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TECHNICAL NEWS LETTER

Public lecture by Mr. Heramb Kulkarni (Educational Researcher)

Mr. Heramb Kulkarni delivering the lecture

Public lecture by Mr. Heramb Kulkarni (Educational Researcher) was organized by the Institute on 6th Feb. 2015 at Dr. Kurtkoti Shankaracharya Nyas, Nashik. His topic was "Educational Vouchers: Is India ready for this concept". This lecture was arranged as a part of lecture series arranged on the occasion of 116th Birth Anniversary of Late Padmashri Kakasaheb Wagh. It was attended by large number of people related to educational field in Nashik.

Felicitation of Hon. Shri. Balasaheb Thorat


Felicitation of Hon. Balasaheb Thorat

Hon. President Shri. Balasaheb Wagh was Chief Guest for the felicitation of Hon. Mr. Balasaheb Thorat as the most 'Active MLA' award by Sarvajanik Vachanalaya, Nashik on 08th Feb. 2015. After the function Hon. Thorat visited the Institute Campus where he was felicitated on the occasion of his birthday.

IET-NCAPS (IET National Conference on Advanced Power System)

Publication of Souvenir of IET National Conference

A National conference on "Advanced Power System" was organized in Electrical Engineering Department of our Institute during 12-13 Feb. 2015. This conference was for Faculty, P.G. students, Industries and Government Organizations. The conference was inaugurated by Principal Dr. K. N. Nandurkar. Total 66 papers from various Institutes and Industries of different states were presented. Conference covered issues like Renewable Energy Technologies, Power Quality Issues and Power Electronics. Prof. Dr. B. E. Kushare, Head of Electrical Engineering, Prof. R. K. Munje, Prof. G. N. Jadhav worked as expert for the conference.

ASCEND-2K15


Inauguration of a state level technical symposium 'ASCEND-2K15'

Department of MCA had organized a state level technical symposium ASCEND-2K15 on

12th and 13th February 2015. Various competitions were organized under ASCEND 2K15 like Code Surgeon, Treasure Hunt, Blind Coding, Quiz Pro Quo, Canvas Wizard and Counter Strike. Around 650 students from various Colleges of Maharashtra participated in ASCEND-2K15. Prizes were distributed on 13th February 2015.

MAVERICK 2015

Principal Dr. K. N. Nandurkar felicitating to Chief Guest Mr. K. S. Patil

Department of Management studies of our Institute organized 'Maverick 2015' on 26th February 2015. In the event under graduate students from various colleges participated in various competitions. The aim of this program was to inspire the students to show their creativity and talent. The inauguration of Maverick 2015 was done by Mr. K. S. Patil, Vice President (Operations) of Nashik Engineering Cluster, Principal Dr. K. N. Nandurkar, Mr. S. S. Jhawar Coordinator of MBA and Mrs. Aarti More, Head of MBA Department. During this program Chief Guest Mr. Patil addressed students regarding the opportunities of employment and entrepreneurship in India and importance of improving the communication skills. Competitions like Debate, Business Quiz, Poster painting and Ad Mad Show were conducted.

Visit by Prof. Rajendrakumar Pant

Visit of Prof. Rajendrakumar Pant of IIT Bombay

Prof. Rajendrakumar Pant of IIT Bombay visited our Institute on 23rd February 2015. He gave the presentation on Aerostat Balloon which was developed in the lab at IIT. The use of this balloon is for testing of Aerospace. For this presentation Police Commissioner of Nashik Mr. Kulwant Kumar Sarangal, Hon Trustee of K. K. Wagh Education Society Shri. Sameer Wagh, All Principals and Heads of departments of various technical institutes of K. K. Wagh Education Society were present.

Personality Development Program

"Personality Development Program" for first year students was organized by Science department of our Institute on 21st and 26th Feb. 2015. Dr. Devdatta Gokhale and Rashmi Gokhale from Gokhale's Advance Trainings Institute, Jalgaon delivered lecture on Communication Skill and other Soft Skills by involving students through different skillful activities.

