

May 2016, Volume 1, Number 4

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## Members

### in the News



Dr. Samarendra Mahapatra, FIE, has been inducted as a Member in the Advisory Board of Master Research of College of Forestry, Orissa University of Agriculture and Technology and also as a Member in the Draft Policy for Agricultural

Marketing Sector of Orissa Agricultural Marketing Board, Department of Co-operatives, Government of Odisha.

Prof (Dr) S C Naik, FIE, Past President of IEI, attended the 6th International Conference on "Industrial Engineering and Operations Management" held at J W Marriott Hotel at Kuala Lumpur, during March 8-10, 2016, as a



Distinguished Speaker to address on Engineering Education and Environment & Chaired a Technical Session.



Under the stewardship of **Dr Febi Varghese**, **FIE**, Managing Director of Kerala Minerals and Metals Ltd., the company which has monopoly in production of pigment-grade titanic oxide, has achieved a turnaround and posted a profit of Rs. 21 crore during

2015-16 on a turnover of Rs. 570 crore.

Prof. (Dr) K.C.Raveendranathan, FIE, delivered a Keynote Speech on "Linear Algebra – Applications and Challenges in Advanced Mathematical Research" at Department of Electronics and Communication Engineering, Rajiv



Gandhi Institute of Technology, Government Engineering College, Kottayam, during a 5-day Short Term Training Programme sponsored by the Directorate of Technical Education, Government of Kerala.



Dr.Nabnit Panigrahi, MIE, was awarded with the GOURI SANKAR SAHU MEMORIAL AWARD by The Institution of Engineers (India), Odisha State Centre during the 57th Annual Technical Session held on February 14, 2016 for the paper

entitled "Fuel from Waste Degradation of Plastic Waste to Liquid Fuels".

Mr Vinay Kumar Shukla, MIE, Deputy Manager, Instrumentation Department, National Fertilisers Limited, delivered Lecture on "CO<sub>2</sub> Compressor Control and its Instrumentation" on January 27, 2016 at National Fertilizers Limited Vijaipur, Guna, Madhya Pradesh.





Dr. Swati Jain, AMIE, Deputy Manager, Research and Development, Gujarat State Fertilizers & Chemicals Limited, was invited as a Panel Member and also Chaired the Session on Case Studies during the WaterEx Gujarat

Conference held on February 11, 2016, in ChemTech at Ahmedabad.

**Dr. B. B. Ahuja, FIE,** has been appointed Director, College of Engineering Pune, which is the alma mater of Bharatratna Sir M Visvesvaraya. He is also Fellow of The Indian Institution of Production Engineers, Member of Computer



Society of India, Member of Indian Society of Technical Education, Member of Academic Council of BATU, Lonere, Member of Romanian Society of Mechanical Engineers, Romania, Member of Robotics Society of India, Member of Additive Manufacturing Society of India (AMSI) and Member of The Institution of Engineering and Technology (IET) etc.

## Members in the News



Mr Ajit Salunke, MIE, delivered a talk on "Virtual Instrumentation in Automation" at SDM College of Engineering & Technology, Dharwad, Karnataka on April 7, 2016.

Ms Moina Athar, AMIE, Assistant Professor, Department of Petroleum Studies, Z H College of Engineering and Technology, Aligarh Muslim University, received Outstanding Women Achiever Award "VIWA 2016" from Venus International Foundation, Chennai on March 5, 2016, for her



contribution and achievement in the field of Biofuels.



Mr Dinesh Kumar D K, MIE, Project Engineer of Karnataka Renewable Energy Development Limited (KREDL) delivered talk on 'Role of Renewable Energy and Energy Conservation in Present

Scenario'. He explained about the Renewable Energy progress in India and Karnataka, various subsidy schemes available from Ministry of New and Renewable Energy (MNRE), Government of India, for installing Solar off-grid and on-grid systems. He also requested participants to adapt High Energy Efficient Electrical product in hotel hospital and industries. The talk was delivered during the Workshop on "Renewable Energy and Energy Conservation for Industries, Hotels, Hospitals and Government Organizations" organised by KREDL on March 15, 2016.

Mr Amrit Pal Singh, FIE, Deputy Chief Engineer, Guru Nanak Dev Thermal Plant, Bathinda, Punjab State Power Corporation Ltd., delivered lecture on "Energy Efficiency and Best Practices in Coal based Power Plants" during the 2nd Annual Conference on O&M of Coal based Power Plants



conducted by India Infrastructure Publishing Pvt. Ltd. from November 23-24, 2015 at Hotel Leela Ambience, Gurgaon. His paper titled "Energy Efficiency Best Practices Adopted by PSPCL" has also been published in Power Line, Volume 20, February 6, 2016.



The second edition of state map of Chhattisgarh (English and Hindi versions) on scale 1:1M with 27 districts produced by **Dr. M. Stalin, IES, FIE,** Director and Team,

Ministry of Science and Technology, Survey of India, Raipur, has recently been released and commended by Hon'ble Governor of Chhattisgarh, His Excellency Balramji Dass Tandon at Raj Bhawan premises, Raipur.

Dr. Manish Kumar Goyal, MIE, took the initiative to conduct first GIAN (Global Initiative of Academic Networks) course titled "Optimization



Methods to Groundwater Resources Management" at IIT Guwahati during March 07-11, 2016. Prof. Gautam Biswas, Director, IIT Guwahati, inaugurated the course. The course was attended by 50 participants from all over the country.



