

**IEI**

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June 2016, Volume 1, Number 5

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# Members in the News



**Prof A P Mittal, FIE,** has recently taken over as **Member Secretary, All India Council for Technical Education (AICTE).**

## **Mr Abhinav Anand, AMIE**

has been certified as Prince2 Practitioner in Project Management by Peoplecert (Axelos) and Six Sigma Green Belt from Indian Statistical Institute, New Delhi, April 2016.



## **Dr Chandrakant Yalaguradarayya Seemkeri, FIE**

In-charge Head, Mechanical Engineering, Government Polytechnic, Ratnagiri, Maharashtra,

(1) Delivered Keynote Address on: "Recent Advances in Science and Technology" at 2nd National conference on 'Recent Advances in Science and Technology (RAST - 2k16)'; Organized by: Department of Mechanical Engineering, Finolex Academy of Management and Technology, Ratnagiri, February 17-1, 2016.

(2) Delivered Expert Lecture on: 'Advanced Optimisation Techniques for Innovative Research in Technology' at M.I.T. College of Engineering, Pune, under one week STTP approved by ISTE, during April 25-29, 2016.

(3) Received the "Best Polytechnic Teacher Award" (State Level) Maharashtra & Goa at 43rd ISTE Convention held at Hanuman Vidyaprasarak Mandal, AMRAVATI Maharashtra, on January 11, 2016. The award was handed over by the State Minister, Hon'ble Girishiji Bapat along with Hon'ble Minister Hansraj Aher and Hon'ble Ranjit Patil.



**Mr N Sivasubramanian, FIE,** former Senior Scientist and Chief General Manager ISRO, Trivandrum was felicitated by Chairman ISRO and Directors of ISRO Centers on April 22, 2016 at IISU Silver Jubilee Function, Trivandrum for his life time contributions and achievements as Chief Architect of ISRO. He is the designer of the Rate Gyroscope and navigation grade Rate Integrating Gyroscope (RIG). He also established the precision fabrication and assembly facilities and high precision centrifuge for testing inertial sensors and systems.

## **Prof (Dr) C M Narayanan, MIE**

has been appointed as the Guest Editor of the Special Issue of Journal of Modern Chemistry and Chemical Technology (Volume - 7, April, 2016) containing selected research papers presented during the Golden Jubilee International Conference on "Recent Developments in Chemical and Biochemical Engineering" held at National Institute of Technology, Durgapur, West Bengal, during October 2-4, 2015, where Prof Narayanan had been the Chairman, Organizing Committee.

Delivered Keynote Lecture on "Green Technologies for Sustainable Development – A Few Successful Case Studies" in the All India Seminar on "Environmental Impact Assessment of Chemical and Allied Industries for Sustainable Development and Climatic Change", organized by The Institution of Engineers (India), West Bengal State Centre, Kolkata, May 6-7, 2016.





# Members in the News



**Dr Shweta Rani, AMIE**, has successfully organized the 4th International Conference on “Advancements in Engineering & Technology” during March 18-19, 2016. With her stupendous efforts, the Proceedings of the Conference has been published in the “MATEC Web of Conferences”, a reputed International Journal indexed with Thomson Reuters and SCOPUS.



**Mr R B Shukla, FIE**, retired as an Executive Director of Vidarbha Irrigation Development Corporation, Nagpur, Water Resources Department of Government of Maharashtra after 36 years of service.

**Mr Anuj Tyagi, AMIE**, successfully completed and awarded the "Post Graduate Diploma in Business Management" (PGDBM) from the National School of Business Management (NSBM), Colombo, Sri Lanka, 2016.



Elected for Deputation in Colombo, Sri Lanka by Dominos Pizza India and successfully completed little more than 2 years Deputation (2013 – 2015) in Colombo, Sri Lanka as Senior Manager-Projects.

**Mr Harjinder Singh Bhatia, MIE**,

delivered lecture on “Solution of Land crunch in Proposed Smart cities” at National Institute of Technical Teacher & Training, Chandigarh, February 2016. Lecture highlighted various techniques to save land bank without hampering real estate development and farmer rights. Programme was attended by GMADA & HUDA officials along with more than fifty technical teachers from the region.



**Dr Chitra Rajagopal, FIE**, Outstanding Scientist and Director, CFEES, DRDO, Ministry of Defence

1. Appointed Distinguished Visiting Professor at IIT Delhi since 01 June 2016.

2. Delivered Invited Talk on “Innovations in Design of Explosive Store Houses” in 10th International High Energy Materials Conference and Exhibits (HEMCE), February 2016.

3. Delivered Invited Talk on “CFEES Initiatives in Fire Protection and Suppression”, International Workshop on Fire Research, IIT Madras, Chennai, February 2016.

**Ms Daisy C Bhalla, FIE**, developed

online real time system for Project Management in BHEL, Bhopal. The paper title 'Integrated Real Time Project Management System' has been awarded copyright status with registration no. SW-7741/2014. The system on Project Management (Hydro) has been developed in association with IT of BHEL Bhopal. The paper was shortlisted by CGG-Hyderabad for presentation to DAR & PG-GOI & was presented by under 'Innovative use of ICT by PSUs for Customer Benefits' in 16th National Conference for National Awards on e-Governance at New Delhi. The paper was also presented in 17th Thinkers & Writers Forum of Skoch Development Foundation at New Delhi.



# Members in the News



**Dr D P Kothari, FIE**, has received the 'Lifetime Achievement Award' from Dr. Kaushik, VC, RTU, Kota on 14th May 2016 at Kota. Dr Kothari has also received "Most Active Researcher" award from Chairman CSI at Udaipur.



**Mr Vijai Kumar Sharma, FIE**, recipient of President of India prize of IEI in 1968 has been re-elected as Honorary Secretary of Rajasthan State Productivity Council, Jaipur, on May 18, 2016, for the three-year term 2016-2019.