Master Student Progrmamme

Prize distribution function of Master student programme

The Master Student Program is organized every year by our ISTE student's chapter since 2003 and this year it marked its 12th year of success. It was conducted on 21st February 2015. This program is inspired by a book called "Master Student" prepared by ISTE. The theme usually revolves around the development of technical and non technical skills that an engineering student needs to inculcate in his life. The theme of this year's Master Students Program was "Innovation" introduced by Principal of the institute Dr. K. N. Nandurkar. This theme is broadly classified into seven subtopics which were presented by fourteen students selected from various department of second year engineering as a speaker. They were mentored by a group of fourteen students from third year for a period of nearly two weeks. Our college's alumni Mr. Manohar Shete informed the students about his career and about patents he has obtained during prize distribution function. He is CEO and founder of MNM Company, which has offices in 11 countries. The program was conducted for the

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entire day and it provided an entire spectrum of topics, right from"What Innovation is" to "How to get ideas" and "How to patent them". The team of ISTE under the guidance of their Principal Dr. K. N. Nandurkar and faculty advisor Prof. Prajakta Vispute marked this year's MSP as a remarkable and successful event.

Inauguration of Karmaveer Sport Festival Competition

Inauguration of Karmaveer Sport Festival Competition

Department of Physical Education of our Institute organized state level tournaments "Karmaveer Sport Festival" in the campus for 5 games: Cricket, Football, Basketball, Volleyball and Lawn Tennis. Tournament started from 17th February 2015. Inauguration program was conducted in presence of Prof. Vilas Patil of Civil department. All the sports were played league-wise. Finals were played as follows: Cricket tournament: KKW ex and NDMVP College. (KKW ex won the match). Volleyball: KKW Agri College and Sandip Institute of Technology. (Winner KKW Agri College). Basketball: KTHM College and HPT College. (Winner KTHM College). Football matches are going on. Lawn tennis Finals: Anuj Chhajed and Ajinkya Kandekar. (Winner Anuj Chhajed).

Expert Lecture/Seminar/Courses/Worshop Organized:

- Production engineering department organized an expert lecture of Dr. Aniruddha Gadhikar on "Materials properties and Testing" on 07/02/2015, an expert lecture of Dr. Shailendra Gaikwad on "Path towards success" on 14/02/2015 and a ARAI Certification program in Manufacturing Technology by Mr. Abhijeet Khatri of NEC, Nashik on 04/02/2015. Same department also organized an expert lecture on "Contribution of Manufacturing sector for the development of Nation" by Mr. D. D. Nikam, Superintendent of Customs, Central Excise and Service Tax, Nashik on 21/02/2015.
- Computer engineering department organized an expert talk on "Web application: Client side and Server side Architecture" by Mrs. Tejaswini Deshpande,CTO,Webfanzine Media Pvt., Ltd., and Mr. Sanjeev Mishra, CEO, Webfanzine Media Pvt. Ltd., on 12th Feb 2015. Same department organized Face and Universal placement training for TE computer engineering students during16 to 21 February 2015. Total 120 TE Students participated in the Training session.
- Mechanical engineering department organized an expert lecture of Mr. Sagar Nikam and Mrs. Madhura Shelar on "Career guidance" on 12/01/2015 and workshop of Mr. Ravindra Prasad Mr. Khobragade and Mr. Doiphode on "CATIA and ANSYS" by IGTR, Aurangabad during 16/02/2015 to 02/03/2015. Same department also organized expert lecture of Mr. Pankaj Roy Gupta and Mr. Rupesh Jagtap on "Paradigm shift in Higher education in Engineering and Energy Management Domain Sector" on 25/02/2015 and an expert lecture and demo on "Lighter than air airship" on 23/02/2015.
- Civil engineering department organized an expert talk of Shri Lakshman Iyer, Marketing head, Foreign Academy Consultancy and Training (FACT) on "Higher Education in US and Canada with assistance for getting Scholarship" on 10 February 2015 and an expert talk of Mr. Vijay Sanap, Architect and Consulting Engineer, Nashik on "Planning of Residential buildings" on 26 February 2015. Same department also organized an expert talk of Mr. S. G. Wagh, Dy. Engineer, MERI, Nashik on "Remote Sensing Division" on 27 February 2015.
- Electronics and Telecommunication department organized One day hands on workshop on "Arduino" for TE and BE E&TC students of Shri. Pravin Ambekar, Director of Ambekar associates, Aurangabad on 07/02/2015, an Interaction for Technocrats Courses of Shri. Nikhil Bhor on 10/02/2015, an expert Lecture on "Effective communication" of Mrs. Nandita Ray on 12/02/2015 and one day workshop on "Advanced DSP" for ME students by Mr. Nitin Paranjape, Edutech Systems on 20/02/2015. Same department also organized One day workshop on "Industrial Automation" by Mr. Ravindra Angal, TAACT, Nashik on 21/02/2015, an expert Lecture on "Industrial Automation" of Mr. Kishor Vyas, Digilog Automation Pvt., Ltd., Nashik on 21/02/2015 and an expert lecture on "Embedded Systems" using IOT by Mr. Ankur Sugandhi, Gill Instruments Pvt., Ltd., Bangalore on

