

# IEI *Epitome*

January 2017, Volume 2, Number 1

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# Members in the News

## **Prof. Debendra C. Baruah, FIE**

*Dean, Students' Welfare and Former Head, Department of Energy, Tezpur University, Tezpur, Assam*



- Chaired the technical sessions in the 6th International Conference on 'Solid Waste Management' organized by Jadavpur University at Kolkata during November 23- 26, 2016.
- Delivered a plenary talk on "Biogas Technology for Rural Development of Northeast India" in the 103rd Indian Science Congress held at Mysore University during January 03-07, 2016.

## **Dr. P. C. Reghu Raj, MIE**

*Principal, Government Engineering College, Srikrishnapuram, Palakkad, Kerala*



- Taken charge as Principal of Government Engineering College, Palakkad from June 08, 2016.
- Delivered lecture on "Computational Linguistics and its Connection with Data Science" as part of the Faculty Development Program on Natural Language Processing and Machine Learning organised by Vidya Academy of Science and Technology at Thrissur during September 01, 2016.
- Invited to deliver a lecture on "Computational Linguistics and Data Science" organised by InApp Technologies, Technopark at Trivandrum on July 23, 2016.

## **Mr. M. N. Talawar, MIE**

*Selection Grade Lecturer, Department of Electrical and Electronics Engineering, B. V. V. S. Polytechnic, Bagalkot, Karnataka*



Awarded with prestigious 'Indira Gandhi NSS Award' by Ministry of Youth Affairs and Sports, Government of India for Best Programme Officer for the session 2015-16. He received the award from Mr. Pranab Mukharjee, Honourable President of India at Rashtrapathi Bhavan, New Delhi on November 19, 2016.



## **Dr. Naveen B. P., AMIE**

*Senior Geotechnical Engineer, Ayesa-Geodata-Aarvee-Korean Rail Consortium*

Received 'Aqua Foundation's Academic Excellence Award' for his contribution in Solid Waste Management from Dr. Sunita Narain, Director General, Centre for Science and Environment at New Delhi on November 24, 2016.



## **Prof. S. K. Mazumder, FIE**

*Former Emeritus Professor, AICTE, Delhi Technological University*

- Invited to deliver talk on the topic "River Behavior near Hydraulic Structures" at a technical event jointly organised by Central Water Commission (CWC), Government of India; Institution of Public Health Engineers, Delhi Center and Delhi Technology University, held at the premises of CWC on December 02, 2016.
- Delivered keynote address on the topic "Bridge Scour in Fine and Coarse Soil" during the plenary session of the 20th International Conference on Hydraulics, Water Resources and River Engineering: HYDRO 2015 organised by Indian Society for Hydraulics and Indian Institute of Technology Roorkee during December 17-19, 2015.

## **Dr. Prem Parkash Mittal, FIE**

*Director, A-Z Energy Engineers Pvt. Ltd., New Delhi*



Awarded 'Energy Conservation Award 2016' by Ministry of Power, Government of India on December 14, 2016 for his contribution as an accredited Energy Auditor.

# Members in the News

## Mr. Bibhas Chandra Bhattacharya, FIE



*Council Member and Editor, Mining, Geological and Metallurgical Institute of India (MGMI), Kolkata and Former Chief General Manager, World Bank Project Division, Coal India Limited, Kolkata*

Attended Workshop on 'Modern Mining Engineering Curriculum in India' organised by the Department of Mining Engineering, Indian Institute of Technology Kharagpur during November 24-25, 2016 on invitation and delivered a presentation on the subject topic.



## Dr. Ambresh P. Ambalgi, MIE

*Assistant Professor, Department of P.G. Studies and Research in Electronics, Mangalore University, Konaje, Mangalore*

- Delivered lecture on "Wireless Generation Technologies" at Department of Electronics and Communication, N. V. Polytechnic

College, Gulbarga on September 14, 2016.