**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". The talk was delivered during the Workshop on "Green Buildings (ECBC&GRIHA) for Builders, Architect and Architect Students" organized by KREDL on May 26, 2016 at Mysore.



**Dr Vijay Gajanan Neve, MIE**, obtained Doctorate on May 20, 2016 under the guidance of Dr. Gajanan M. Dhole, former Professor of Shri Sant Gajanan Maharaj College of Engineering, Shegaon, on the topic of Electrical Engineering engineering "Categorization and Analysis of Power Quality Signatures" from Sant Gadge Baba Amravati University, Amravati.



## IEI – Springer Journal



Online paper submission :  
[www.editorialmanager.com/ieia](http://www.editorialmanager.com/ieia)  
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# Publications by Members



**Mr Sharun Mendonca, AMIE**

**Title of Paper:** "Influence of Injection Timing on Performance and Combustion Characteristics of Simarouba Biodiesel Engine", *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 4, 2016.

**Mr Aly K, MIE**

**Title of Paper:** "Evaluation on Definition of Strength Reduction Factor for Soil Structure Interaction of Multistoried Buildings". *International Journal of Engineering Research*, Vol. 5, Issue 3, February 27-28, 2016, pp 514-519.

Co-Author : Dr Antony Balan



**Mr Satyendra Kumar Singh, FIE**

**Title of Paper:** "Natural Gas: A Key Source of Energy" *Process Worldwide Subcontinent Edition*, Issue No. 2, April 2016.

**Dr. Jiten H. Shah, AMIE**

**1. Title of Paper:** "Determination of Pedestrian Level of Service for Undivided Stairways at Suburban Rail Station in Developing Countries". *Transportation Research Record (TRR)*, *Journal of the Transportation Research Board*, January 2016.

Co-Authors: Gaurang Joshi, Purnima Parida, Shriniwas Arkatkar.

**2. Title of Paper :** "Effect of Stairway Width on Pedestrian Flow Characteristics at Railway Station". *Transportation Letters, The International Journal of Transportation Research*, Taylor and Francis, 10-1197, 2016, pp.1-15.



**Gurupal K Gaidhane, AMIE**

**Title of Paper:** "Performance of Dual-Bridge High Frequency Resonant DC/DC Converter for Energy Storage Application", *IEEE International Conference on 'Energy Efficient Technologies and Sustainability'*, St. Xavier Engineering College Nagercoil, Tamilnadu, April 7-8, 2016.

**Raza Ahmed Khan, FIE**

**Title of Paper:** "Indoor Air Quality Considerations for HVAC Systems Design in India". *National Conference on "Recent Trends in Mechanical Engineering"* (NCRTME-2016), Department of Mechanical Engineering, JNTUH College of Engineering, Hyderabad, April 28-29, 2016.



**Dr R Rajashekar, MIE**

**Title of Paper:** "Development of a Model for Friction Stir Weld Quality Assessment using Machine Vision and Acoustic Emission Techniques". *Journal of Materials Processing Technology*, Elsevier Publication, Vol. 229, March 2016, pp 265-274.

**Mr Chiranjib Guha Majumder, AMIE**

**Title of Paper:** "Bee Foraging Inspired Multi-Agent Optimal Motion Planning Analysis in a Simulated-Mobile Environment". *Indian Control Conference, IEEE Control Systems Society and IIT Hyderabad*, January 4-6, 2016.



**Mr Matruprasad Rout, AMIE**

**Title of Paper:** "Finite Element Analysis of Cross Rolling on AISI 304 Stainless Steel: Prediction of Stress and Strain Fields"; *Journal of The Institution of Engineers (India): Series C*, Vol. 97, Issue 1, 2016, pp. 1-9.

# Publications by Members



**Mr Shaik Khaja Mohiddin, AMIE**

- 1. Title of Paper:** "A Practical Approach to Overcome Glitches in Achieving High Performance Computing". *Proceedings of the 10th INCIACom-2016; IEEE conference ID:37465, 3rd International Conference on 'Computing for Sustainable Global Development', March 16-18, 2016, Organized by Bharati Vidyapeeth's Institute of Computer Application and Management, New Delhi, India, pp. 412-416.*
- 2. Title of Paper:** "A Practical Green Approach for High Performance Computing"; *5th National Conference on 'Recent Trends in Information Technology 2016', P.V.P. Siddhartha Institute of Technology Kanuru, Vijayawada, India, Vol. 6, Issue 3, March 2016, pp. 24-30.*



**Mr Partha Pratim Dey, AMIE**

- 1. Title of Paper:** "End User Response to Web-server Access Calibration Method", *Proceedings of Fifth International Conference on 'Communication Systems and Network Technologies', IEEE Computer Society, April 2-6, 2015, pp.1020-1024.*  
Co-Author: H K Kalita
- 2. Title of Paper:** "Modeling End User Response to Web-server Access, I3CS'15": *International Conference on 'Computing and Communication Systems', April 9-10, 2015, Shillong.*  
Co-Author: H K Kalita

**Mr Mahesh R Chavda, AMIE**



- 1. Title of Paper:** "Effect of Gas Ratio on Tribological Properties of Sputter Deposited Tin Coatings" AIP Conference Proceedings 1728, 020213 (2016), *International Conference on 'Condensed matter & Applied Physics' (ICC-2016) organized at Bikaner, Rajasthan during October 30-31, 2015.*  
Co-Authors: Kamlesh V. Chauhan, and Sushant K. Rawal
- 2. Title of Paper:** "Tribological Characterization of TiN Coatings Prepared by Sputtering", *Science Direct, Procedia Technology, Vol. 23, 2016, pp. 36-41, 3rd International Conference on 'Innovations in Automation and Mechatronics Engineering', (ICIAME 2016) organized at V.V. Nagar, Gujarat during February 5-6, 2016.*  
Co-Authors : Divyesh P. Dave, Kamlesh V. Chauhan, and Sushant K. Rawal