Mr V. D. Pandarkar, FIE, delivered a talk on "Smart Initiatives in Highway Sector" on February 09, 2016 at a Seminar organized by The MIT College of Management, Pune, in association with Ministry of Urban Development, Government of India.

He highlighted on various new measures NHAI (National Highways Authority of India) has initiated for smart and safe travelling on National highways.

The programme was graced by Mr. Babul Supriyo, Hon'ble Minister of State, Government of India and was telecast on DD Sahyadri and DD National Channel.

Prof. A K Rastogi, FIE, Professor, Water Resources Engineering, IT Department of Civil Engineering, IIT Bombay along with Prof T I Eldho conducted a QIP (quality improvement program) cum CEP (continuous education program)



course at the Department of Civil Engineering, IIT Bombay, titled 'Groundwater and Surface Water Management' during December 7-11, 2015.

## Members



#### Dr. M. D. Mathew, FIE

Title of Paper: "Chracterisation of Mechanical Properties of Materials using Innovative Small Specimen Testing Methods", *Transaction of the Indian Institute of Metals*, 2016, DOI: 10.1007/s12666-016-0847-2.

Co-Authors: Naveena and J. Ganesh Kumar.

#### Mr Devendra Gowda, MIE

Title of Paper: "Modelling of Partial Discharge (PD) for Solid Insulation with Void and Building a Hardware Setup to Measure Partial Discharge", Conference: Power and Energy Systems: Towards Sustainable Energy-2016 (IEEE PESTSE-2016), Amrita Vishwa Vidyapeetham University (Amrita Institute of Technology, Bangalore), Bangalore Campus, January 21-23, 2016.

### Dr. Ramachandra C G, MIE

(1) Title of Paper: "A Review on Tool Flank Wear Monitoring by Tool Condition Monitoring System using Various Approaches", Global Research and Development Journal for Engineering (GRDJE,) ISSN:



2455-5703, Vol.1, No. 4, March 2016, pp 07-13.

(2) Title of Paper: "Ecotel Concept for Energy Conservation and Waste Reduction in Hotel Industries", *International Journal of Computer Applications (IJCA) ISBN:* 973-9380892-01-1, *Proceedings on NCPSIA-15, No.1, December 2015, pp 22-24.* 



#### Dr Indra Kumar Khanna, FIE

Title of Paper: "A Qualitative Approach for Improvement in Technical Education", International Journal of Academic Conference Proceedings, Vol.III,

ISBN 978-93-85436-89-5, Conference: Recent Trends in Business Management and Information Systems, Institute of Management Technology, Singapore, November 17-20, 2015.

#### Dr. Anamika Yadav, AMIE

(1) Title of Paper: "A Finite State Machine based Approach for Fault Detection and Classification in Transmission Lines", *Electric Power Components and Systems*, Vol. 44, No. 1, 2016.

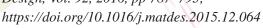


(2) **Title of Paper:** "Directional Relaying using Support Vector Machine for Double Circuit Transmission Lines including Cross-country and Inter-circuit Faults", *International Journal of Electrical Power & Energy Systems, Elsevier, Vol. 81*, 2016, pp 254-264.

(3) Title of Paper: "Fuzzy based Fault Location Estimation during Unearthed Open Conductor Faults in Double Circuit Transmission Line", Third International Conference on "Information System Design and Intelligent Applications", January 8-9, 2016, Vishakapatnam.

#### Mr Debasis Das, AMIE

Title of Paper: "Decision-based Design Driven Material Selection: A Normative-Prescriptive Approach for Simultaneous Selection of Material and Geometric Variables in Gear Design". Materials and Design, Vol. 92, 2016, pp 787–793;







**Title of Paper:** "Impact of Global Crude Prices", Process Worldwide Subcontinent Edition, Issue No. 5, October 2015.





#### Dr. Abhijit Saha, FIE

**Title of Paper:** "Venturing Deep into High Right-Bank Slide of River Ganges Near Chandernagore Strand, in Hooghly, India", Conference: The 15th Asian Regional Conference on Soil Mechanics and Geotechnical

Engineering, Fukuoka, Japan, November 9-13, 2015.

#### Mr Amiya Ranjan Mallick, FIE

Title of Paper: "Petcoke, an Alternative Cost Effective Fuel for CFBC Boiler", SteamTech 2016, Journal published during 9th National Conference on Boiler and Steam Systems 2016 held at Ahmadabad during February 19-20, 2016.



#### Prof. Prachi D Mohite, MIE

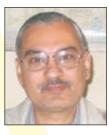
**Title of Paper:** "Performance Study and Analysis of Photovoltaic Hydrogen Fuel Cell Hybrid Energy System", *Chemix'16 organised by IIChE Nagpur Regional Centre & IIChE Students' Chapter, VNIT,* 

Nagpur, April 2-3, 2016.

Co-author: Sweta Khalatkar.

#### Mr C. P. Kumar, FIE

(1) Title of Paper: "Assessing the Impact of Climate Change on Groundwater Resources", IWRA (India) Journal, Indian Geographical Committee of IWRA, Vol. 5, No. 1, pp 3-11.



(2) Title of Paper: "Modelling Flow and Transport in Unsaturated Zone", Global Journal of Engineering Science and Research Management (GJESRM), Vol. 3, No. 3, pp 48-53.