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25/02/2015. Same department also organized an expert lecture on "Preparing for Personal Interview" of Mr. Vishal Jategaonkar, Director PTeducation, Nashik on 25/02/2015 and an expert lecture on "Automation and safety" by Mr. Ravi Bhati, Head Quality dept. Autocop, Nashik on 28/02/2015.

- Electrical engineering department organized an expert talk of Prof. R. K. Munje on "Concepts of Nuclear Reactor Engineering" on 27/02/2015.
- Chemical Engineering department organized an expert talk of Mr. Nikhil Vyawhare on "Career guidance in Engg. Process Consultant" on 18/02/2015 and an expert talk of Dr. V. G. Pangarkar, Ex. Professor and Head of Chemical Engineering, ICT Mumbai on "Design of Packed towers" on 20/02/2015. Same department also organized an expert talk of Mr. S. K. Kshirsagar, Govt. Analyst, MEERI on "Overview of Environment Engg." on 24/02/2015 and an expert talk of Mr. Sharad Naik on "Introduction to Process Design Engg." on 25/02/2015.
- Information Technology Department organized an activity on "Demonstration of Assembly of PC and Installation of Operating Systems" by Mr. D. D. Patole, Minitek Solution, Nashik on 14th Feb. 2015 and two days workshop on "Oracle Forms and Reports" under KPIT Pace Program for Oracle 10g training by Mr. Abhinandan Chivate, TechMahindra, Pune on 21 and 22 Feb. 2015. Same department also organized two days workshop on "PL-SQL, Trigger's and Packages" under KPIT Pace Program for Oracle 10g training by Prof. Rupali Bora and Prof. Umesh Gaikwad on 14 and 15 Feb. 2015.
- MCA department organized an expert lecture on "Web Services using J2EE" by Mr. Ajay Sharma from Winjit Technologies, Nashik on 21st Feb. 2015.
- MBA department organized an expert talk of Mr. Namdev Vasnik (DINFO) on "Skill Mahotsav" on 05/02/2015.
- 'Marathi Bhasha Deen' was celebrated on the occasion of birthday of famous poet Shri. V. V. Shirwadkar (Kusumagraj) on 27th February 2015. Essay competition in Marathi was organized as a part of celebration.
- Training and Placement Cell Coordinator Dr. P.K. Shahabadkar, conducted FE-Orientation Program with an objective of making the students aware about "Preparations required from FE to get a good Job". This was conducted on 9th, 10th and 11th of February for 5 Divisions. Around 300 Students attended this Orientation programme.Dr.P.K. Shahabadkar, conducted an interaction with TE Civil students with an Objective of making the students aware about "Preparation required for the HR/Technical Interview" on 12th February 2015. An interaction with BE Mechanical students and TandP cell was arranged on 12th February 2015 with an objective of "Discipline in Placement Process". FACE training institute conducted 1st Phase 60 hours training for TE students during 16 to 22 February 2015. Total 87 students participated in this structured training. Content of this training was an Aptitude skills/Verbal Communication skills. Universal Academy Training Institute conducted - 1st Phase of 60 hours training for TE students during 16 to 20 February 2015 and around 202 Students attended this Campus Recruitment Training (CRT). Content of this training was an Aptitude skills/Verbal Communication skills. Three days C/C++ In-house training for Infosys eligible students was organized by T and P cell during 26 to 28 February 2015. Total 50 students participated in this training programme.

