

■ **CSI Best Student Branch Award**

Our Institute has been conferred the Best Student Branch in Region VI - Maharashtra & Goa (Category C) on the eve of 1st December, 2012 during CSI National Convention at Science City, J. B. S Haldane Avenue, Kolkata.



Prof. Dr. S. S. Sane, Prof. M. B. Jhade, Mr. Avinash Shirole, Mr. Prasad Gosavi, Prof. A. V. Kolapkar, Mr. Sumeet Pardeshi and Mr. Rupinder Chandhoke receiving CSI Best Student Branch award at the hands of CSI President Mr. Satish Babu.

■ **“Active Participation- Young Member Award”**

The Computer Society of India Awards Committee has unanimously conferred the “Active Participation- Young member Award” to Prof Anand V. Kolapkar of Computer Engineering Department on the eve of 1st December, 2012 during CSI National Convention at Science City, J. B. S Haldane Avenue, Kolkata.



Prof. A. V. Kolapkar receiving “Active Participation- Young member Award” at the hands of CSI President Mr. Satish Babu

■ **“Highest Committed Student Activist Award”**

Mr. Sumeet Pardeshi of BE Computer has been conferred “Highest Committed Student Activist Award” by the Computer Society of India Awards Committee on the eve of 1st December, 2012 during CSI National Convention at Science City, J. B. S Haldane Avenue, Kolkata.



Mr. Sumeet Pardeshi receiving “Highest Committed Student Activist Award” at the hands of CSI President Mr. Satish Babu

■ **CONGRATULATIONS**

- Ms. Srushti Agrawal of BE Computer Engineering has awarded Rs. 50,000 Scholar-2012 award by Apropos Gumption- Scholarship and Talent Search Program.
- Mr. Sumeet Pardeshi and Mr. Akash Jaiswal of BE Computer were qualified for the Personal Interview round and received Android Based Tablets. The AG-STs program is designed to identify trainable students, Induce entrepreneurship and Award scholarships to the final qualifiers, filtered through all the stages of the AG-STs program. More than 1700 students from 16 districts had attempted for the CBT round out of which 350 students were considered as trainable students.

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

- Prof. Dr. B. E. Kushare, Head of Electrical Engineering and Prof. Mrs. T. N. Date attended workshop on “Syllabus structure revision for SE to BE (Electrical) & Syllabus revision of SE Electrical” at Modern College of Engg., Pune on 2nd November 2012. Prof. Mrs. T. N. Date also attended 5 days workshop on ‘Energy Management’ at IIT, Mumbai during 26-30th November 2012.

Training & Placement :

Name of the Department	Name of Company	No. of students selected
Computer Engg.	Tata Consultancy Services, Pune	12
Information Technology	Tata Consultancy Services, Pune	04

Other Achievements

- Principal Prof. Dr. K. N. Nandurkar was co-opted as member of Board of Studies (Production Engineering) by Sant Gadge Baba Amravati University, Amravati for the second time.
- Prof. Dr. B. E. Kushare, Head of Electrical Engineering offered Electrical consultancy to 1200 KV, UHV Lab of CG Ltd., Bosch Ltd., Times of India, Airoli.

Abstracts Of Papers Presented By Staff during November 2012:

Electrical Modeling of Photonic Crystal Defects

Dr. Preeti D. Bhamre

(Published in Wiley Periodicals, Microwave And Optical Technology Letters, Vol.54, No.11, Page Nos: 2522–2528, November 2012)

Abstract:- A transmission line model of a planar photonic crystal (PC) waveguide is presented here. Electrical characteristics of single and multiple point defects in a PC waveguide are investigated. It is shown that a point defect in the waveguide can be modeled as a reactance connected across the transmission line. Investigation shows that depending on the size and refractive index, a point defect can be inductive or capacitive and its reactance can vary over a wide range. A double defect behaves as a bandpass filter.

Keywords:- Finite difference time domain method; transmission line theory; wave propagation; photonic bandgap.

Study of growth kinetics and structural properties of Electrochemically deposited ZeSe Thin Films.