**Mr Abdullah Anwar, AMIE**



- 1. Title of Paper:** "Determination of Liquefaction Potential by Sub-Surface Exploration using Standard Penetration Test (SPT) IJISSET; *International Journal of Innovative Science, Engineering and Technology, Vol.2, Issue 10, October 2015, pp. 751-760.*  
Co-Authors: Sabih Ahmad, M.Z. Khan, Syed Mohd. Ashraf Husain
- 2. Title of Paper:** "Study of Soil Stabilization using Lime"; *National Conference on 'Advances in Geotechnical Engineering' held at Aligarh Muslim University, Aligarh during April 8-10, 2016; organized by Department of Civil Engineering, Zakir Husain College of Engineering & Technology in association with Indian Geotechnical Society, Delhi Chapter, Delhi; pp. 92-96.*  
Co-Authors: Sabih Ahmad and Syed Mohd. Ashraf Husain
- 3. Title of Paper:** "Salvage of Ceramic Waste and Marble Dust for the Refinement of Sustainable Concrete"; *All India Seminar on 'Innovative Building Materials and Technology for Sustainable Constructions' held at Lucknow organized by The Institution of Engineers (India), U P State Centre during August 22-23, 2015; pp. 84-92.*  
Co-Authors: Sabih Ahmad, Syed Mohd. Ashraf Husain, and Syed Aqeel Ahmad

# Publications by Members



**Mr Divyesh Kumar Dave, AMIE**

**1. Title of Paper:** "Exploration of Various Properties for Chromium Oxide-Nitride Coatings Prepared by Reactive Sputtering" presented in the 43rd International Conference on 'Metallurgical Coatings and Thin

Films' held during April 25-29, 2016 at San Diego, California, USA, organized by The American Vacuum Society, AVS.

Co-Authors: Kamlesh V Chauhan and Sushant K Rawal

**2. Title of Paper:** "A Review Paper on Various Properties for Chromium Oxide-Nitride Coatings" presented at National Conference on 'Design, Analysis and Optimization in Mechanical Engineering' held at M S University, Vadodara and published in Conference Proceedings; Vol-I, 2016, pp.178-183.

Co-Authors: Kamlesh V Chauhan, Mahesh R Chavda, Sushant K. Rawal

**Dr G Venkatesan, MIE**



**1. Title of Paper:** "Adsorption Kinetic Models for the Removal of Cu(II) from Aqueous Solution by Clay Liners in Landfills", *International Journal of Environmental Science and Technology*, Vol. 13, 2016, pp.1123-1130 (DOI 10.1007/s13762-016-0951-1).

Co-Author: V Rajagopalan

**2. Title of Paper:** "Removal of Copper using Clay Admixed with Quarry Fines as Landfill Liners ", *Polish Journal of Environmental Studies*. Vol. 25, No. 1, 2016, pp. 377-384. (DOI: 10.15244/pjoes/59500).

Co-Author: V Rajagopalan V, G Swaminthan

**3. Title of Paper:** "Geotechnical Characterisation of Clay Admixed with Quarry Fines as Potential Liner Material", *Journal of the Institution of Public Health Engineers, India*, Vol. XXXXIII, No. 4, 2016, pp 12-15.

Co-Author: V Rajagopalan



**Dr M Shunmuga Priyan, AMIE**

**1. Title of Paper:** "Design and Fabrication of Automated Bed Control System for Patients." *International Journal for Scientific Research and Development*, Vol. 4, Issue 2, 2016, pp. 588-592.

**2. Title of Paper:** "Investigation of Surface Roughness and MRR on Stainless Steel Machined by Wire EDM." *International Journal of Engineering Research & Technology*, Vol. 5, Issue 3, 2016, pp. 66-71.

**3. Title of Paper:** "Wear Performance of Ti based Powders Coating on SS 304 by PVD Method." *Journal of Materials Science & Surface Engineering* Vol. 4, Issue. 3, 2016, pp. 372-375.

**Ms Ishu Sharma, AMIE**



**1. Title of Paper:** "Comparative Study of LEACH, LEACH-C and PEGASIS Routing Protocols for Wireless Sensor Network"; *International Conference on 'Advances in Computer Engineering & Applications'*, IMS Engineering College, Ghaziabad, March 19-20, 2015.

**2. Title of Paper:** "Performance Evaluation of PEGASIS Protocol for WSN using NS2", *International Conference on 'Advances in Computer Engineering & Applications'*, IMS Engineering College, Ghaziabad, March 19-20, 2015.



**Mr Ajay Kumar Kushwaha, AMIE**

**Title of Paper:** "Inductorless Realization of Chua's Oscillator using DVCCTA", *Analog Integrated Circuit and Signal Processing*, (Springer Publication), DOI 10.1007/s10470-016-0746-9, Vol. 88, Issue 1, July 2016, pp. 137-150.



# Publications by Members



**Dr PN Singh, FIE**

**Title of Paper:** "Optimization of Existing Irrigation Schemes in Jharkhand for Irrigation, Drinking Water & Industrial Use", *One Day Seminar on 'Optimization of Existing Irrigation Schemes in Jharkhand for Irrigation, Drinking Water & Industrial Use', organized by The Institution of Engineers (India), Jharkhand State Centre on March 5, 2016.*



**Dr G Renuka Devi, AMIE**

**1. Title of Paper:** "Performance Investigations of Inverter Fed 7-Phase Induction Motor Drive", *International Research Journal of Engineering and Technology, Vol. 3, No. 5, May 2016, pp. 694-699.*

**2. Title of Paper:** "Comparative Analysis of Different n-level Inverter", *International Journal of Electrical & Electronic Engineering & Telecommunication, Vol. 1, No. 1, March 2015, pp.141-147.*

Co-Authors: B Manikandan, C Muralitharan, K Muthukumar

**3. Title of Paper:** "Modeling and Analysis of 5-Level H-bridge Inverter-Fed Switched Reluctance Motor" *International Journal of Electrical & Electronic Engineering & Telecommunications, Vol. 1, No. 1, March 2015, pp.228-234.*

Co-Authors: M P Mohan Kumar and N Anup Sethumadhavan.