Industrial Training/Workshop/STTP Attended By Staff:

- Principal Dr. K. N. Nandurkar attended the condolence meeting of Late Adv. Shri. Raosaheb Shinde at Pune on 05/02/2015 and offered his condolences on behalf of the Institute.
- Computer engineering department staff Prof. N. G. Sharma attended one day workshop on "One day Workshop on Effective ways of Teaching" on 3 February 2015 at University of Pune.
- Electronics and Telecommunication engineering department staff Prof. K. Nirmalkumari attended workshop on "DSP using Xilinx FPGA" at SNJB's COE, Chandwad during 4 to 5 February 2015. Same department staff Prof. M. P. Joshi and Prof. S. S. Morade attended One day workshop on "Advanced DSP" at KKWIEER Nashik on 20 February 2015.
- Chemical engineering staff Prof. Nidhi A. Sharma attended International Conference on Nanotechnology, organized by Haldia

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Regional Centre, Indian Institute of Chemical Engineering (IIChE) during 19 to 22 February 2015.

- IT department staff Prof. Poonam B. Mahale attended 2 days workshop on "Research Publication" in Matoshree College of Engineering Education and Research, Nashik on 6 and 7 Feb. 2015.
- MCA department staff Prof. M. R. Sonar and Prof. P. G. Fegade visited Alphasoft Infotech Solution, Nashik on 20/02/2015 to track the performance of interns of TYMCA. Prof. V. C. Bagal, head of MCA department and Prof. A. L. Rane visited BlueSky, Nashik on 21/02/2015 to track the performance of interns of TYMCA.

Industrial Visits Organized For Students:

Date	Class	Name of Company
05/02/2015	SE Electrical	Link Servo System Ltd., Ambad,Nashik
06/02/2015	SE Chemical	Abelin Polymer, Ambad, Nashik
06/02/2015	BE Chemical	Hydrology Llab, MEERI, Nashik
11/02/2015	TE Chemical	Sewage Treatment Plant, Tapovan, Nashik
13/02/2015	BE(Electronics)	Doordarshan relay station, Gangapur road, Nashik
14/02/2015	SE Civil (I Shift)	Dirk India
14/02/2015	TE Civil	De Palloza Buliding, College Road, Nashik
21/02/2015	SE and TE IT	Persistent Systems, Pune
21/02/2015	SE Civil (II Shift)	Dirk India
23/02/2015	TE Electrical	Electric Shed, POH, Central Railway, Bhusawal
25/02/2015	TE Electrical	Meena Elastomers
28/02/2015	BE Mechanical (A, B and C Division)	Nashik Thermal Power Plant,Eklahare.

Training & Placement :

Name of Company	Name of the Dept.	No.of students selected
Bridge Stone India Pvt., Ltd., Pune	Mechanical Engg.	5 (2014 batch 04 and 2015 batch 01)
Persistent, Pune.	Computer Engg.	02
CMS Info Solutions	Computer Engg.	02
	IT	01
Kotak Mahindra	MBA	03

Paper Presented by Students

In the month of February 2015, 43 students have participated in various paper presentation, model making, etc competitions.