#### Prof. Rajkumar Sirsam, MIE

**Title of Paper:** "Preparation and Characterization of Sulfonic Acid Functionalized Silica and its Application for the Esterification of Ethanol and Maleic Acid", *Journal of The Institution of Engineers* 

(India): Series-E, Vol. 97, Issue 1, pp 75-80.

### Members

#### Dr. Mohan Kumar Pradhan, AMIE

**Title of Paper:** "Multi-Objective Optimization in End Milling of Al 6061 Using Taguchi Based G-PCA" World Academy of Science, Engineering and Technology International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering, Vol. 9, No. 6, 2015.

Co-authors: Mayank Meena, Shubham Sen, Arvind Singh.



#### Mr Rajeev Namdeo, MIE

Title of Paper: "Two-body Abrasive Wear Behaviours of Polyethylene Vinyl Acetate Copolymer/High-density Polyethylene (EVA/HDPE) Polymer Blends", *Proceedings of* 

National Conference on Emanate Trends in Mechanical & Allied Engineering Sciences, Indore (MP), April 1-2, 2016, pp 1-7.

#### Mr Naveen B P, AMIE

(1) Title of Paper: "Effect of Aging on the Leachate Characteristics from Municipal Solid Waste Landfill", Japanese Geotechnical Society Special Publication, J-Stage publisher, Vol. 2, No. 56, 2015, pp. 1940-1945.



Co-authors: Sivapullaiah.P.V, Sitharam.T.G.

(2) **Title of Paper:** "Influence of Leachate Migration on Ground Water Quality", 5th Indian Young Geotechnical Engineer's Conference (51YGEC-2015), Indian Geotechnical Society Baroda Chapter, March 14-15, 2015, pp 127-128.

Co-authors: Sivapullaiah.P.V, Sitharam.T.G.

(3) Title of Paper: "Evaluation of Municipal Solid Waste Unit Weight and Shear Wave Velocity Profile", Municipal Solid Waste Management-2016 (MSWM 2016), Organised by Energy and Wetlands Research Group (EWRG), CES, Indian Institute of Science (IISc); Students for Development (SFD); Karnataka Environment Research Foundation (KERF), February 23-24, 2016.

#### Dr. M. Kedar Mallik, AMIE

(1) **Title of Paper:** "Application Oriented Approach of Layered Manufacturing in Biomedical and Engineering

Fields: A Review" Journal of Materials and Metallurgical Engineering Vol 5, Issue 2, August 2015.



(2) **Title of Paper:** "Effect of Heat Treatment on Hardness and Wear

Behaviour of Weld Deposited Co-Cr-Mo Alloy", *Revista Materia*, Vol. 20, No. 5, July-September 2015, pp 544-549.



#### Prof. K. Santhi Sree, MIE

(1) Title of Paper: "Comparative Analysis: On Clustering of Sequential Data Streams using Optics and ICA", International Journal of Computer Applications

(IJCA), Foundation of Computer Science, New York, USA, Vol. 135, No. 2, February 20<mark>16, pp 34-37.</mark>

Co-author: R. Kranthi Kumar.

(1) **Title of Paper:** "Semantic Web-based Recommendation: Experimental Results and Test Cases", *International Journal of Emerging Research in Management & Technology, Vol. 4, Issue 6, June 2015.* Co-authors: Anusha, Manoj Kumar

#### Mr Dilip Kumar Dey, FIE

Title of Paper: "Automation and its Relevance in Operating Large Capacity Thermal Power Plants", 2nd International Conference on Advances in Steel, Power and



Construction Technology, O P Jindal University, O P Jindal Knowledge Park, Punjipatra, Raigarh (Chhattisgarh), March 17-19, 2016.

### Members

#### Mr P. Sathees Kumar, MIE

**Title of Paper:** "Application of Geospatial Techniques on Land Suitability Analysis", *Journal of Sustainable Building Technology and Urban Development. Vol. 5, Issue 2, pp 145-156.* 



Co-authors: Nisha Radhakrishnan, Samson Mathew

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### Mr Sachin Ganpatrao Ghalme, MIE

**Title of Paper:** "Modelling of Wear Performance of Si3N4-hBN Composite using Artificial Neural Network (ANN)", CiiT International Journal of Artificial

Intelligent Systems and Machine Learning. Vol. 8, No.2, 2016, pp 62-65.

#### Mr Piyush Gupta, AMIE

Title of Paper: "Treatment of Groundwater of Kolar Gold Fields Area using Phytoremediation Technique", International Journal of Environmental Engineering, Vol. 7, No. 1, 2015, pp 11-34.



#### Mr Aly K, MIE

(1) Title of Paper: "Evaluation on Definition of Strength Reduction Factor for Soil Structure Interaction of Multistoried Buildings" National Conference on "Advances in Structural Engineering", Applied

Mechanics Department, Government College of Engineering, Karad, February 27-28, 2016.

Co-author: Dr. Antony Balan.

(2) Title of Paper: "Bearing Capacity of HDPE Reinforced Sand using Plate Load Test", *IJERA-International Journal of Engineering Research and Applications, Vol. 5, No. 6, June 2015.* 

Co-authors: Prof. Stephen Joseph Nigli, Dr. Antony Balan

#### Dr. Sivakumar Naganathan, MIE

(1) **Title of Paper:** "Automated Attendance Management System for Construction Workforce

Management", 3rd IASTEM International Conference, November 2015.

