a shocking result for the World and on these lines, many countries have started their own evaluation. Prof. Sabnis urged to undertake such survey for India in general and Nashik in specific. The presentation was followed by questions answer session.

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

- Department of Computer Engineering had organized expert lecture on 'Introduction of cloud technologies' on 28<sup>th</sup> Feb. 2012 Dr. Uday Wad was expert person for the program and guest lecture on 'Financial Management' by Dr. Shekhar Paranjape for T.E. (Computer) students.
- Department of Electronics and telecommunication had organized following activities
  - 'Group Discussion Activity' on 2<sup>nd</sup> Feb. 2012 Mr. Shekhar Papanje was expert person of the program.
  - 'Appitude test' on 2<sup>nd</sup> Feb. 2012
  - Expert lecture on 'Cloud compound and Mobile application' on 13<sup>th</sup> Feb. 2012 Mr. Sandip Chavarkar was expert person for the program.
  - Seminar on 'Career options after Graduation' on 22<sup>nd</sup> Feb. 2012 Mr. Kunal Dhakate was expert person for the program.
- Department of Mechanical Engineering had organized 'MOCK Test and Personal Interviews' on 23<sup>rd</sup> Feb. 2012 Mr. Kunal Dhakate from TIMES Institute was expert Person For The Program.
- Department of Mechanical Engineering had organized a Seminar on 'Vehicle engine system and pollution control Techniques' on 29<sup>th</sup> Feb. 2012. Mr. P.K. Joshi and Mr. Uday Deshmukh were expert persons of the program.
- Department of Electrical Engineering had organized following programs
  - 'Youth Empowerment' on 24<sup>th</sup> Feb. 2012 Mr. Krunal Dhakate L. V. Switchgear was speaker of program.
  - 'Career options after Graduation' on 17<sup>th</sup> Feb. 2012 Ms Dipali Salve was expert person of the program
- Department of Information technology
  - Seminar on 'How to prepare for placement interviews' on 24<sup>th</sup> Feb. 2012 Mr. Ravikumar Zha, Zenser Technology, Pune was expert person for the program.
  - Seminar on 'study abroad' on 21<sup>st</sup> Feb. 2012 Mrs. Smita Bhamre from Step Ahead, Branch Of Impel Overseas Nashik was speaker person for the program.
- Department of Management studies had organized Extempore program on 4<sup>th</sup> Feb. 2012 and Orientation program on 'Six Sigma' on 24<sup>th</sup> Feb. 2012 by C. Vishwanatahn.

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- Department of Production Engineering has organized guest lecture on 'Voter's Role in NMC, Nashik Election 2012" for Final year students on 3<sup>rd</sup> Feb. 2012.

#### ■ Seminars / Workshop / Training Attended By Staff:

- Prof. D. M. Kanade staff member of department of computer engineering attended two days State Level Seminar on "Security in Cloud Computing" from 22<sup>nd</sup> Feb. 2012 and 23<sup>rd</sup> Feb. 2012 organized by KABGT College of Engineering Nasik in association with BCUD, University of Pune.
- Prof. Umesh Shirole staff member of Department of Electronics and Telecommunication had attended two days workshop on 'Industrial Network and communications' during 24<sup>th</sup> Feb. 2012 to 25<sup>th</sup> Feb. 2012.
- Prof. V. K. Patil staff member of department of Mechanical engineering attended DST Cluster of projects meeting on 'Instrumentation for agriculture and food Engineering' on 16<sup>th</sup> Feb. 2012 to 17<sup>th</sup> Feb. 2012 at CIAE, Bhopal topic of research proposal Design and developing internal ploughing system for agriculture.
- Prof. P. K. Kawale staff member of department of Mechanical engineering attended one day workshop on 'Finite element method using ansys and Matlab' on 24<sup>th</sup> Feb. 2012 organized by NDMVP College Of Engineering, Nashik
- Prof. P.P.Joshi and Mr. K. C. Sonawane staff member of department of Chemical Engineering attended two day workshop on 'Process Engineering & Simulation' during 28<sup>th</sup> Feb. 2012 to 29<sup>th</sup> Feb. 2012 organized by SVIT Chincholi Sinnar.
- Prof. S. S. Joshi staff memembr of Department of Applied Science attended workshop on 'Emerging Trends In Solar Energy' during 24<sup>th</sup> Feb. 2012 to 25<sup>th</sup> Feb. 2012. Organized by P.V.G. College of Engineering, Nashik.

#### ■ Papers Presented By Students :

During month of Feb. 2012, 17 students of our institute had participated in National & International Level Paper Presentation, poster presentation workshop, Model making, etc competitions and won several prizes.