- Ms. Diksha Sakharpekar and Ms. Surbhi Jalori of TE E&TC department have secured 1st prize in Drishti of Eureka-2K15, state level Technical Event organized by SNJB COE, Chandwad on 23/02/2015.
- IT department students Ms. Priyanka Bibbe, Ms. Radhika Kaushal, Ms. Swati Patil and Ms. Kashmira Mulani of BE(IT) won 1st prize (Cash Prize Rs. 5000) in Technical Research Paper Competition, held at G. H. Raisoni Inst. of Engg., and Technology, Pune held on 13th Feb. 2015 on topic "Degraded Document Image Binarization". Mr. Chaitanya Deshmukh and Mr. Manas Kalamkar of S.E.(IT) won 2nd Prize (Cash Prize Rs. 500) in 'Quiz Pro' in ASCEND event at MCA Department of KKWIEER, Nashik on 13th Feb. 2015. Mr. Akshay Gaikwad of S.E.(IT) won 1st Prize in Aptitude Test in TechUnique Event at Amutvahini College of Engineering, Sangamner on 19th Feb. 2015.

Books Purchased in Central Library : Feb. 2015

Sr.No.	Name of Dept.	Total No.of Books purchased
1	Computer Engg.	32
2	MBA	12
3	MCA	44

CONGRATULATION

Ms. Anuradha Pawar, Assistant Professor of Science Department received Ph.D. award from Savitribai Phule Pune University. Her topic was "Synthesis and Characterization of Economically Desirable Thin Films using Compounds of Chalcogenide Materials for Enhancing their Photovoltaic and Semiconducting Properties" under the guidance of Prin. Dr. B. G. Wagh and Prof. (Dr.) C. D. Lokhande.

Other Achievements

- Computer Engineering department staff Prof. Khalid Alfatmi delivered an expert talk on "Macros and Procedure in 8086 Assembly Language" at K. K. Wagh Polytechnic on 03/02/2015.
- Civil engineering department staff Prof. V. K. Patil delivered an expert talk on "AMIE Induction Programme" at the Institution of Engineers India, Nashik Local Centre on 14/02/2015.
- Electronics and Telecommunication Engineering department staff Prof. Dr. M. D. Kokate worked as Resource person for National workshop held at SCCOE, Ahemadnager on 05/02/2015. Same department staff Prof. S. P. Munot (Bhabad) worked as a judge for "Techmanthan-2015" state level paper presentation competition on 23/02/2015. Same department staff Prof. V. R. Lele worked as a resource person for 3 Days workshop on C and C++ for Non-IT students.
- Electrical engineering department head Prof. Dr. B. E. Kushare offered Electrical Consultancy at Times of India, Bangalore, HPCL, Hassan and EPCOS Ltd., Nashik. He also delivered an expert lecture in State Level Seminar on "Emerging Trends in Electrical

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Engineering SPARK 2K15" at Amrutvahini COE, Sangamner. Same department staff Prof. R. K. Munje delivered a lecture on "Advanced Heavy Water Reactor" on 27 February 2015.

Abstracts of papers presented during Feb. 2015:

Clinical Decision Support Model for Prevailing Diseases to Improve Human Life Survivability

Prof. A. L. Rane

(Presented in International Conference on "Pervasive Computing (ICPC 2015) Advanced Communication Technology and Application for Society" organized by Sinhagad COE, Pune on 8 to 10 Jan. 2015)

Abstract: Constantly increasing amount of heterogeneous prevailing disease patient data can redefines medical research and clinical practice for human life survival. Computational intelligent techniques help to translate them into knowledge base that is applicable in health-care. Prediction of such diseases at early stages is biggest challenge for doctors in the country. Previous studies on prevailing diseases focus on individual diseases rather than many with similar symptom. Few of these models have constraints in finding good parameters with high accuracy. The proposed clinical decision support system in this paper models the patient's diseases state statically from his heterogeneous data to reveal the correct diagnosis by formalizing the hypothesis based on test results and symptoms of the patient before recommending treatments for the prevailing diseases. Its goal is to assist clinician in diagnosing the patient by analyzing his available data and relevant information. The proposed model designed using data mining techniques such as neural network, decision tree, statistical method, Naive Bayes, classifier and clustering pattern analysis for improving human life survivability. Several clinical data-set are used to evaluate and demonstrate the proposed model for early prediction of prevailing disease.