Co-authors: Teo Hui Li, Sreedhar Kalavagunta.

(2) Title of Paper: "Performance Assessment of Cementless

Controlled Low-Strength Material (CLSM) Utilizing Coal Ashes", *Jordon Journal of Civil Engineering, Vol.* 9, No. 1, 2015.

Co-author: Shojaeddin Jamali

#### Mr Randhir Kumar Singh, AMIE

(1) Title of Paper: "Comparison of Zn Loss in



Traditional Brass Melting Furnace used by Brassware Artisans and Energy Efficient Brass Melting Furnace", Indian Foundry Journal, Vol. 61, No.7, July 2015, pp 33-39,

Co-authors: D. Mandal, K.L.Sahoo.

(2) Title of Paper: "Strain Rate

Effect on Cyclic Deformation Behaviour of Advanced Ultrasupercritical Boiler Grade Wrought Ni-Based Superalloy IN740H at 760 °C", *Materials Science & Engineering A, Elsevier, 658, 2016, pp 272–279*.

Co-authors: J.K. Sahu, S. Tarafder.

#### Dr. Swati Jain, AMIE

**Title of Paper:** "Recovery of Ammonium Sulphate from



Effluent Stream of Ammonium Sulphate Plant at GSFC – A Case Study", *Chemical Engineering World, Vol. 5, Issue 1, January 2016, pp 66.* 

Co-authors: N. K. Sanchapara, K.A. Patel, A.S. Sikdar

## Members

#### Prof. D. B. Ghane, AMIE

(1) Title of Paper: "Rapid Prototyping: The Revolutionary Technology & Applications Review", International Seminar on Recent Trends in Engineering and Management organised by Sanjivani Rural Education Society's, College of Engineering,

Kopargaon, Ahmednagar, Maharashtra, February 5-6, 2016.

(2) Title of Paper: "Review on Performance Characteristics, Revolutionary Technology and Design of Scuderi Split Cycle Engine", National Conference on



Advances in Design and Thermal Engineering (NCADTE-2016), G.H. Raisoni College of Engineering and Management, Chas, Dist- Ahmednagar, Maharashtra, February 17-18, 2016.

#### Dr. Nabnit Panigrahi, MIE

(1) **Title of Paper:** "Energy and Exergy Analysis of a CI Engine fuelled with Diesel and Mahua Biodiesel Blend", *International Conference on Electrical*,



Electronics, Engineering Trends, Communication, Optimization and Sciences (EEECOS/E3 COS)-2015 organised by Sri Sunflower College of Engineering and Technology, Andhra Pradesh, March 28-30, 2015.

**(2) Title of Paper:** "Fuel from Waste-Degradation of Plastic Waste to Liquid Fuels", 57th Annual Technical Session of The Institution of Engineers (India), Odisha, February 14, 2016.

#### Dr. Dhulipalla Venkata Rao, FIE

**Title of Paper:** "Hop Tree based Collaborative Ad hoc



On-demand Multicast Routing for IEEE 802.15.4 in Ad-hoc Networks", 3rd IEEE International Conference Advanced computing and Communication Systems 2016 at Sri Eswar College of Engineering Coimbatore, January 22-23, 2016.

#### Dr. Gurudutt Sahni, MIE

(1) Title of Paper: "Design of Planetary Gear to use it for



Lapping of Wedge of Gate Valve and its Benefits over other Gear Mechanism", International Journal of Research in Engineering & Technology, Vol. 3, Issue 8, August 2015, pp 1-6.

Co-authors: Balpreet Singh, Ankush Kohli

(2) Title of Paper: "Design and Development of Prototype of Magnetic Engine using Neodymium Iron Boron (Nd2Fe14B) as Magnetic Material", International Journal of Mechanical Engineering and Technology, Vol. 6, Issue 4, April 2015, pp 27-34.

Co-authors: Jaspreet Singh, Tajinder Singh, Karan Vadehra.

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#### Mr Ramakoteswara Rao .V. MIE

Title of Paper: "Tribological Properties of Aluminium Metal Matrix Composites (AA7075 Reinforced with Titanium Carbide (TiC) Particles)", International Journal of Advanced Science and Technology, Vol.88, 2016, pp 13-26.



#### Mr Harisharan Aggarwal, MIE

(1) Title of Paper: "Implementation of SOI MOSFET using Silvaco TCAD Reduction of KINK Effect and Frequency Response", International Journal of IT,



Engineering and Applied Sciences Research, Vol. 4, Issue 6, June 2015.

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(2) **Title of Paper:** "Digital Trainer Kit", International Journal of IT, Engineering and Applied Sciences Research, Vol. 4, Issue 10, October 2015.

## Members

#### Dr. M. Shunmuga Priyan, AMIE

**Title of Paper:** "Influence of HVOF Parameters on the Wear Resistance of Cr3C2-NiCr Coating", *Journal of Materials Science & Surface Engineering Vol. 4, No. 2, 2016, pp 355-359.* 



# **E**

#### Mr Tadi Chandrasekhar, AMIE

**Title of Paper:** "A Novel Approach of Face Recognition Using Statistical Features and Neural Networks", *International Journal of Engineering and Innovative Technology (IJEIT), Vol. 4, Issue 11, May* 2015.