#### ■ Industrial Visits Organized by Department For Students:

Date	Class	Name of Company
13/02/2012	T.E. Electrical	Volt Amp Transformer Ltd. Baroda Gujrat
14/02/2012	B.E. Electrical	Thyssen Krupp Electric controls Ltd., Vadivarhe
15/02/2012	T.E. Electrical	Enercon India Ltd. Daman
20/02/2012	B.E. Electrical	Kirloskar Electric Co. Banglore
21/02/2012	B.E. Electrical	Schneider Electric (Meter Division) Banglore
21/02/2012	T.E. Chemical	Godavari Biorefinaries, Kopergaonn
24/02/2012	B.E. Electrical	Crompton Greaves Ltd., Ambad., Nashik
28/02/2012	T.E. Electrical	POH Railway Traction, Bhusawal

#### ■ Training & Placement :

Name of the Department	Name of Company	No. of students selected
Department of Management Studies	ICICI Bank	04

#### ■ Other Achievements

- Prof. Dr. K. N. Nandurkar was invited as session chair for the session on Solar Energy at Maharashtra Vigyan Samelan, Nashik.
- Prof. Dr. K. N. Nandurkar attended the meeting of Principals of all colleges in Nashik District with Pune University officials at Raosaheb Thorat Hall. The problems faced by affiliated colleges were presented to the University Authorities.
- Prof. E. Perumal, AICTE Distinguished Visiting Professor visited institute on 27<sup>th</sup> Feb. 2012.
- Prof. Dr. S. S. Sane Head Department of Computer Engineering was invited as resource person for following events:
  - Expert Talk on 'Data Mining' at K.K. Wagh Arts, Commerce, Science and Computer Science College Nashik on 2<sup>nd</sup> Feb. 2012.
  - Chief Guest to Inaugurate the "Genesis" student event at H.P.T RYK Science College, Nashik on 3<sup>rd</sup> Feb. 2012.
  - Expert Talk on 'Technological Tools in Research Methodology' at Mahila Mahavidyalay, Nashik Road on 14<sup>th</sup> Feb. 2012.
  - Expert Talk on "Cloud Databases" at NDMVP College of Engineering, Nashik on 23<sup>rd</sup> Feb. 2012.
  - Session Chair at International Conference at Sandip Institute of Technology, Nashik on 12<sup>th</sup> Feb. 2012.
- Prof. M. B. Jhade, Prof. S. S. Banait staff member of department of computer engineering were invited as a Judge for Circuit Design Contest and paper presentation contest respectively for CSI Regional Student Convention 2012 from 9<sup>th</sup> Feb. 2012. to 10<sup>th</sup> Feb. 2012.
- Prof. S. S. Banait staff member of department of Computer engineering was invited to judge Personality Contest on 21<sup>st</sup> Feb. 2012 at K. K. Wagh Arts, Commerce, Science College, Sarswati Nagar for Youth Festival and as a resource person on 6<sup>th</sup> January 2012 for Software Testing at Jalgaon.
- Prof. Dr. P.J. Pawar staff member of department of Production engineering has delivered expert lecture on 'Advanced engineering Optimization' in two day state level seminar held at Gokhale education society's COE Nashik on 27<sup>th</sup> Feb. 2012.
- Prof. S. R. Gangurde staff memembr of department of Production engineering delivered an expert lecture on "Multi-Attribute Decision Making Method & Applications" in Two-day state level Seminar, held at Gokhale Education Societies' COE, Nashik on 27<sup>th</sup> Feb. 2012 and expert lecture on "Applications of Value Engineering" in one-day seminar, held at Gokhale Education Societies' COE, Nashik on 27<sup>th</sup> Feb. 2012.
- Prof. N. D. Chaudhary staff member of department of Civil engineering delivered expert talk during training for sub divisional forest engineer & Jr. Forest engineer, assistant coservator of forest on 23<sup>rd</sup> Feb. 2012 & 27<sup>th</sup> Feb. 2012 organized by Maharashtra engineering training academy, Nashik.
- Prof. Dr. Sunil Kute staff member of Department of Civil Engineering delivered expert talk on 'High Impact

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Presentation Skill' on 24<sup>th</sup> Feb. 2012 to K.K.Wagh Women's Polytechnic, Nashik and expert talk on 'Nanotechnology Application in Civil Engineering' on 28<sup>th</sup> Feb. 2012 at V. P. College Baramati.

- Department of Civil Engg. and K.K.Wagh Institute of Engineering Education & Research, Nashik is admitted as Member of Association of Consulting Civil Engineers(India) with effect from 20<sup>th</sup> Jan. 2012.
- Prof. Dr. B. E. Kushare, Head department of Electrical engineering offered consultancy to Vashnavi Auto Enter mode polyester, Bosch India Ltd. Nashik, EPOCS Ltd., Flyocrete Ltd.during Feb. 2012 and offered technical expertise for 3 patent revocation cases to Enercon India. Pvt. Ltd.
- Prof. J.P. Shah staff member of Dept. of Electrical Engineering delivered expert talk on 'Smart Grid for Nashik' on 1<sup>st</sup> Feb. 2012 at Mahavir Polytechnic, Nashik and expert talk on 'E Waste Management' on 7<sup>th</sup> Feb. 2012 at K.K.Wagh Polytechnic, Nashik
- Prof. J.P. Shah staff member of Department of Electrical Engineering delivered expert talk on 'smart transmission and distribution grid ' on 28<sup>th</sup> Feb. 2012 at Guru Gobindsingh Polytechnic, Nashik

#### ■ SPORTS

Ms. Mansi Mali student of Dept. of Electronics & Telecomm. was selected for Interzonal Football tournament held at Pune.