Measurement of Vibration Levels by FFT Analyzer on Single Cylinder Four Stroke Diesel Engine for Detecting Improper Structural Supports

Prof. N. S. Ahirrao

(Presented at G. H. Raisoni College of Engineering and Management, Wagholi, Pune during 26/02/2015 to 28/02/2015)

Abstract: To predict the vibration output of an engine and to minimize the possible problems associated with engine vibration, a robust and accurate design is needed. To reduce the engine vibration proper mounting must be provided as dampers at the interface of the engine and foundation. The vibrations caused at the engine are two types they are torsional and longitudinal vibrations. The rotation of crankshaft of an engine increases the cylinder pressure as the piston approaches top dead centre on the compression stroke. Ignition and combustion increases the pressure just after and the pressure starts to decrease when the piston moves down to bottom dead centre. The internal combustion engine is the concentrated mass and if not properly designed it will cause vibrations and will be transferring to the supporting structures. Vibrations will be measured by FFT analyzer and calibrated values for analysis will be the outcomes of measurements. Vibrations can be reduced by minimizing the unbalanced forces and by supporting the engine at proper mounts.

Key words: vibrations, FFT analyzer, unbalanced forces, foundation, structures, dampers

Comparison of Tribological Behavior of PVD Coated TiAlN and WCC on AISI 4140 Nitrided Alloy Steel

Prof. Nikhil R. Kadam

(Presented at G. H. Raisoni College of Engineering and Management, Wagholi, Pune during 26/02/2015 to 28/02/2015)

Abstract: The objectives of this paper is to systemically discuss the coating selection process, to develop a coating pre-selection tool and to propose some approaches for evaluating and comparing coatings, sequentially to help the selection of Tribological coatings. In present wok, Tribological test were conducted on nitride AISI 4140 steel and coated with few low friction surface coatings such as TiAlN and WCC.

Around the objectives, the following research approaches are realized. At first, literature study and case study is carried out to investigate the research progress in the field and general coating selection process. Based on the investigation, a coating pre-selection tool is developed, comprehensively considering factors from various aspects, to select coatings for further tests. Finally, according to the experiments, some approaches are proposed to predict, evaluate and compare coatings. Depositions of surface coating materials is one of the important approaches in improving friction and wear properties of the surface, there is a growing demand for low friction coatings that allow contacting surfaces to rub against with reduced friction and wear.

In this work, analytical analysis is carried by using Design Expert 7 and Minitab Software and experimental analysis by using a Pin-on-disc, friction and wear monitor. It appears that the above test gives considerably useful and informative results. Result shows substantial improvement in tribological properties to select the best suited coating material from above for high-speed drill bits.

Keywords: AISI 4140 Alloy Steel, Nitriding, PVD,

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TiAlN, WCC, Friction, Wear, Pin on Disc Tribometer.

Is in your Blood?

Prof. Chaitali Deshmukh (Published in international Journal IPASJ on 10/02/2015)

Abstract: In social networking Image-based kinship recognition is inspiring problem. The question of whether or not two people are kin, earlier studies based on image-based kinship recognition have focused on pairwise kinship verification. Such methodologies fail to achieve the fact that there are many real-world photographs contain several family members but we are looking only for parent and children relation. In this effort, we propose a wavelet based approach for feature extraction from identified faces in a family photo that incorporates facial similarities between parents – child face in a photograph in order to improve the performance of kinship recognition.

Keywords: kinship recognition, wavelet, feature extraction .