#### Mr M. Aravind Kumar, AMIE

(1) **Title of Paper:** "Performance Evaluation of Different Multipliers in VLSI using VHDL", *International Journal* 

of Advanced Research in Computer and Communication Engineering, Vol. 5, Issue 3, March 2016, pp 6-11.

(2) Title of Paper: "Adaptive Hearing Aid Algorithm using Different Types of Multiplier", International Journal of Application



or Innovation in Engineering & Management, Vol. 5, Issue 2, February 2016, pp 148-156.

#### MrAVLNarayana Rao, MIE

(1) **Title of Paper:** "Reduction of Mutual Coupling Effect in Adaptive Arrays", © Springer India, Lecture Notes in Electrical Engineering, Vol. 372, 2016.



Co-authors: N. Balaankaiah and D.R. Cheruku

(2) Title of Paper: "Antenna Performance Improvement in Elliptical Array using RMI Method of Mutual Coupling Compensation", Journal of Electromagnetic Analysis and Applications, Vol. 8, 2016, pp 8-21, Published Online January 2016 in SciRes. h t t p://w w w . s c i r p . o r g / j o u r n a l / jemaahttp://dx.doi.org/10.4236/jemaa.2016.81002.

Co-authors: Nunna Bala Ankaiah and Dharma Raj

#### Mr Dipankar Das, AMIE

(1) **Title of Paper:** "Sample Based Visualization and Analysis of Binary Search in Worst Case Using Two-

Step Clustering and Curve Estimation Techniques on Personal Computer", International Research Journal of Engineering and Technology, Vol. 02, Issue 08, pp 1508-1516.



Co-Authors: Kole Arnab, Chakrabarti Parichay.

(2) **Title of Paper:** "Empirical Analysis of Binary Search Worst Case on Two Personal Computers Using Curve Estimation Technique", *International Journal of Engineering and Management Research, Vol. 5, Issue 5, pp 304 - 311.* 

Co-Authors: Kole Arnab, Mukhopadhyay Shameek, Chakrabarti Parichay

#### Mohd. Zameeruddin, MIE



(1) Title of Paper: "Review on Recent Developments in the Performance-based Seismic Design of Reinforced Concrete Structures", Structures, Vol. 6, 2016, pp 119-133. Co-Author: Keshav K. Sangle.

(2) Title of Paper: "Some Studies on

Effect of Response Reduction Factor (R) - Value on Seismic Behaviour of RCC Building", International Journal of Earth sciences and Engineering (Geo-base Elsevier), Vol. 8, No. 1, 2015, pp 388-395.

Co-Author: Jyotsna More

#### Dr. R. Krishnan, MIE



Title of Paper: "A Comprehensive Strategy to Improve Water use Efficiency through Irrigation System Improvement - A Case Study of Grand Anicut Canal System", WAPTECH Special Edition 2015, WAPCOS Limited, New Delhi.

Co-Authors: DVS Murthy, NRaman

## Members

#### Mr Kannan BT, AMIE

**Title of Paper:** "Computation of an Axisymmetric Jet using Open Foam", International Conference on Computational Heat and Mass Transfer (ICCHMT-2015), NIT Warangal, November 30 - December 2, 2015.



#### Mr Bhavesh K. Kanabar, AMIE

**Title of Paper:** "Energy and Exergy Analysis of Vapour Absorption Refrigeration Cycle — A Review", *Journal of The Institution of Engineers (India): Series C. http://link.springer.com/article/10.1007%2Fs40032-015-0216-7* 

#### Mr Bhushan Rajkumar Khade, AMIE

Title of Paper: "Mitigation of Harmonics in a Neutral



Conductor for Three-Phase Four-Wire Distribution System using Series Active Power Filter", IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT) organised by SVS College of Engineering, Coimbatore, Tamil

Nadu, IEEE ICECCT Conference Proceedings, March 2015, pp 421-426.

#### Mr M. Muthukumar, MIE

(1) Title of Paper: "Influence of Porous Carbon Inserts on Scaling up Studies for Performance Enhancement on PEMFC", International Journal of Hydrogen Energy, Vol. 41, Issue 4, 2016, pp 2867-2874.



- (2) **Title of Paper:** "Parameters of Serpentine Flow Channel Influencing the Performance of PEM Fuel Cell A Review", *International Journal of Innovative Research in Engineering Science and Technology, Special Issue*, 2016, pp. 301-305.
- (3) **Title of Paper:** "Numerical Analysis on the Performance of PEM Fuel Cell with Square Spiral Channel", Recent Innovations in Engineering *ICRIE'16*, Sri Subramanya College of Engineering and Technology, Palani, April 2, 2016.

#### Mr Madhab Chandra Jena, AMIE

Title of Paper: "Optimization of Solar Power Generation Efficiency using MINITAB Software", International Journal in IT and Engineering, Vol. 3, Issue 2, February 2015.



#### Mr G. Chiranjeevi Reddy, MIE



Title of Paper: "Right Aspirations and Essential Learning Traits for Textile Students to Make in India", National Seminar on 'The Indian Textile Industry, Modernization, Make In India, Ethnic Handlooms, Fashion Skill Development and

Futuristic Textiles', organized by The Institution of Engineers (India), Andhra Pradesh State Centre at Hyderabad during February 5-6, 2016.