- Delivered keynote lecture on the topic "Moving towards Environmental, Social and Economic Developments: Green and Sustainable Technology (Inspiring Examples)" at International Conference on 'Envirotech, Cleantech and Greentech-2016' organized by World Association for Scientific Research and Technical Innovation-GRDS at Regal Oriental Hotel, Kowloon City, Hong Kong, China during October 20-21, 2016.



## Mr. Venkata Narayana Angina, MIE

*Research Officer (Water Supply), Rural Development Division, National Institution for Transforming India (NITI AAYOG), Government of India, New Delhi*

Participated in "NITI Lectures on Transforming India" Series organised by NITI AAYOG at Vigyan Bhavan on

November 16, 2016 in presence of Mr. Narendra Modi, Honourable Prime Minister, Council of Ministers and Senior Officers of Government of India. On this occasion, Mr. Bill Gates, Co-chair, Bill and Melinda Gates Foundation delivered the keynote address.

## Dr. N. Bhanu Prakasham Reddy, AMIE

*Assistant Executive Engineer, Design Division No.2, Office of the Chief Engineer, NTRTGP, Tirupati, Chittoor District, Andhra Pradesh*



Received 'George Oomen Memorial Prize' for his research paper on "Effect of Convergent and Divergent Boundaries on Flow Resistance through Porous Media" on December 16, 2016 during the 31st Indian Engineering Congress organized by The Institution of Engineers (India) at Kolkata. The paper was published in the Journal of The Institution of Engineers (India): Series A, Vol. 96, Issue 4, October-December 2015.

## Dr. Darshan M. B., AMIE

*Assistant Research Engineer, AICRP on PHET (ICAR), University of Agricultural Sciences, Gandhi Krishi Vignan Kendra, Bengaluru*



Received 'Young Scientist Award' from Society of Scientific Development in Agriculture and Technology, Meerut for his outstanding contribution in the field of Post Harvest Engineering and Technology on the occasion of National Conference on 'Innovative and Current Advances in Agriculture and Allied Sciences' organised by Prof. Jayashankar, Telangana State Agricultural University at Hyderabad during December 10-11, 2016.

# Members in the News

## Mr. M. M. Madan, FIE



*CEO (Hydro and Renewables Business), Jindal Power Limited and President, Arunachal Pradesh Power Companies Association*

Received 'Aqua Foundation's Excellence Award' under the category of Professional Excellence (Individual) for his outstanding contribution in 'Sustainable Development of Hydropower for past 40 years at National and International Level' and 'Development of 5P System of Execution in Extremely Weak Rock Formations in Underground Works' on the occasion of 10th World Aqua Congress 2016 held at India Habitat Centre, New Delhi on November 24, 2016.



## Mr. Abhishek Appaji M, AMIE

*Assistant Professor, Department of Medical Electronics, B. M. S. College of Engineering, Bengaluru, Karnataka*

- The team lead by him won the first position for the presenting the Genesis on "Real-Time Personal Monitoring Device for Pregnant

Women in Rural Areas" in the competition 'MED4DEV 2016 India-Israel Affordable Healthcare Hackathon' organised by Pears Program for Global Innovation at Bangalore during July 22-24, 2016.

- Invited for College Audit at BIT Institute of Technology Hindupur, Andhra Pradesh on September 26, 2016.
- Winner of 'Elderly Care Hackathon' organised by Municipality of Hague, Netherlands from October 02-07, 2016.



## Mr. S. V. V. Satyanarayana, MIE

- Became Chartered Engineer and received fellowship in Mechanical Engineering from Institution of Mechanical Engineers, UK in June 2016.

- ATKINS has declared him as the Role Model for Engineering Business in August 2016.
- Institution of Mechanical Engineers, UK has released a video on his contribution to professional development and contribution to engineering industry on September 15, 2016 on the occasion of Engineers Day.



## Dr. Wooday P. Krishna, FIE

*Techno-Legal Expert and Council Member, IEI*

Nominated as Chairman of the Indian Institution of Technical Arbitrators (IITArb), Karnataka State Centre for the balance session 2016-17 and full session 2017-18 by the Council of IITArb at its meeting held at Kolkata on December 09, 2016.