Impact of Variable Links on Standard Particle Swarm Optimization

Prof. Snehal Kamalapur

(Presented paper in International Conference on 'Advances in Engineering and Technology (ISTE) during 25 to 26 February 2015)

Abstract: Particle Swarm Optimization (PSO) is inspired by collective behavior in the nature and social sharing of information of a population is the core idea behind PSO. Researchers have proposed different variants of PSO to verify the effects of various parameters on the performance of PSO. PSO algorithm has gained increasing interest in recent years to deal with optimization problems. Clerc proposed Standard PSO 2011(SPSO2011) version which modifies velocity in a geometrical way as early PSO variants were rotationally variant. Proposed work focuses on impact of variable number of links for different threshold number of unsuccessful iterations. Benchmark suite used here is CEC2013. As particles in the swarm may leave the feasible search space, different bound handling methods have been proposed so far. The work here considers reflex position bound handling with hyperbolic velocity bound handling.

Impact of Acceleration Coefficients and Random Neighborhood Topology Modification Threshold on SPSO

Snehal Kamalapur (Presented in International Conference on "Information systems Design and Intelligent Applications (IEEE) 2015" during 26 to 27 February 2015)

Abstract: Particle Swarm Optimization is motivated by collective behavior in the nature. Earlier PSO variants were biased and rotationally variant because of dimension by dimension method. Clerc proposed Standard PSO 2011 version to overcome the bias which modifies velocity in a geometrical way. Particle Swarm Optimization is an optimization technique having few parameters to tune. The neighborhood topology and acceleration coefficients are two major parameters to enhance PSO performance. The work under consideration extends the existing parameter setting techniques on acceleration coefficients. The concept of a "dynamic" neighborhood is explored here. The paper focuses on random and linear increment and decrement acceleration coefficients as well as random neighborhood topology link based variants. Experiments are conducted

A Digital motor protection relay for HT motors

Dr. Sunita Ugale (Published in online journal "International journal of research in electronics and computer engineering (IJRECE)", Vol- 3, Issue- 1, January to March 2015)

Abstract: Medium voltage 3-phase motors are very reliable and robust, but as modern designs operate much closer to their thermal limits and to give adequate protection, intelligent and advanced protection relays are required. In addition, increased industrial use of power electronics leads to corruption of power systems and unless specific equipment is installed to eliminate the corruption it can cause considerable rotor overheating. Motor protection relays are capable of monitoring and diagnosing long-term failure, based on the information collected and processed by powerful data acquisition systems. This paper presents a Digital Motor Protection Relay to protect High Tension motors, an IED using state-of-the-art technology, which monitors various quantities at power system level and provides all the basic protection functions, including the thermal overload protection, which is specially designed for motors.

Keywords: motors; failure; power systems; protective relays; monitoring; thermal overload

WiMAX and WLAN Band Notched Semi Annular Ring Printed Monopole UWB Antenna

Prof. S. S. Dongare (Presented in International Conference on "Computational Intelligence Application 2015" at Sandip Institute of Technology and Research Center, Nashik)

Abstract: This paper proposes a low cost and compact printed monopole ultra wideband (UWB) antenna with dual notched bands. The antenna has a slotted semi annular ring shape patch and a slotted ground plane. It is designed using a low cost FR4 substrate (εr=4.4) having dimensions 38mm×38mm×1.6mm. It shows extremely wide bandwidth from 2.8 to 11.4 GHz for VSWR<2 with two notched bands. An arc shape slot in patch notches WiMAX band (3.3 to 3.8 GHz) and a pair of inverted L shape slots in ground plane beside feed line notches WLAN band (5 to 6.05 GHz).

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This proposed antenna has nearly omni-directional radiation pattern and acceptable gain and radiation efficiency over entire operating band.

Voltage Stability in Wind Farm

Prof. D. P. Kadam (Presented in IET-NCAPS-15 organized by Electrical Engg. Dept., KKWIEE and R., Nashik during 13 to 15 February 2015)

Abstract: Increasing size of wind farm connected to grid will lead to various challenges such as power quality and reactive power control during normal operation and fault ride through capability during fault conditions. Considering the challenges to be faced related to interfacing of large wind farms using Induction generators, it is necessary to study the various power quality, stability and reactive power requirement of large-scale wind farm connected to grid and provide cost effective solution for management of power quality and reactive power.