#### Mr Arindam Majumder, AMIE

#### (1) Title of Paper:

"Comparative Study of
Evolutionary Algorithms Coupled
with Neural Network Model for
Optimization of EDM Process
Parameters" Proceedings of
IMechE, Part B: Journal of



Engineering Manufacture, Vol. 229, No. 9, September 2015, pp. 1504-1516.

(2) Title of Paper: "Standard Deviation Method Based PSO - An Instigated Approach to Optimize Multi-Objective Manufacturing Process Parameters", *Journal of Swarm Intelligence Research (IJSIR)*, Vol. 7, No. 2, 2016, pp 15-35.

Co-Author: Abhishek Majumder

(3) Title of Paper: "Bacteria Foraging Optimization Algorithm for Robotic Cell Scheduling Problems", 5th International Conference of Materials Processing and Characterization (ICMPC 2016), GRIET, Hyderabad, March12-13, 2016.

Co-Author: Dipak Laha

## Members

#### Dr. Poonam Kumari, MIE

**Title of Paper:** "Coupled Three-Dimensional Piezoelasticity Solution for Edge Effects in Levy-Type Rectangular Piezolaminated Plates using Mixed Field Extended Kantorovich Method", *Composite* 



Structures, Elsevier B.V., Vol 140, January 2016, pp 491-505.

Co-Authors: Behera Susanta, Santosh Kapuria

#### Mr Prem Baboo, FIE



(1) **Title of Paper:** "Material Selection for Nitrogen-based Fertilizers Plants", *ResearchGate*, November 2015, pp 1-21.

(2) **Title of Paper:** "Neem Coated Urea an Eco-Friendly Approaches",

ResearchGate, December 2015.

#### Mr N. Dhanasekar, MIE

Title of Paper: "Accidental Navigation & Rescue System using GSM and GPS Technology", National Conference on Revolutionary Research in Electrical Engineering



(NCRREE'16), April 2, 2016, E.G.S Pillay Engineering College, Nagapattinam, Tamilnadu.

#### Mr Vinothkumar, A, AMIE

**Title of Paper:** "Classifier Models for Discrete Information Retrieval", *International Journal of Applied Engineering Research*, Vol. 10, No. 16, 2015, pp 37695-37699.



# **Publications**

## Members

#### Mr H. G. Vivek Prasad, AMIE



Title of Paper: "Case Study on Conventional and Fast Track Construction Techniques", International Journal of Science Engineering and Technology, Vol. 3, Issue 5, 2015, pp 1232-1235.

Co-Author: H.N. Rajendra Prasad

#### Dr. Santosh Kumar Ray, FIE

(1) Title of Paper: "Recent Development in Determining Spontaneous Heating Susceptibility of Indian Coals and its Correlation with Intrinsic

Parameters of Coal", Journal of The Institution of Engineers (India) Series D, Vol. 96, Issue 2, October 2015, pp 159-167.

Co-author: Durga Charan Panigrahi.

(2) Title of Paper: "Assessment of Spontaneous Heating Susceptibility of Indian Coals - A New Approach", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Vol. 38, No. 1, 2016, pp 59-68.

Co-authors: D. C. Panigrahi, G. Udayabhanu and V. K. Saxena



#### Mr G. Srinivas Rao, MIE



pp.145-152.

Mr Maruthi. G. S., MIE

Title of Paper: "Applications of

MEMS Accelerometer for Multiple

Faults Detection in Roller Element Bearings of Three Phase Induction

Motor", IEEE Sensors Journal, Vol.16, Issue 1, January 2016,

Co-Author: Vishwanath Hegde, MIE

(1) **Title of Paper:** "Review Article on 5S - Most Powerful Lean Manufacturing Tool", International Journal of Engineering Research, Vol.5, Issue Special 2, February 2016, pp 440-444.

Co-Author: Dr. C.V. Kameshwar Rao.

(2) Title of Paper: "Application of Operating Characteristics (OC) Curve for the Development of the Society", Paradigms in Engineering and Technology (ICPET-2016) organised by Methodist College of Engineering and Technology, Hyderabad during March 2-3, 2016.



#### Mr Ananta Kr. Nath, MIE

Title of Paper: "Productivity Improvement of Black Tea Production: A Case Study", International Journal of Scientific and Engineering Research, Vol. 7, Issue 3, March 2016.

#### Dr. G. Baburao, MIE

Title of Paper: "Biosorption of Copper (II) from Aqueous Solution using Oscillatoria Splendida", International Journal of ChemTech Research, Vol. 9, No.3, April 2016, pp 290-295.



Co-Authors: M. Krishna Prasad, K. Kishore Kumar

#### Dr. C. Sabarinathan, AMIE

Title of Paper: "Tribological Performance of Carbon Nano Tubes-Alumina Hybrid/Epoxy Composites", Optoelectronics and advanced materials - Rapid

communications, Vol. 9, No. 3-4, 2015, pp. 455-459.