**Ch Viswanadham, FIE**

**1. Title of Paper:** "Challenges in Production & Installation of EW Antennas on Military Platforms", *EWCI - 2016, Bengaluru, February 2016.*



**2. Title of Paper:** "Experimental Results of Structurally Modified High Power Ultra Broadband Phased Array Antenna for Extending the Operating Frequency Range and Improving the VSWR", *ATMS (India-16), February 2016.*



**Dr Satish Kumar Kansal, FIE**

**Title of Paper:** "Hybrid Approach for Optimal Placement of Multiple DGs of Multiple Types in Distribution Networks", *International Journal of Electrical Power & Energy Systems (Elsevier, SCI Indexed), Vol. 75, pp. 226-235, February 2016, doi:10.1016/j.ijepes.2015.09.002.*



**Dr Yash Paul Singh, FIE**

**Title of Paper:** "Design of Optical Network using Optical-Source Powers based on Spatial Phase Modulation", *Journal for Optical Communication Hindawi Publications, Vol. XVIII, February 2015, pp. 67-71.*

**Dr E Bhaskaran, MIE**

**Title of Paper:** "Technical Efficiency of Automotive Industry Cluster in Chennai"; *Journal of The Institution of Engineers (India): Series C, Volume 93, Issue 3, pp. 243-249, DOI: 10.1007/s40032-012-0029-x.*

**Ms Sowmyashree T, AMIE**



**1. Title of Paper:** "Study on Mechanical Properties of Red Mud as a Partial Replacement of Cement with Hydrated Lime in the Production of Concrete", *International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Issue 5, May 2016.*

**2. Title of Paper:** "Properties of Pavement Quality Concrete with Partial Replacement of Fine Aggregates by Iron Ore Tailings", *International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Issue 5, May 2016.*



# Publications by Members



**Dr Gurudutt Sahni, MIE**

**1. Title of Paper:** "Performance Techniques for Operability of Regulating Globe Valve and its Functioning". *International Multi Track Conference on 'Sciences, Engineering & Technical*

*Innovations' organized by CT Institute of Engineering, Management & Technology, Jalandhar & Punjab Technical University, Jalandhar during June 22 - 23, 2015.*

Co-Author : Balpreet Singh

**2. Title of Paper:** "Optimization of Gate Valve with New Wedge Design and to Study Effect of Varying Temperature". *International Multi Track Conference on Sciences, Engineering & Technical Innovations, organized by CT Institute of Engineering, Management & Technology, Jalandhar & Punjab Technical University, Jalandhar during June 22 - 23, 2015.*

Co-Author : Balpreet Singh

**Mr C S Siddu Karthik C S, AMIE**



**1. Title of Paper:** "Study on Mechanical Properties of Red Mud as a Partial Replacement of Cement with Hydrated Lime for M40 Grade Concrete with Super Plasticiser"; *IJRET Journal, Vol. 5, Issue 4, April 2016.*

**2. Title of Paper:** "Seismic Performance of R C Buildings on Sloping Grounds with Different Types of Bracing Systems"; *IJRET Journal, Vol. 5, Issue 2, February 2016.*

**Mr Gorle Raghavendra Gowri Shankar, AMIE**

**Title of Paper:** "Design Change for Thermostatic Expansion Valve Body Assembly and its Static Analysis", *International Journal & Magazine of Engineering, Technology, Management and Research, Vol. 2, Issue: 4, April 2015.*



**Mr Ratindra Nath Kanungo, FIE**

**Title of Paper:** "Effect of Yarn Twist Direction and Woven Design on Certain Novelty Fabrics from Cotton / Polyester Trilobal Filament 3-ply Yarn", *Journal of The Institution of*

*Engineers (India): Series E, Volume 96, Issue 1, 2015, pp. 15-21.*

**Mr Chandra Prakash Kumar, FIE**



**1. Title of Paper:** "Contribution of Women in Hydrological Research", *International Journal of Research - Granthaalayah, Volume 4, Issue 1, January 2016, pp. 14-26.*

**2. Title of Paper:** "Sea Water Intrusion in Coastal Aquifers", *EPRA International Journal of Research & Development (IJRD), Vol. 1, Issue 3, May 2016, pp. 27-31.*



**Dr Dhulipalla Venkata Rao, FIE**

**Title of Paper:** "Color based Multi Directional Local Motif XoR Patterns for Image Retrieval"; *International Conference on 'Applied and Theoretical Computing and Communication Technology',*

*BIET, Davangere, Karnataka, India, October 29-31, 2015, Publisher: IEEE, INSPEC Accession Number: 15937487, DOI:10.1109/ICATCCT.2015.7457002.*



**Mr P Siva Nagendra Reddy, AMIE**

**Title of Paper:** "Generation and Implementation of IRNSS Standard Positioning Signal", *Engineering Science and Technology, an International Journal (JESTECH), Elsevier,*

*doi: 10.1016/j.jestech.2016.01.005, <http://www.elsevier.com/locate/jestech>*

# Publications by Members



**Dr Sukanta Roy, AMIE**

**1. Title of Paper:** “Unsteady Analysis on the Instantaneous Forces and Moment Arms Acting on a Novel Savonius-Style Wind Turbine”, *Energy Conversion and Management, (Elsevier), Vol. 121, August 2016, pp. 281–296. doi:10.1016/j.enconman.2016.05.044.*

Co-Author: A Ducoin

**2. Title of Paper:** “Wind Tunnel Experiments of a Newly Developed Two-Bladed Savonius-Style Wind Turbine”, *Applied Energy, (Elsevier) Vol. 137, pp. 117–125. doi:10.1016/j.apenergy.2014.10.022.*

Co-Author: U K Saha

**Prof Krishnaswamy R Ramana, MIE**

**1. Title of Paper:** “Impact of Training on the Development of Construction Trade Worker in Indian Construction Industry”, *International Journal of Technology (IJT), Vol. 05, Issue 2, July-December 2015, pp. 311-315.*



**Dr Vijay Gajanan Neve, MIE**

Presented paper in the 1st International Conference on Science, Engineering & Technology, during November 21-23, 2015, held at Birla Institute of Technology, Offshore Campus-Rasal Khaimah, U.A.E., Dubai. This paper was published in reputed journal of Researchers in Biosciences, Agriculture and Technology (IJRBAT) ISSN: 2347-517X, Nov. 2015.