Power quality problems such as voltage sag, swell, under voltage, over voltage along with rotor stability issues are some major concern. In this paper all issues are analyzed. Wind turbine connected to squirrel cage induction generator is modeled using PSCAD simulation software to analyze the said issues where STATCOM is introduced as an active voltage and reactive power supporter to increase the power system stability. STATCOM unit is developed to inject reactive power for mitigation of power quality problems and to get stable grid operation.

Index Terms: Squirrel Cage Induction Generator (SCIG); PSCAD; Wind Turbine Generator (WTG); Static Synchronous Compensator (STATCOM); Power Quality issues, Reactive power Management.

Synthesis, Characterization and Application of Nano Sio_2 Catalyst

Prof. Nidhi Sharma and Vijay Vaishampayan

(Presented paper in 2nd International conference on Nanotechnology(ICNT 2015) organized by IIChe Haldia Regional center during 19 to 22 Feb. 2015)

Abstract: This paper presents a promising route for the synthesis of silica nanoparticles (SiO2) with diameter in range below 5nm. SiO2 were successfully synthesized by sol-gel method.The precursor solutions were made by mixing Silicon Tetrachloride (SiCl4), TRITON X-100 LR (t-octylphenoxypolyethoxyethanol) and sodium hydroxide (NaOH) in the molar ratio of 1: 1: 2. The powder catalyst is thermally treated at 120°C temperatures; the detailed Microscopic and Spectroscopic characterizations of core/shell structure (SiO2) were conducted by using Ultraviolet Spectroscopy (UV), Infrared Spectroscopy (FTIR), Scanning Electron Microscopy (SEM), and X-ray Diffraction (XRD). The degradation of Congo red dye takes place in the presence of sunlight or with photo-catalytic reactor. High catalytic activity and ease of recovery from the reaction mixture using filtration, and several reuse times without significant losses in performance are additional eco-friendly attributes of this catalytic system.

Keywords- Nano-SiO2, microscopic, spectroscopic, core/shell structure, degradation

Natural Language Processing & its Applications

Prof. D. C. Yeole and Prof. S. V. Baviskar

(Presented in "National Advances in Computational Research" organized by Department of MCA, MIT College, Aurangabad on 23 to 24 January 2015)

Abstract: Natural language processing has been in existence for more than fifty years. During this time, it has significantly contributed to the field of human-computer interaction in terms of theoretical results and practical applications. As computers continue to become more affordable and accessible, the importance of user interfaces that are effective, robust, unobtrusive, and user-friendly â€" regardless of user expertise or impediments â€" becomes more pronounced. Since natural language usually provides for effortless and effective communication in human-human interaction, its significance and potential in human-computer interaction should not be overlooked â€" either spoken or typewritten, it may effectively complement other available modalities, such as windows, icons, and menus, and pointing; in some cases, such as in users with disabilities, natural language may even be the only applicable modality.

Study of factors Influencing consumer purchase behavior for Life style drugs

Prof. Sadhana Wagh

(Presented in National conference at MET Institute of Management Nashik on 28 Feb.'2015)

Abstract: Life style drugs are emerging market segment under OTC products. The proposed paper intends to study 1. The consumer purchase behavior for lifestyle drugs, 2.Identify factors influencing consumer purchase behavior for Life style drugs. The Research design is based on secondary data, Research papers were collected from EBSCO, ProQuest, and Google surfing. Total 50 papers were considered for the study. Research papers from year 2001 to year 2014 were downloaded for the study. The review of 50 papers revealed that there are various factors like Direct to Consumers advertisements, Influencers, Sensory evaluation, source of information which influence consumer purchase behavior for life style drugs. Hence a model is developed incorporating this variables to understand the consumer purchase behavior for Life style drugs.

Prof. Dr. K. N. Nandurkar
PRINCIPAL