#### ■ Abstracts Of Papers Presented By Staff :

##### Web Page Clustering using Latent Semantic Analysis

Prof. L. A. Patil and Prof. D. M. Kanwade (Department of Computer Engineering) presented at 'IJCA - ICCIA 2012' Conference held by SIRT Mahiravani, Nashik Maharashtra, during 11<sup>th</sup> Feb. to 12<sup>th</sup> Feb. 2012

**Abstract:-** Web mining techniques such as clustering help to organize the web content into appropriate subject based categories so that their efficient search and retrieval becomes manageable. Traditional Web Pages clustering typically uses only the page content (usually the page text) in an appropriate feature vector representation such as Bags of words, term-frequency /inverse document frequency ,etc. and then applies standard clustering algorithms(e.g. K-means, Suffix tree, Query directed clustering). For example, Users can provide captions for images on the internet, provide tags to Web Pages and other media content they regularly browse on the internet, etc. Therefore such user generated content can provide useful information in various forms such as meta-data or in more explicit ways such as tags. Typically, Web Pages clustering algorithms only use feature extracted from the page text. However, the advent also social -bookmarking websites, such as Stumble Upon and Delicious has led to a huge amount of user-generated content such as the information that is associated with the Web Pages. In multi-view learning, the feature can be split into two subset alone is sufficient for learning. Here as for, unsupervised learning algorithms, multiple views of the data can often help in extracting better features. Canonical Correlation Analysis (CCA) is an unsupervised feature extraction technique for finding dependencies between two (or more) views of the data by maximizing the correlations between the views in a shared subspace. The first approach is based on an annotation based probabilistic latent semantic analysis (LSA) over document

**Word and tag - Word Co-Occurrence Matrices**

#### ■ Cam Dynamics And Vibration Control By Detecting Jump

Prof. N. S.Ahirrao, Prof. V. V. Khond(Department of Mechanical Engineering) Paper presented at International Conference on Competitiveness & Innovativeness in Engineering, Management & Information Technology on 29<sup>th</sup> January 2012 organized by Maharaja Agrasen Institute of Management & Technology Jagadhri, Dist.-Yamunanagar, Haryana India-135003

**Abstract:-** Typical industrial cam-follower systems include a force closed cam joint and a follower train containing both substantial mass and stiffness. Providing the cam and follower remain in contact, this is a one degree-of freedom (DOF) system. It becomes a two-DOF system once the cam and follower separate or jump, creating two new natural frequencies. A study was conducted to determine whether imperfections in the cam surface, while the contact force is on the brink of incipient separation, may cause a spontaneous switch to the two-DOF mode and begin vibrations at resonance. A force-closed translating cam-follower train was designed for the investigation. The system is designed to be on the cusp of incipient separation when run. One of the many potential problems with unwanted vibrations in high-speed machinery is the possible introduction of follower jump in a cam-follower mechanism. Jump is a situation where the cam and follower physically separate. When they come back together the impact introduces large forces and thus large stresses, which can cause both vibrations and early failure of the mechanism. This paper will suggest different methods to detect the jump practically with the accuracy. The illustrative experimentation with results will be discussed in this paper.

#### ■ Technological Aspects Of Nano Electro Mechanical Systems

Prof. V. V. Khond, Prof. N. S. Ahirrao

(Department of Mechanical Engineering), Paper presented at International Conference on Competitiveness & Innovativeness in Engineering, Management & Information Technology on 29<sup>th</sup> January 2012 organized by Maharaja Agrasen Institute of Management & Technology Jagadhri , Dist.-Yamunanagar, Haryana India-135003.

**Abstract:-** Nanotechnology allows the materials to be built up atom by atom. One of the advancement using nanotechnology is in the field of electromechanical systems called "Nano Electro Mechanical System (NEMS)". NEMS are characterized by small dimensions, where the dimensions are relevant for the function of the devices. Critical feature sizes may be from hundreds to a few nanometers. Due to nanometer dimensions, and the use of light materials, the devices achieve performance in terms of speed, sensitivity and versatility that challenges or surpasses the limitations of technological achievement to date. The possibility of simple, low cost fabrication, made possible by developments in Nano Imprint Lithography (NIL). NEMS consume only little energy, this will allow continuous monitoring of all the important functions in hospitals, in manufacturing plants, on aircrafts, or even within the human body. This paper first discusses the manufacturing aspects of NEMS considering the latest trends in miniaturization. Also it focuses on materials used for nanoscale components. Further it reviews the current applications in the military, defense, space, medical, & engineering. The paper also gives the various design aspects like modeling, characterization, simulation, and control for some of the applications. It also focuses on the packaging aspects nanoscale systems and its components. The paper finally gives the environmental impacts of Nano Electro Mechanical Systems.

Prof. Dr. K. N. Nandurkar  
PRINCIPAL