**Mr Sindavalam Sharath, AMIE**

**1. Title of Paper:** “Study and Comparison of Torque Transmitting Characteristics of Asbestos Disc Clutch and 6 Pad Ceramic Clutch Plate in Ashok Leyland 370 Engine”, *IJAERD, Vol. 3, Issue 3, UGC National Conference on 'Advances in Computer Integrated Manufacturing' (NCACIM-III), MBM Engineering College, JNV University, Jodhpur, Rajasthan, March 18-19, 2016.*



**Mr Hariharasudhan S, AMIE**

**1. Title of Paper:** “Data Extraction of Elevated Objects Using Characteristic Extraction Methods”, *4th National Conference on 'Intelligent Computing Techniques in Electrical and Electronics Engineering', April 28, 2016, organized by Department of Electrical and Electronics Engineering, held at Mailam Engineering College, Mailam, Tindivanam Tk, Villupuram District, Tamilnadu.*

Co-Author: Dr Raghu

**2. Title of Paper:** “An Interactive and Synergistic Synthesis of Multimedia Data Extraction on Various Patterns”, *International Conference on 'Engineering Systems and Designs' held at Avvaiyar College of Engineering & Technology for Women, Pudhucherry, during April 21-22, 2016; Proceedings Vol 2.*

Co-Author: Dr Raghu

**3. Title of Paper:** “An Interactive and Synergistic Synthesis of Multimedia Data Extraction on Various Patterns”, *Singaporean Journal of Scientific Research (SJSR), Vol.8. No.3, 2016, pp.190-198, <http://iaaet.org/sjsr/Papers/Papers/sjsrvol8no32016-7.pdf>*

Co-Author: Dr Raghu





# Publications by Members



**Dr Pralay Pal, MIE**

**1. Title of Paper:** "Application of Emerging Technologies in ERP Implementation in Indian Manufacturing Enterprises: An Exploratory Analysis of Strategic Benefits". *Springer – International*

*Journal of Advanced Manufacturing Technology, Online First: 23 April 2016.*

Co-Authors: Shree Ranjan and Vijay K Jha

**2. Title of Paper:** "Literature Review on ERP Implementation Challenges", *Inderscience – International Journal of Business Information Systems, Vol. 21, No. 3, 2016.*

Co-Authors: Shree Ranjan and Vijay K Jha

**3. Title of Paper:** "A Strategic and Sustainable Multi-Criteria Decision Making Framework for ERP Selection in OEM", *Research India Publications – International Journal of Applied Engineering Research, Vol. 11, No. 3, 2016, pp. 1916-1926.*

Co-Authors: Shree Ranjan and Vijay K Jha



**A Krishna Murthy, FIE**

**Title of Paper:** "Traditional Irrigation Systems in India", *Annual Technical Volume of Civil Engineering Division Board of IEI, 2015-16.*



**Mr Pulok Ranjan Mohanta, AMIE**

**Title of Paper:** "Implementation of Flipped Classroom Approach in Automobile Engineering Course", *NAAC Sponsored National Level Interdisciplinary Conference on "Innovative Practices: Pathways to*

*Quality Assurance and Sustenance in Higher Education" during April 21 - 22, 2016; University of Mumbai, Kalina Campus; organized by MES's Pillai College of Education and Research, Chembur, Internal Quality Assurance Cell and University of Mumbai, Department of Education.*



**Mr Prashant Dasharath Sathe, AMIE**

**1. Title of Paper:** "Continuum Damage Mechanics based Nonlinear Finite Element Analysis of Structure" *2nd Indian National Conference on Applied Mechanics*

*(INCAM 2015), Indian Institute of Technology Delhi, New Delhi, July 13-15, 2015.*

Co-Authors: B. M. Dawari and R.D. Mangalekar

**Mr Satya Prakash Rout, AMIE**

**1. Title of Paper:** "Analysis and Visualization of the Center Line in Large Intestine by Virtual Colonoscopic and Processing Algorithms: A Brief Study". *International Journal of Scientific & Engineering Research (IJSER), Vol. 6, Issue 9, September 2015, pp. 989 – 993.*

**2. Title of Paper:** "Quality of Service and Traffic Engineering in MPLS Network by Fuzzy Logic Computing: A Brief Study", *International Journal of Engineering Sciences & Research Technology (IJERST), Vol. 4, Issue 9, September 2015, pp. 415-421.*

**3. Title of Paper:** "Network Performance Enhancement for 1G-EPON by DBA Algorithms", *International Journal of Engineering Research and Applications (IJERA), Vol.5, Issue 8, August 2015, pp.1-4.*



**Ms R Sharanya, AMIE**

**Title of Paper:** "Linear MMSE Time Domain Equalisation Technique for 2x2 MIMO System Without Pilot in LTE", *International Journal of Innovative Research in Science , Engineering & Technology, Vol. 5, Special Issue 2, 2016, pp.68-74.*



# Publications by Members



**Mr S Sivanantham, AMIE**

**1. Title of Paper:** "Review Framework for Hybrid Approaches to Outlier Detection in Wireless Sensor Networks", *Middle-East Journal of Scientific Research*, Vol.24, Issue: 4, pp. 1025-1032,

DOI: 10.5829/idosi.mejsr.2016.24.04.23216.

**2. Title of Paper:** "Secure Vantage Point Application", *International Journal of Engineering Research & Technology*, Volume and issue: NCICCT-2016 Conference Proceedings, pp. 109 - 112.