Prof. Anuradha C. Pawar

(Presented at International Conference on "Emerging trends in Chemical Sciences (ACTS-12" organized by School of Chemical Sciences, Solapur University, Solapur)

Abstract:- ZeSe thin films are prepared by electro deposition technique over stainless steel substrate in galvanostatic mode from an aqueous acidic bath containing $ZnSO_4$ and SeO_2 . The growth kinetics of the film was studied and the deposition parameter such as electrolyte bath concentration, deposition time, deposition potential and pH of Electrolyte bath are optimised. The X-ray diffraction (XRD) analysis of the deposited film showed presence of polycrystalline nature. The surface morphology studied by scanning electron microscope (SEM) shows crystalline morphology with well adherence and uniform distribution of grains with nanosized rods over the surface of substrate.

December 2012

Meeting With Mr. Vivek Sawant At MKCL Pune

A meeting of President Hon. Shri. Balasaheb D. Wagh, Principals of Engineering College and Polytechnics, HODs of Engineering College with Mr. Vivek Sawant was held at MKCL, Pune on 09th December 2012. Issues related to overcoming weaknesses as pointed out by the NBA committee and future development of Institutes were discussed during this meeting.



Meeting with Mr. Vivek Sawant at MKCL, Pune on 9th December 2012.

NSS Winter Camp

NSS unit of our institute had organized Special Winter Camp-2012 during 23rd to 29th December 2012 at Vilholi (Tal. & Dist. Nashik). Total 125 Volunteers participated in this camp. NSS Camp was inaugurated by Krushibhushan Shri. Tukaram Borade (Director, Silver Oak House, Vinchur Gawali, Nashik) in presence of Principal Dr. K. N. Nandurkar, and Sarpanch Sau. Dange.



Inauguration of NSS Winter Camp by hands of Krushibhushan Shri. Tukaram Borade

In this camp various social events like Cleanliness, Tree Plantation, Village survey, Health Awareness were held. In this camp Lecture Series was organized. Various experts had given speeches on different topics such as: Rain Harvesting (Prof. Prakash T. Kadve), Women's Empowerment (Smt. Ashatai Patil), Law and ethics (ACP Ganesh Shinde), Competitive Exams (ACP Hemrajsingh Rajput), History of India (Prof. Pable), and Today's Youth (Prof. Hire). Camp Valedictory function was held in presence of Dr. Anirudha Dharmadhikari (Saibaba Heart Institute, Nashik) and Dr. Shirish Sane. For the successful completion of camp Prof. N. B. Gurule, Shri, P. S. Kolhe and all NSS volunteers had taken special efforts.

continued on page 3



Closing of NSS Camp

Inauguration of Rangoli Competition as part of Maffick 2013

Rangoli Competition was organized in the Institute as a part of Maffick 2013. It was inaugurated on 31st December 2012 by the hands of Principal Dr. K. N. Nandurkar. It received very good response.



Alumni Meet Organized By MCA

Department of MCA- Computer Engineering of our Institute organized an Alumni Meet on 29th December 2012. All alumni members and staff shared their views for the overall development of department, students and alumni.



Departmental alumni meet organized by Department of MCA – Computer Engineering on 29th Dec. 2012

Three Days Conference on “Advanced Power System”



Inauguration of NCAPS organized by Electrical Engineering Department

A National conference on Advanced Power System was conducted in Electrical Engg. Dept. during 20th-22nd Dec. 2012. This conference was organized for Faculty, P.G. students & working professionals from Industries & Government Organizations. Total 38 papers by experts from different states were published. In this conference Power Generation, Transmission & Distribution, Renewable Energy Technologies, Power Quality Issues

& Power Electronics topics are covered. Mr. Mukul Shrivastava, GM, Crompton Greaves, Ambad and Mr. John Yesuraj, Crompton Greaves, Ambad, Nashik was the Chief Guest for Conference.

Two Week ISTE Workshop On ‘Engineering Thermodynamics’

Department of Mechanical Engineering had organized two weeks online ISTE Workshop on ‘Engineering thermodynamics’ in association with IIT Bombay. Prof. U. N. Gaitonde, Prof. U. V. Bhandarkar & Prof. Bhalchandra Puranik were expert speakers for the program during 11th-21st Dec., 2012. Faculties from our Institute and other Engineering Institutes in Nashik participated in the workshop.