# **Welcome**New Institutional Members

### **Modern Education Society's College of Engineering**

Wadia College Campus Bund Garden Road Pune

#### T K M College of Engineering

T K M College PO Kollam

#### INS Valsura

I N S Valsura Jamnagar

### **Institute of Engineering & Management**

Salt Lake Electronics Complex Kolkata

#### **Army Institute of Technology**

AIT Dighi Hills, Pune

## Programmes by Institutional Members

#### **National Conference MECHORIZON-16**

May 11, 2016

#### **New Horizon College of Engineering**

Outer Ring Road, Panathur Post, Near Marathalli, Bangalore, PIN: 560 103 Contact: 080-6629 7777 / nhceoffice@newhorizonindia.edu

### National Workshop on Harnessing Open Stack, Hadoop and Mongodb Technologies to Architect and Build Big Data Solutions July 2- 4, 2016

#### **KPR Institute of Engineering and Technology**

Arasur, Coimbatore, Tamilnadu, PIN: 641 407

Contact: Mr. S. Raguvaran, Mr. T. Rajsekaran (Coordinators) / 0422-2635600

## BOOK Review



#### Engineering Drawing by Dr.BVR Gupta, FIE

Engineering Drawing is a common subject offered in all branches of engineering. It helps one to express his or her ideas into reality through drawing. This book helps both faculty and students to understand the concepts on their own. The book presents the concepts through a step-by-step approach, with important points to remember duly highlighted. Various worked-out examples and problems in the exercises are presented under various categories so that the students can attempt any particular type of

problem they want to. This book includes short answer questions, with answers for each chapter. Some new pictures have been added in each chapter apart from figures for easy understanding of the subject.

Theory of

Machines

Publisher: I. K. International, New Delhi

#### Theory of Machines – Kinematics and Dynamics by Dr. BVR Gupta, FIE

The Theory of Machines is an important subject to and diploma level. One has to understand the basics designing and manufacturing any component. The average student can easily understand the concepts. preference over analytical wherever possible quickly. Particular care has been taken to draw compared with analytical ones wherever possible. preparing for the examinations or new faculty in examples are being explained wherever different

mechanical engineering students of both bachelor's of kinematics and dynamics of machines before subject material is presented in such a way that an The graphical methods of analysis are given though they lack in accuracy but can be performed diagrams to scale correctly. The results are Common doubts that the students have while the classrooms have been kept in mind. The same methods are there instead of giving different

examples. The effect of the different parameters on the end result also is shown in the same problem, for example, in cams and governors etc. In the exercises at the end of each chapter, questions from the question papers of various universities are given under three categories: short answer questions, problems, multiple choice questions.

Publisher: I. K. International, New Delhi



#### Basics of Mechanical Engineering by **Boby** George, AMIE

This book- Basics of Mechanical Engineering- has been prepared for the first semester students of the Kerala Technological University. It covers the

entire syllabus prescribed by the university in a simple and understandable manner. It will also be a handy tool to refresh the basics in Mechanical engineering. In the present day world all the engineering studies are multidisciplinary in nature and students are expected to know the basics of all branches of studies in a nutshell. The book covers various topics like refrigeration and air conditioning, thermodynamics, hydraulic machines, engines, turbo machines, power transmission systems, auto mobiles and modern trends in auto mobiles, manufacturing methods and various types of materials.

Co-authors: Jerin Cyriac, Appu Kurian

Publisher: S. Chand Publications, New Delhi

#### **Highlights of the Proceedings: ISTE National Seminars** by Dr S V Vaishnav, FIE

National seminars organized regularly during Annual Conventions of ISTE provide a commendable platform for deliberations on vital issues related with the enhancement of excellence of technical education. The theme selected for presentations at the seminars pertains to the growth and development of technical education and institutions. The problems of



reaching to the status of world class institutions and higher global rankings, Sustainability of technical education, Accreditation and quality assurance along with creation of innovative environment are some of the prominent issues of discussions and deliberations at the national seminars. The proceedings are the outcome of the invited and contributed papers of learned academia, professionals and distinguished luminaries.

Publisher: Indian Society for Technical Education (ISTE)

## Members

speak

I convey my thanks to you for publishing news about me in IEI Epitome. I feel this Epitome is most informative.

#### Poorna Prabhat Sunkara, AMIE

Epitome of The Institution of Engineers (India) has become now the only initiative by a national international institution in the present world, which is focused to motivate its member engineers for doing good work in their expertise area and thus gives wide publicity and coverage to individual achievements. This, in a very short span of time, has become a novel platform for recognition of proactive, dedicated professionals/ researchers academicians' work in the socio-technoeducational development of trained minds in the national interest. For the last two issues, I being in the list of members in the news in the Epitome feel proud of my affiliating institution "the Institution of Engineers (India)" for giving such opportunity to all members of the engineering fraternity. I am sure this way, youngsters / the fresh graduating engineers / students would be activated to excel in their professional career and enjoy recognition by establishing connections with the Institution.

Dr. Bhagwanjee Jha, Ph.D.(IITB), FIE HOD I/C, Civil Engineering Department Dr. BBA Government Polytechnic, Karad (DP) Dadra and Nagar Haveli

Thank for promoting IEI members in such a nice platform IEI Epitome.

Dr. Sushanta Tripathy, PhD, FIE
Professor, School of Mechanical Engineering
KIIT University, Bhubaneswar, Orissa

Publication of Epitome is an excellent initiation, which provides information of contributions of Engineers of this country in various fields.

Naveen Kumar Gupta, MIE

Thank you for your effort to make IEI Epitome a grand success. It is very good attempt.

Dr. Ch. Rupa, AMIE

Professor, Department of CSE,

V. R. Siddhartha Engineering College, Vijayawada

I have gone through the April 2016 issue of IEI Epitome. The publication is worthy of praise. E Mail of members in this IEI epitome will help the members to get connected to each other and exchange technical thoughts and innovative ideas.