**Mr Surender Singh Tanwar, AMIE**

**Title of Paper:** "Techno-Economic Analysis of DG Siting and Sizing in Balanced Radial Distribution System". *IEEE International Conference in ICPS 2016* organized

by IIT Delhi during 4-6th March, 2015.



**Mr Manjunath C S, AMIE**

**Title of Paper:** "Study of Mechanical Properties of Steel Polyolefin Hybrid Fibre Reinforced Concrete With Partial Replacement of Cement By GGBS", *Conference on 'Futuristic Technology in Civil Engineering for Sustainable Development' (NCFTCES-16)*, SJBIT, Bengaluru, 7th May, 2016.

**Mr Abhishek Singh, AMIE**

**Title of Paper:** "Effect of Geogrid Reinforcement on Load Carrying Capacity of a Coarse Sand Bed". *International Journal of Civil Engineering and Technology (IJCIET)*, Vol. 7, Issue 3, May-June 2016.



**Prof (Dr) C M Narayanan, MIE**

**Title of Paper:** "Computer Aided Design and Performance Analysis of Inverse Fluidized Bed Biofilm Reactors With Special Reference to Bioplastic Synthesis", *Advances in Chemical Engineering and Science*,

Vol.6, 2016, pp. 130-39.

Co-author: Ms. Shrijta Das

**Mr Rajeev Namdeo, MIE**

**Title of Paper:** "High Stress Abrasive Wear Behaviours of Compatibilized EVA/HDPE Polymer Blends", *Proceedings of National Conference on Emanate Trends in Mechanical & Allied Engineering Sciences, Indore (MP), April 1-2, 2016*, pp. 8-14, ISBN No.: 978-81-925456-3-9.

Co-Authors: S. Tiwari, S. Manepatil and N. Chand



**Dr Harvinder Singh, MIE**

**1. Title of Paper:** "Strength and Performance of Steel Fibre-Reinforced Concrete Stiffened Plates", *Magazine of Concrete Research*, Vol. 68, No. 5, 2016, pp. 250-259.

**2. Title of Paper:** "Steel Fibers as the Only Reinforcement in Concrete Slabs: Flexural Response and Design Chart", *Structural Engineering International*, Vol. 25, No. 4, 2016, pp. 432-441.

**3. Title of Paper:** "Flexural Modelling of Steel-Fibre-Reinforced Concrete Member with Conventional Tensile Rebars", *Building and Structures (SBI)*, pp 44-56.



# Publications by Members



**Mr Rajeev Kumar Chauhan, AMIE**

**1. Title of Paper:** "Intelligent Energy Management System for PV-Battery-based Microgrids in Future DC Homes," *International Journal of Emerging Electric Power*

*Systems, Vol.17, No. 2, April 2016, pp. 173-186.*

Co-Authors: B. S. Rajpurohit, S. N. Singh and F. M. Gonzalez-Longatt.

**2. Title of Paper:** "Voltage Standardization of DC Distribution System for Residential Buildings," *Journal of Clean Energy Technologies, Vol. 4, No.3, May 2016, pp. 167-172.*

Co-Authors: B. S. Rajpurohit, R. E. Hebner, S. N. Singh, and F. M. Gonzalez-Longatt.

**Dr Kanwalvir Singh Dhindsa, MIE**

**Title of Paper:** "Clustering based Cost Optimized Resource Scheduling Technique in Cloud Computing", *i-manager's Journal on Cloud Computing, Vol.2, No. 3, May-July 2015.*



**Mr Bhushan Suresh Akarte, AMIE**

**Title of Paper:** "Determination of Activity Duration Using Fuzzy Logic", *Global Journal Of Engineering Research and Technology (GJERT), IISN 2249-*

*3107, Vol. 5, No.1, 2015, pp. 119-132.*

**Mr Naveen Kumar Gupta, MIE**

**Title of Paper:** "Rainfall and Surface Water Resources of Rajasthan State, India", *Water Policy, Vol. 18, 2016, pp.276-287, IWA Publishing 2016, doi: 10.2166/wp.2015.033.*

Co-Authors: A. S. Jethoo and S. K. Gupta



**Dr. Bhupendra Singh Chauhan, MIE**

**1. Title of Paper:** "Practice of Diesel Fuel Blends using Alternative Fuels: A Review", *Renewable and Sustainable Energy Reviews, Vol.59, 2016, pp. 1358-1368.*

Co-Authors: Ram Kripal Singh, HaengMuk Cho and Hee-Chang Lim

**2. Title of Paper:** "Combustion Behavior of Bio Fuels in A Single Cylinder Diesel Engine", *International Conference of Advance Research and Innovation- 2016, February 27, 2016, The Institution of Engineers (India), Delhi State Centre, Delhi, India.*

**Dr Trupti Ranjan Mahapatra, MIE**

**Title of Paper:** "Nonlinear Free Vibration Analysis of Laminated Composite Spherical Shell Panel Under Elevated Hygrothermal Environment: A Micromechanical Approach", *Aerospace Science and Technology, Vol. 49, 2016, pp. 276-288.*



**Mr Dhundi Raj Dahal, MIE**

**1. Title of Paper:** "Impacts of Melamchi Water Supply Project in Socio-Economic Development of Sindhupalchok District of Nepal", *Journal of Advance Academic Research (JAAR); July, 2015.*

Co-Author: Prof. Dr. Tatwa P. Timsina

**2. Title of Paper:** "A Study on Public Participation in Environmental Management in Melamchi Valley of Nepal", *The International Journal of Science & Technology (ISSN 2321-919X), October, 2015.*