Expert Lecture/Seminar/Courses/Worshop Organized:

- Department of Computer Engineering organized a seminar on ‘GATE’ by Mr. Mrunal on 27th Dec. 2012 for their students. Same department in association with TCS conducted online Directorate of Economics and Statistics Examination under IBPS on 9th December 2012.
- Department of Electronics & Telecommunication organized seminar on ‘Troubleshooting & Maintenances of Electronics equipments’ on 21st Dec. 2012.

Seminars / Workshop / Training Attended By Staff:

- Principal Dr. K. N. Nandurkar, Prof. S. R. Gangurde and Prof. N. B. Gurule attended the 4th International and 25th All India Manufacturing Technology, Research and Design Conference at Jadhavpur University, Kolkata during 14th – 16th December 2012.
- Prof K.F. Alfatmi, Prof. D.M. Kanade of Department of Computer Engineering attended Faculty Development Program on ‘Cloud Computing using Amazon Web Services’ at MIT, Alandi, Pune during 13th-15th Dec., 2012. Same departmental staff, Prof. Lalit Patil attended ‘ACM International Conference on ‘Management & Data’ at Persistent System Pvt., Ltd., Pune during 14th-16th Dec., 2012. Also Prof. Jyoti Bhambre & Prof. Ashvini Taware of same department attended workshop on ‘FPL-II’ on 21st Dec. 2012 organized by MIT, Pune in association with University of Pune.
- Prof. I. Priyadarshani & Prof. S. A. Baviskar of Department of Computer Engineering attended workshop on ‘Latex’ organized by Matoshri College of Engineering and Research Center, Nashik from 28th - 29th December 2012.
- Mr. Keshav Dhikale & Mr. Tushar Gangurde of Department of Electronics & Telecommunication attended workshop on ‘Troubleshooting & Maintenances of Electronics equipment’ under Technical Education Quality Improvement Program phase II organized by Sinhgad College of Engineering, Pune from 3rd - 7th Dec. 2012.
- Prof P. K. Kawale, Prof. P. J. Patil, Prof. A. S. Gujrathi, Prof. R. P. Chumbhale of Department of Mechanical Engineering, Prof. Ms. Aarati Jakhad of Chemical Engineering Department attended two

continued on page 4

week online ISTE workshop on 'Engineering Thermodynamics' organized by Department of Mechanical Engineering in Association with IIT Bombay.

- Prof. Ms. Keki Kashyap of Department of Management Studies attended two days workshop organized by JDC Bytco, Nashik from 15th - 16th December 2012.
- Prof. S. N. Kadlag, Head of Applied Science Department & Prof. S. S. Naik attended workshop on 'New Syllabus of Engineering Mathematics II' organized by MIT, Pune on 20th December 2012.
- Prof Jaydeep Shah of Electrical Engineering department attended seminar on 'Extra Solar Planets' by Dr. Natalie Batalha (Co-Investigator, Kepler Mission, NASA) on 4th Dec. 2012 at Delhi.

Industrial Visits Organized by Department For Students:

Date	Class	Name of Company
26/12/2012	T.E. Chemical	Century Paper & Pulp, Haldawani, Uttarakhand

Training & Placement :

Name of the Department	Name of Company	No.of students selected
MBA	Patabata.com	04
MBA	Ceasefire Industrial Equipment	03

Books Purchased in Central Library : December 2012

Sr.No.	Name of Dept.	Total No.of Books purchased
1.	Production Engg. (ME Course)	09
2.	Computer Engg. (ME Course)	08
3.	Elect. & Telecomm. (ME Course)	08
4.	Civil Engg. (ME Course)	03
5.	Electrical Engg. (ME Course)	12