Pathik Debmallik, FIE

Head Projects (Civil)

Tata Steel Processing and Distribution Limited

It's been great pleasure to be a part of The Institution of Engineers (India). Glad to know that for members publications will be recognized.

Piyush Gupta, AMIE

I am pleased to acknowledge the receipt of IEI EPITOME-April'16 issue in my registered email id. The online dispatch of the IEI- Epitome soft version is a wonderful initiative by IEI. The e-news letter is quite informative & may be useful for the members of the IEI society. I admire the initiative by the IEI and extend my warm appreciation to all individuals associated with the process.

Sanjib Dhar, FIE.

General Manager(C).

North Eastern Electric Power Corporation Ltd. Arunachal Pradesh, India

# Members speak

I appreciate the Institution team in bringing useful Epitome and sending through mail the soft copy. I wish the team hearty congratulations and wish to keep it up.

OP Garg, FIE
Seattle, WA, United States

Congratulation on bringing out electronic version of IEI Epitome. It is really a very good forum to share and know about fellow members who have done wonders and have been recognized.

T Chandrasekhar, AMIE GITAM University, Visakhapatnam

I am very glad that Institute is acting with innovative idea to bring the members into Technodynamism.

Congratulations for the efforts!

A V L Narayana Rao, MIE
Associate Professor, ECE Department
SSN College of Engg & Technology, Ongole, AP

At the outset, I would like to congratulate Council members of IEI for the decision and also to all the publication team members of IEI in bringing this beautiful and colourful e-newsletter named IEI EPITOME. This is also a vital step towards saving of paper and helping environment. In the present era of internet, it was the long awaited publication of information in very concise and to the point. This is essential from the point of view of a reader. Others may note and follow as far as possible in their respective areas of work.

Bharat Chandra Roy, FIE Ex-General Manager, RDCIS, SAIL, Ranchi I feel very happy to have seen IEI Epitome issues in online. It is really a good forum to share and know about the members of our Institution who have done wonders and have been recognised. I congratulate your team for great efforts.

A.Vinothkumar, AMIE

Assistant Professor(ECE),

Dr.M.G.R. Educational and Research Institute University,

Maduravoyal, Chennai

I am extremely glad in receipt the soft copies of the successively published IEI Epitomes. Indeed, it is a great endeavour of IEI for connecting all IEI members as a cohesive team in sharing valuable immense knowledge and information for continuous growth and success of our Institution. I feel that fundamentally, this will deeply encourage, motivate and enhance all IEI members and will be put forward as a road map of creativity in exploring themselves on the basis of continual improvement for their educational and career goals & objectives. At the end, I express my sincere gratitude and thank to Director (Technical) of IEI for his endless effort and dedicated support in forwarding consecutively these epitomes to us.

**Dr. Bhakta Bhushan Biswas, FIE** Kharafi National, Kuwait

# Announcement

#### **IEI Industry Excellence Award 2016**

The Institution of Engineers (India)
8 Gokhale Road, Kolkata 700 020



#### **Recognising Industry Leaders**

#### **Applications are Invited from Industries**

Last date: July 31, 2016

For Information Brochure & Application form please visit http://www.ieindia.org/indexcel2016

Award will be presented at 31st Indian Engineering Congress during December 2016

For further query contact:

Mr Tanmoy Chakraborty, Executive (Technical)
Phone: (033) 40106259/Mob: 9804461661
E-mail: award@ieindia.org / iei.technical@gmail.com

#### **IEI AWARDS**

The Steel Authority of India Ltd (SAIL) had instituted two Awards, namely, SAIL AWARD and DR M VISVESVARAYA AWARD to be given away every year during the Indian Engineering Congress to author/s of the articles adjudged best on selected topics. The topics for the year 2016 are given hereunder.

#### SAIL AWARD

'Improving Safety, Health & Environment in the Steel Industry'

### DR M VISVESVARAYA AWARD 'Role and Contribution of Steel Industry to 'Make in India' Programme'

The Coal India Ltd (CIL) had instituted an Award to perpetuate the memory of Late J G Kumaramangalam, its first Chairman to be awarded every year during the Indian Engineering Congress to author/s of the articles adjudged best on a selected topic. The topic for the year 2016 is given below.

#### COAL INDIA (J G KUMARAMANGALAM MEMORIAL) AWARD:

'Sustainable Mining Strategies in Current Scenario'

Intending contributors are requested to submit their articles (visit www.ieindia.org/jourtechdwnlds.aspx for guidelines) in quadruplicate to Director (Technical), The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700 020 by July 15, 2016.



### The Institution of Engineers (India)

8, Gokhale Road, Kolkata 700020

### Approval of AICTE for AMIE Passouts with M.E./M.Tech for Teaching Assignments

It is hereby informed that All India Council for Technical Education (AICTE), through Extraordinary Gazette notification, part III, Section 4 published by Government of India on 06 January 2016, clarified under item (E) Miscellaneous Issues, S.No. 67, page 31 (in Hindi, Page 12, S. No.67) that passing Sections A & B examinations (AMIE), along with M.E./M.Tech degree acquired through contact mode (i.e. regular/part time), is accepted for the appointment as a faculty in Technical Education. Ref:http://www.aicte-india.org/downloads/clarification\_2016.pdf#toolbar=0

Issued by Secretary & Director General Incharge for and on behalf of The Institution of Engineers (India)

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