Co-Author: Prof. Dr. Tatwa P. Timsina

# *Welcome* New Institutional Members

## **Dr B B A Govt. Polytechnic Karad (DP)**

Dadar and Nagar Haveli

Silvassa

## **Vels Institute of Science Technology and Advanced Studies**

Velar Nagar, Pallavaran

Chennai

## **Budge Budge Institute of Technology**

Nischintapur, Budge Budge

Kolkata

## **Vignan's Institute of Information Technology**

Gajuwaka

Visakhapatnam

## **Sri Sivani College of Engineering**

Etcherla Mandal

Srikakulam

## **Programmes by Institutional Members**

### **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



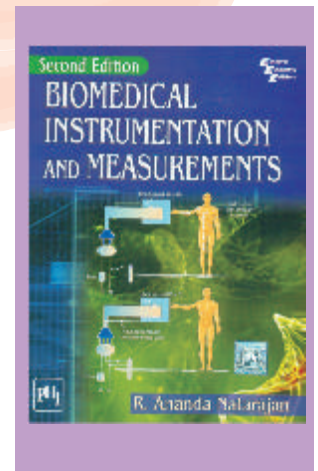
# Book Review



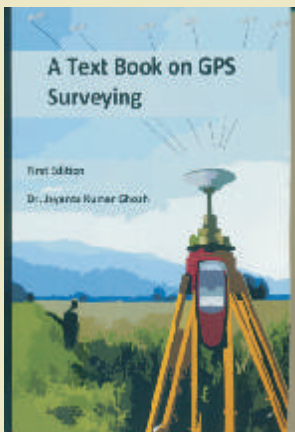
## **Biomedical Instrumentation and Measurements** by **R Ananda Natarajan, FIE**

The book “Biomedical Instrumentation and Measurements” has been designed as a text for the undergraduate students of instrumentation, electrical, electronics and biomedical engineering. This book covers the entire range of instrumentation and their measurement methods used in the medical field. The functions of the biomedical instruments and measurement method are presented keeping in mind those students who have minimum required knowledge of human physiology. This books aims to review the principles of biomedical instrumentation and measurements employed in the hospital industry. Primary emphasis is laid on the method rather than micro level mechanism. It serves to explain the mechanism and functional details of human body, and also how the biological signals of human body can be acquired and used in a successful manner.

**Publisher:** PHI Learning Pvt Limited, Delhi.



## **A Text Book on GPS Surveying** by **Dr Jayanta Kumar Ghosh, MIE**



'A Text Book on GPS Surveying' is an introductory textbook on GPS surveying for students, working professionals as well as field surveyors. The book has been written with the state of art information available in public domain and built upon nuances experienced out of teaching, research and consultancy works by the author. The primary objective of the book is to provide readers a detail insight on GPS Surveying and positioning under one cover. Its aim is to help readers to understand and learn the basics on GPS Surveying systematically at ease and with minimum time. The book starts with an introduction to Global Positioning System (GPS) for land surveying. Subsequently, it also delves into GPS for surveying, collection of GPS observations, contents of GPS observations, determination of positions from GPS observations and finally, network adjustment with worked out example. This book also includes ephemeris algorithms and a bibliography. The well drawn figures and quantitative expressions of the book are expected to provide deep insights of GPS surveying to inquisitive learners.

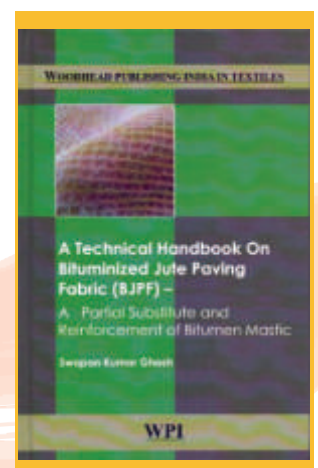
**Publisher:** CreatSpace Independent Publishing Platform (An Amazon Company)

## **A Technical Handbook on Bituminized Jute Paving Fabric (BJPF) – A Partial Substitute and Reinforcement of Bitumin Mastic** by **Prof (Dr) Swapan Kr Ghosh, FIE**

The book states that in the last quarter of the twentieth century, a new class of materials called Geosynthetics emerged which led to significant revolution in the design of geotechnical and geoenvironmental systems. Geotextiles extend the service life of roads, increase their load carrying capacity and reduce rutting and other distresses. The effectiveness of geotextiles in stabilization and separation roles with flexible pavements has been extensively researched.

Recognizing the vast potentiality of this developed Bituminized Jute Paving Fabric (BJPF) as overlay on existing pavements to reinforce and partially substitute the bitumen mastic, a strong desire of sharing the findings stimulated by the author to write this comprehensive technical handbook. The author firmly believes that this book will at least partially fulfill the requirements of the interested engineering students and practicing engineers and may prompt them to delve deeper into the subject to explore new avenues for its use and to refine the existing design methodologies.

**Publisher :** Woodhead Publishing India Pvt. Ltd.



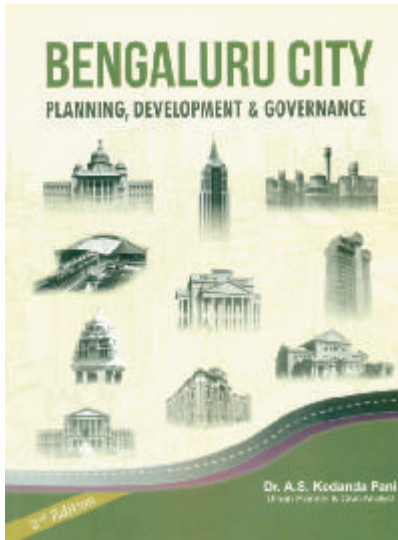
# Book

## Review



### **Bangalore City Planning, Development and Governance**

by **Dr A S Kodanda Pani, FIE**



A proper and comprehensive documentation of the Saga of transformation of the small town 'Bendakaluru' to a civil station / state capital 'Bangalore' and thento metropolis 'Bengaluru' was really a strong and long felt need especially from the town planning and city governance perspective. The developments especially after 1990 have been multi-faceted and mind boggling. The institutional structure and the delivery systems have been totally transformed during last 30 years.