## Ms. M. Kavitha, MIE

*Assistant Professor, Department of Electronics and Communication Engineering, Government College of Engineering, Bargur, Tamilnadu*

Invited as Chief Guest at the event "PROJECT EXPO'16" organized by Varuvan Vadivelan Institute of Technology, Dharmapuri on March 16, 2016.



## Dr. K. Rajasekar, MIE

*Manager, Research and Development, BEML Limited, Mysore*

Awarded Ph.D on the topic "Design and Validation of On-Road Heavy Vehicle Chassis" in Mechanical Engineering from Jain University, Bangalore in November 2016. He has received the Convocation certificate from Dr. Mahendra Nath Pandey, Hon'ble Minister of State (Higher Education), Ministry of Human Resource Development, Government of India on the occasion of 6th Annual Convocation of Jain University at Jain Global Campus, Jakkasandra, Ramanagara, Karnataka on December 23, 2016.



# Members in the News



**Mr. B. K. Gavit, AMIE**

*Assistant Professor, Department of SWCE, Dr. ASCAE, MPKV, Rahuri, Maharashtra*

Received 'Best Paper Award' for his paper on "Utilization of Waste for Energy Production" at All India Seminar on 'Mechanical Composting of Municipal Solid Wastes for using It as Farmland Fertilizer', organized by The Institution of Engineers (India), Udaipur Local Centre at Udaipur during December 23-24, 2016.



**Dr. Pralay Pal, MIE**

Invited as a keynote speaker at the International Conference on 'Management of Ergonomic Design, Industrial Safety and Healthcare Systems 2016' organized by Indian Institute of Technology Kharagpur on

December 22, 2016 and delivered the lecture on the topic "Digitizing Industrial Safety Practices in Automotive OEM".



**Mr. Krishna Lok Singh, MIE**

*Senior Scientist, Structural Technologies Division, CSIR-National Aerospace Laboratories, Bengaluru*

Received 'Sir C. V. Raman Research Fellowship' from Council of Scientific and Industrial Research (CSIR) on December 04, 2015 for the period 2015-16 to work on 'Rolling Element Bearing Diagnosis using Mechanical Fault Simulator' at Cranfield University, IVHM Centre, UK.

**Mr. Sandeep Sitoke, AMIE**

*Deputy General Manager (PLM), Office of the Managing Director, Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited, Bhopal*

Nominated as Energy Manager of Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited on July 18, 2016.



**Dr. Parameshachari B. D., MIE**

*Professor and Head, Department of Telecommunication Engineering, G. S. S. S. Institute of Engineering and Technology for Women, Mysuru, Karnataka*



- Received Young Scientist Award from Mr. Daniel Manoharan S, Managing Editor, Aufau International Awards, Aufau Periodicals, Salem for

his valuable contribution and achievements in the field of Electronics and Communication Engineering on December 04, 2016.

- Received Young Scientist Award for the year 2016 for his initiatives, discoveries and developments in the discipline of Image Processing from Dr. R. Sathishkumar, General Chair, VIRA and Chairman, Venus International Foundation, Adambakkam, Chennai at event organised by Venus International Research Award (VIRA).

- Acted as Organizing Chair and Publication Chair for the IEEE- International Conference on 'Electrical, Electronics, Communications, Computers Technologies and Optimization Techniques' organised by G.S.S.S. Institute of Engineering and Technology and technically co-sponsored by IEEE Bangalore Section for Women at Mysuru during December 09-10, 2016.

**Mr. B. Ramagopal, FIE**

*Principal Consultant, NAVALE Consulting Group, Kakaguda, P.O. Trimulgherry, Secunderabad, Telangana*

Received 'Lifetime Achievement Award' on the occasion of the Annual Awards Function of Regional Centre of Institution of Indian Interior Designers held at Hyderabad on October 21, 2016.