Other Achievements

- Principal Dr. K. N. Nandurkar delivered an expert lecture on 'Virtual Cell Manufacturing Systems' at Government Polytechnic, Nashik on 24th December 2012. Prof. Dr.P.J. Pawar of Production Engineering also delivered a lecture on 'Advances in Manufacturing Processes Systems and Materials' during the same programme.
- University of Pune has granted Research Centre in Computer Engineering for our Institute. This is fourth Research Centre in the Institute offering Ph.D. programme.
- Prof. Dr. S. S. Sane, Head of Computer Engg. Dept. delivered an expert lecture on 'WEKA-A Data Mining tool' at MAE, Alandi on 5th December 2012.
- Prof. Darshan Medhane of IT department received the 'Best Paper Award' at International Conference on 'Emerging Trends in Electrical, Communication and Information Technologies - 2012', held at Srinivasa Ramanujan Institute of Technology, Anantpur, Andhra Pradesh.
- Prof. Jaydeep Shah department of Electrical Engineering won the best paper award for 'Voltage Sag Mitigation by DVR' at NCAPS 2012.
- Students from Electrical Engineering Department won the 1st prize for IEEE School Awareness contest 2012 at Sinhgad Engineering College, Pune on 28th Dec. 2012.

Abstracts Of Papers Presented By Staff during December 2012:

Realizing Potential of Powder Mixed Electric Discharge Machining with Rotary Tool for Die Steel

Prof. Nanasaheb B. Gurule and Prof. Dr. Keshav N. Nandurkar

(Presented at International Conference at AIMTDR-2012 at Kolkata during 13-15th December 2012)

Abstract:- Powder mixed electric discharge machining (PMEDM) is a recent innovation of EDM for enhancing its capabilities. PMEDM is very complex in nature and controlled by a large number of parameters, which are having impact on various responses. The present study is an attempt to investigate the potential of PMEDM for enhancing machining capabilities of Die steel with rotary tool. Taguchi methodology has been adopted to plan and analyze the experimental results. Experiments have been performed on newly designed experimental setup. In this study seven factors with three levels are investigated using Orthogonal Array (OA) L_{27} . The recommended best parametric settings have been verified by conducting confirmation experiments for material removal rate (MRR), relative wear rate (RWR) and surface finish (SF).

Keywords:- PMEDM, MRR, RWR and SF.

PROMETHEE: A Method for the Selection of Product Alternative

Prof. Sanjay R. Gangurde

(Presented at International Conference at AIMTDR-2012 at Kolkata during 13-15th December 2012)

Abstract:- Product selection can be considered as a complex multi-criteria decision problem since the expectations differ from customer's point of view as well as designer's point of view. A proper mechanism is to be applied to decide on the most suitable product in the marketplace considering customers requirements. In this paper, customer requirements are considered as criteria for ranking the alternatives. The weight for each attribute is determined using analytical hierarchy process (AHP), and the same weights are then used in Preference Ranking Organization Method for Enrichment Evaluations (PROMETHEE) method for the selection of best product alternative.

Selection of the Best Factory Data Collection (FDC) System Using AHP-TOPSIS Method

Prof. Sanjay R. Gangurde and Mr. Shrikant Dalvi

(Presented at International Conference at AIMTDR-2012 at Kolkata during 13-15th December 2012)

Abstract:- "Information" is fundamental to the success of any business. The information that is collected and/or assembled in any business is as valuable as resource, capital or people. Over the last decades the use of information systems and information technology in the manufacturing industry has grown dramatically. The development and introduction of new information systems has often reshaped the organization by eliminating the human tasks, by changing the traditional methodologies. The factory data collection

continued on page 5

system (FDC system) consists of the various paper documents, terminals, and automated devices located throughout the plant for collecting data on shop floor operations, plus the means for compiling and processing the data. This paper aims to identify the best ideal solution from nine factory data collection system (FDC) with the help of MCDM technique. A proper mechanism is to be applied on the most FDCs used in the manufacturing organization. In this paper, nine alternatives of Factory data collection methods are considered for the evaluation & eight criteria are considered for ranking the alternatives. The weight of each criterion is determined using AHP, and the same weights are used in the multi-criterion decision making method. The alternatives are evaluated using TOPSIS method.