Civic problems are increasing in Bangalore, the only prime city in Karnataka , due to rapid increase in population with increasing economic activities including Information Technology sector and multi-national company activities. The present population of Bangalore is 11 million and it is expected that by about the year 2031 it will be about 13 million. It has become the fourth largest city in India and is known to be investor-friendly city. The urban infrastructure is very much inadequate and civic problems have increased affecting living and working of citizens. Bangalore is faced with serious civic problems like; acute traffic congestion with 5.8 million vehicles, solid waste management problem, bad condition of roads, potable water shortage, sewage flowing in to the lakes and polluting the environment, etc. This book mentions the details of all the problems and proper urban governance.

**Publisher:** Add Contact Publishers, Bangalore

### **Introduction to Computing and Problem Solving with Python**

by **Dr P Sojan Lal, FIE**

This book helps every student, teacher and researcher to understand the computing basics and advanced Python programming language. Python is a widely used general-purpose, high-level programming language.

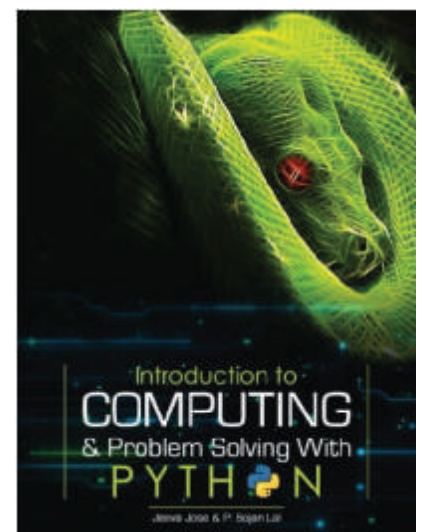
Python can run on any hardware platform or software platform. Its design philosophy emphasizes code readability, and its syntax allows programmers to express concepts in least lines of code than in languages like C++ or Java. The Python programming topics in this book covers all basics and advanced topics like Python regular expressions, Database Programming and Object Oriented Programming concepts.

All chapters have worked out programs, illustrations, review and frequently asked interview questions. The simple style of presentation makes this a friend for self learners. More than 300 solved lab exercises available in this book is tested in Python 3.4.3 version for Windows.

The book covers the syllabus for more than 35 International Universities and 45 Indian universities.

Co-author : Jeeva Jose

**Publisher:** Khanna Publishers, New Delhi





## Members

## Speak

Excellent work for keeping engineers connected and motivated.

**Mr Vinod Kumar Singh, FIE**

It is really a very good forum to share and know about fellow members who have done wonders and have been recognized. Congratulations for the efforts.

**Mr Amitav Routray, MIE**

Epitome is the new version of Newsletter of IEI. It is very informative and knowledge based new concepts of fellow members. I Congratulate to all team of Epitome.

**Mr Pramod Kumar Misra, AMIE**

Congratulations on implementation of superb IEI EPITOME with all details. I request you to include the data copying facility as all will not require all Data's presented but would like to have the details as per the theme, so that I in my own personal experience would like to go through in my spare time - Electrical/ networking/ electronics/robotics/ nano technology etc. in which the papers are presented could be copied to my IEI folder.

Thanking you all for the effort put in,

With regards

**Mr Ravi Sankar Nath, MIE**

IEI Epitome is great initiative to motivate IEI Members. It will help in long run for membership development. We wish this initiative extraordinary success.

**Mr Ashok Maheshwari, AMIE**

Congratulation for the IEI Epitome.

**Mr Hirak Kumar Mitra, FIE**

I appreciate the Institution team in bringing IEI Epitome issues online and feel happy to get it to my mail. I always feel proud to be an AMIE, which has made me a tough teaching professional. I wish the editorial team hearty congratulations and wish to keep continuing.

**Mr N K Rayaguru, MIE**

It is quite encouraging step by IEI, for extending the benefits to the corporate members by introducing new method of networking through Epitome. I have gone through all the issues of Epitome and personally felt that it is highly beneficial to me to know many new activities carried out by IEI members.

**Ch Viswanadham, FIE**

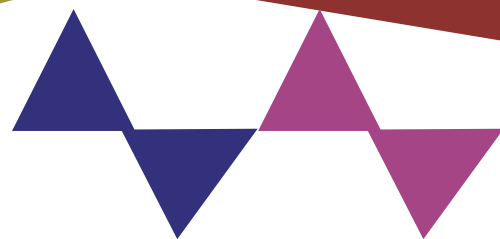
Greetings to IEI Epitome!

I am proud to be a Fellow Member of IEI. We the members of IEI are delighted to see such a great initiative from the Administrative Team of IEI. In the present day context, bringing out an e-news letter would give wide coverage which in turn encourages more enrollments from engineering fraternity to IEI family. I believe IEI has more potential to accomplish greater things in future.

**Dr D Venkata Rao, FIE**



# 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

31<sup>st</sup> 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](mailto:award@ieindia.org) / [iei.technical@gmail.com](mailto: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/jourtechdwldns.aspx](http://www.ieindia.org/jourtechdwldns.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](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)

## National Workshop on Advances in Repair and Rehabilitation of Concrete Structures

September 22-23, 2016

Organised by  
**CSIR-Central Building Research Institute  
Roorkee**

For details please contact :

**Dr B Singh**

Chief Scientist & Convener

CSIR-CBRI, Roorkee

Email: [singh122000@yahoo.com](mailto:singh122000@yahoo.com)

Ph : (01332) 283481; Mob: 09719303934

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**IEI epitome**

**President : Mr H C S Berry**

Editor : Dr Anil Kumar

Associate Editor: Mr S Chaudhury

Special Contributors: Mr N Sengupta, Mr K Sen, Dr S Ghosh, Mr T Chakraborty, Ms A Dutta, Ms S Biswas Sett, Mr T K Roy, Mr S Bagchi, Ms H Roy

Telephones: 91-33-2223 8311/14/15/16

E-mail: [newsletter@ieindia.org](mailto:newsletter@ieindia.org)

Web: <http://www.ieindia.org>