# Publications by Members

## Mr. Pritam Prakash Bhiungade, AMIE

Assistant System Engineer, Tata Consultancy Services, Mumbai

**Title of Paper:** "Investigation of Pressure Variation and Fluid Flow Behavior inside the Shock Absorber Piston Assembly using CFD Simulation and Design of Experiments", 2015 Altair Technology Conference organised by Altair Organization at Bangalore on July 14-15, 2015.

Co-author(s): Swapnil S. Kulkarni, B. Ravi, G.R. Boob



## Prof. Debendra C. Baruah, FIE

Dean, Students' Welfare and Former Head, Department of Energy, Tezpur University, Tezpur, Assam



• **Title of Paper:** "GIS based Planning of a Biomethanation Power Plant in Assam, India", *Renewable and Sustainable Energy Reviews*, Vol. 62, 2016, pp. 596–608.

Co-author(s): Antara Brahma, Kangkana Saikia, Moonmoon Hiloidhari

• **Title of Paper:** "Biogas Production from Surplus Plant Biomass Feedstock: Some Highlights of Indo-UK R&D Initiative", *Elsevier Procedia Environmental Sciences*, Vol. 35, 2016, pp. 785–794.

Co-author(s): Dipam Patowary, Helen West, Michèle Clarke

• **Title of Paper:** "Steady State Heat Transfer Modeling of Solid Fuel Biomass Stove: Part 1", *Energy*, Vol. 97, 2016, pp. 283-295.

Co-author: Biswajit Gogoi



## Prof. S. K. Mazumder, FIE

Former Emeritus Professor, AICTE, Delhi Technological University, Delhi

• **Title of Paper:** "Irrigation Management by Loss Reduction, Recycling and Water Transfer", *Proceedings of National Conference on 'Challenges in Irrigation Mgt. for Food Security' organised jointly by Indian Water Resources Society Roorkee, Min. of Water Resources, River Development and Ganga Rejuvenation- Government of India and Jain Irrigation Systems during December 26-27, 2016.*

Co-author: L. V. Kumar

• **Title of Paper:** "Scour in Bridge Piers on Non-Cohesive Fine and Coarse Soil", *ISH Journal of Hydraulic Engineering*, Taylor and Francis Online, October 12, 2016.

• **Title of Paper:** "Size and Weight of Stone for Protection of River Banks and Embankments", *Proceedings of 20th International Conference on 'Hydraulics, Water Resources and River Engineering; HYDRO-2015' organised jointly by Indian Society for Hydraulics and Indian Institute of Technology Roorkee, December 17-19, 2015.*

## Mr. Abilash Jose, AMIE

Lecturer, D.E and F.O Engineering, B.T.T.I, Pilani, Rajasthan



• **Title of Paper:** "Frequency Response by AC Analysis on One-Pole Low Pass Filter for the Modification of Fixed Physically Constraints and to Manipulate Sound into a Different One", *American Journal of Mechanical and Industrial Engineering*, Vol. 1, Issue 2, September 2016, pp. 27-30.

• **Title of Paper:** "Futuristic and Strategic Technological Advancements in Communication Method to Switch from 4th Generation Long Term Evolution to 5th Generation" *International Journal for Scientific Research and Development*, Vol. 4, Issue 2, June 2016, pp. 402-404.

• **Title of Paper:** "Dazzle Power Logical Extended Surround Interface a New Evolution in Multi Channel Audio Professional Theatre System", *International Journal for Research in Applied Science and Engineering Technology*, Vol. 4, Issue 3, March 2016, pp. 377-382.



# Publications by Members

## Mr. Mohammed Asim, AMIE

Assistant Professor, Integral University, Lucknow, Uttar Pradesh



**Title of Paper:** "An Improved Constant Voltage Based MPPT Technique for PMDC Motor", *International Journal of Power Electronics and Drive Systems*, Vol. 7, No. 4, December 2016.