■ Design of 2D Photonic Crystal Waveguide based Bandpass Filter using Electrical Models of a Defect

Prof. (Dr.) Mrs. Preeti D. Bhamre

(Presented in Photonics 2012, International Conference on 'Fiber Optics and Photonics' at Indian Institute of Technology Madras (IIT Madras), 9-12 December, 2012)

Abstract:- Optical filters are essential components of photonic integrated circuits and optical communication systems. Various types of filters like channel drop filter, a bandpass filter and comb filters are needed in different applications. It has been shown that by incorporating multiple defects, a wide variety of spectral characteristics can be obtained. Since there is no systematic approach for obtaining defect combinations for achieving a given spectral response, a large number of combinations are to be investigated. If a full FDTD simulation is used every time, the computational load is excessive. It is therefore attractive to use some simpler and computationally less intensive models for designing a filter. In our earlier work, defects in a photonic crystal waveguide (PCW) were successfully modeled with electrical equivalents like the single shunt element or the T section respectively. By using these models, spectral characteristics of PCWs could be obtained with reasonable accuracy. This paper therefore presents A systematic approach for designing a narrow bandpass photonic crystal waveguide based filter by using the equivalent electrical models is proposed. An optimization approach is used to obtain the necessary defect combinations.

Keywords: Photonic Crystals, Wave Propagation.

■ Incremental Learning Algorithm for Association Rule Mining

Prof. Prajakta Vispute & Prof. Dr. Shirish S. Sane

(Presented (Published in International Journal of Scientific & Engineering Research (IJSER) Volume 3, Issue 10, Oct.2012 ISSN: 2229-5518)

Abstract:- These Associations rule mining is to find association rules that satisfy the predefined minimum support and confidence from a given database. The Apriori and FP-tree algorithms are the most common and existing frequent itemsets mining algorithm, but these algorithms lack incremental learning ability.

Incremental learning ability is desirable to solve the temporal dynamic property of knowledge and improve the performance of the mining process as the incremental data is available with the passage of time. Currently FUFPP, pre-FUFPP and IMBT algorithms have been developed that support incremental learning. The IMBT uses a binary tree data structure called an Incremental mining binary tree. This work proposes a novel incremental learning algorithm that makes use of a data structure called Item-Itemset (I-Is) tree that is a variation of B+ tree. Initially I-Is tree is created from the original data to allow searching of frequent items based on the threshold values. The created I-Is tree is updated incrementally.

Keywords: Association rule mining, B+ Trees, Data Mining, Frequent pattern tree, IMBT, Incremental mining, Support.

■ Image Forgery Detection through Motion Blur Estimates

Prof. Rupali M. Bora & Prof. Nitin M. Shahane

(Presented at 2012 IEEE International Conference on 'Computational Intelligence and Computing Research (ICCIC)' at Tamilnadu College of Engineering, Coimbatore during 18th-20th Dec. 2012)

Abstract:- Images can be easily manipulated for malicious purposes due to broad availability of photo exploitation software. One such form of tampering is image splicing. To detect splicing in images by searching discrepancies in motion blur is one type of method for forgery detection. The motion blur estimation is using image gradients to detect inconsistencies between the spliced region and the rest of the image. The gradient based PBM method gives better results for a wide range of magnitude values as compared to Cepstral method. A Blur Estimate Measure (BEM) is used to aid in inconsistent region segmentation in images that contain small amounts of motion blur and a noreference Perceptual Blur Metric (PBM) has been used to detect directional motion blurs in images. Based on these measures the regions of the images are identified with consistent and inconsistent blurs. The effect of motion blur inconsistencies and region separation is achieved using Kmeans clustering algorithm.

Keyword: Image gradient, image forgery detection, motion blur estimation, Blur Estimate Measure, Perceptual Blur Metric, K-means algorithm.

■ A K-Anonymity Confidentiality Defending Locality Examining Scheme for Wireless Networks with Jack Secure System

Prof. Darshan V. Medhane

(Presented International Conference on 'Emerging Trends in Electrical, Communication and Information Technologies-2012' at Srinivasa Ramanujan Institute of Technology, Anantpur, Andhra Pradesh during 21st-23rd Dec., 2012)

Abstract:- Anonymizing wireless networks permit users to access services confidentially by using a series of routers in order to cover up the IP address of the client from the server. As a result, administrators wedge all



identified or acknowledged exit nodes of anonymizing networks, denying anonymous entrance to misbehaving. To concentrate on this problem, servers can blacklist misbehaving users, by this means blocking users devoid of compromising their anonymity. Monitoring personal locations with a potentially non-trusted server poses privacy threats to the monitored individuals; a privacy-preserving location monitoring system for wireless networks is adopted. Two in-network location anonymization algorithms are considered, namely, resource and quality-aware algorithms that mean to facilitate the system in order to offer high-quality position monitoring services for system users, while preserving personal location privacy. Both algorithms rely on the well established k-anonymity privacy concept, that is, a person is indistinguishable among k persons, to allow trusted wireless nodes to give the aggregate location information of monitored persons. Each aggregate location is in a form of a monitored area A along with the number of monitored persons residing in A, where A contains at least k persons. The main intention behind use of resource-aware algorithm is to reduce computational cost and communication cost, while the quality-aware algorithm aims to make best use of the accuracy of the aggregate locations by minimizing their monitored areas. To make use of the aggregate position information and to offer location monitoring services, a spatial histogram approach is used that estimates the sharing of the monitored persons on the basis of the gathered summative position information. Then, the estimated allocation is used in order to offer position monitoring services through answering range queries.

Keywords: Wireless Networks; location privacy; position monitoring system; anonymous authentication; aggregate query processing; anonymous blacklisting; misbehaving users; spatial cloaking; threat monitoring; position anonymization.

■ Branding through Sensory Experience for Pharmaceutical over the Counter (OTC)

Dr. Aarti T. More

(Presented at Indo Global Chamber of Commerce, Industries and Agriculture, 15th Dec. 2012, Pune)

Abstract:- Traditionally, product attributes like medical claims of better efficacy, longer lasting effects, milder side effects or faster onset of action were used to position the pharmaceutical OTC product in the market. But, today markets are becoming competitive and it has become important to provide "a reason for being" to each brand. In the case of over the counter preparations, where consumer choice is no longer influenced by the advice of an authority in the field, the product with the most acceptable sensory properties will usually win out. In order to develop patient acceptable drug products, all aspects of the sensory experience need to be considered. Thus, optimizing the sensory experience of OTC products needs to be top priority for Pharmaceutical OTC companies. This study aims to understand the influence of Sensory attributes like Color, Taste, Size and Shape, on promotion and positioning and overall branding of pharmaceutical OTC product.

Key Words: over the counter, sensory experience, color, taste, size and shape.

■ Issues in Women Entrepreneurship - with special reference to Nashik District in Maharashtra State, India

Dr. Aarti T. More

(Presented at Padmashree Dr. D. Y. Patil University, Navi Mumbai on 8th Dec. 2012)

Abstract:- In the words of former President A P J Abdul Kalam, "Empowering Women is a prerequisite for creating a good nation, when women are empowered, society with stability is assured". Empowerment of women is essential as their thoughts and their value systems lead to the development of a good family, good society and ultimately a good nation. Women make up a half of potential human capital available in any economy. The efficient use of this talent pool is a key driver of competitiveness. Empowerment of women is critical not only for their own welfare but also for the development of their family and community at large. As compared with past women in modern times have become more concerned towards their education & career but do they constitute majority is the question. Though Indian women have proven themselves, they are yet to get their dues. There are many problems which women in India have to go through daily and gradually. A report published by World Economic Forum 2012 mentioned stark fact that India is placed at 105th position on a list of 135 countries in Global Gender Gap Index 2012. This indicates the gravity of gender disparity with which India is plagued. It also implies that resources, educational attainment, health & political involvement are uneven in India. Women entrepreneurs are still not recognized as potential business women in this country. The patriarchal society does not recognize the economic role of women in Indian economy.

■ Consumer behavior towards tea brands in Nashik District

Prof. Bhakti Joshi

(Presented at Singapore which organized by International Association of Academicians & researchers in association with Choice College Pune during 10th-11th Dec. 2012)

Abstract:- Those activities directly involved in obtaining, consuming and disposing of products and services is called marketing. Consumer behavior involves the psychological processes that consumers go through in recognizing needs, finding ways to solve these needs, making purchase decisions (e.g., whether or not to purchase a product and, if so, which brand and where), interpret information, make plans, and implement these plans (e.g., by engaging in comparison shopping or actually purchasing a product). Tea is preferred as a daily refreshment beverage by most Asians. For the research a survey is conducted on 120 people who purchase tea. And various attributes considered for buying a tea brand is studied for Nashik District. Also appropriate way of advertising is identified.

Prof. Dr. K. N. Nandurkar

PRINCIPAL