Co-author(s): Mohd. Tariq, M.A. Mallick, Imtiaz Ashraf

## Dr. P. C. Reghu Raj, MIE

Principal, Government Engineering College, Srikrishnapuram, Palakkad, Kerala



**Title of Paper:** "Design and Implementation of RTRL Based Adaptive Controller for TCSC to Enhance Power System Stability", *Proceedings of IEEE International Conference TENCON 2016- Technologies for Smart Nation* organised by IEEE Singapore Section at Singapore during November 22-25, 2016.

Co-author: Sindhu Thampatty K. C.



## Mr. A. Vinothkumar, AMIE

Administrative Co-ordinator, ACS Medical College and Hospital, Dr. M. G. R. Educational and Research Institute University, Velappanchavadi, Chennai

**Title of Paper:** "Cloud Based Server Incorporating Attribute Based Encryption (ABE) Processes", *International Journal of Engineering Sciences and Research Technology* Vol. 5, No. 11, 2016, pp-10-21.

Co-author: M. Anand



## Dr. Mahendra Pratap Choudhary, FIE

Associate Professor, Department of Civil Engineering, Rajasthan Technical University, Kota

● **Title of Paper:** "Heavy Metal Concentrations in Topsoil along National Highway-12, Kota-Deoli (Tonk)", *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 8, August 2016, pp. 14793 – 14802.

Co-author: Yogesh Kumar Kushwah

● **Title of Paper:** "Evaluation of Physico-chemical Parameters of Alania and Lakhawa Natural Wetlands of Kota, India with regard to Aquatic Organisms and Wildlife Species", *International Journal of Emerging Technology and Advanced Engineering*, Vol. 6, Issue 8, August 2016, pp. 54-61.

Co-author: Govind Singh Chauhan

● **Title of Paper:** "Assessment of Vehicular Air Pollution in Kota City, Rajasthan", *International Advanced Research Journal in Science, Engineering and Technology*, Vol. 3, Issue 7, July 2016, pp. 268 – 272.

Co-author: Himanshu Gupta

## Dr. Abhijit Saha, FIE

Irrigation and Waterways Department, Government of West Bengal



**Title of Papers:** (a) "An Unique Formula for the Stone-column Group Efficiency" and (b) "Analytical Method of Stone Columns compared with an Analysis as per Rowe Dilatancy Theory", *Proceedings of 6th Conference on 'Deep Foundation Technologies for Infrastructure Development in India'* organised by Indian Institute of Engineering Science and Technology, Shibpur at Kolkata during September 09-10, 2016.

# Publications by Members

## Mr. Raj Kumar Saini, MIE

Associate Professor, Shoolini University, Solan, Himachal Pradesh

**Title of Paper:** "Design Improvement and Assessment of Efficiency of Three Phase Induction Motor Operating under the Rated Voltage", *Proceeding of 'International Conference on Intelligent Communication, Control and Devices' organised by University of Petroleum and Energy Studies, Dehradun, Uttarakhand, April 4-6, 2016, Vol. 479 of the series Advances in Intelligent Systems and Computing, pp. 495-502.*



## Mr. Sita Ram Bhardwaj, AMIE

Ph.D Research Scholar, Department of Electrical Engineering, National Institute of Technology Hamirpur, Himachal Pradesh

• **Title of Paper:** "Analysis of Induction Motor Drive using SPRS based on GTO/IGBT Buck-Boost Chopper Topologies", *Proceeding of 7th IEEE India International Conference on 'Power Electronics' organized by Thapar University at Patiala during November 17-19, 2016.*

Co-author(s): O. P. Rahi, Veena Sharma, Prakash Kumar, Rishav Choudhary, Gaurav Vardhan, Rajat Choudhary



• **Title of Paper:** "Reactive Power Control of Induction Motor Drive using Chopper Operated Slip Power Recovery Scheme", *Proceedings of IEEE 7th Power India International Conference organized by Government Engineering College, Bikaner, Rajasthan during November 25-27, 2016.*

Co-author(s): O. P. Rahi, Veena Sharma, Prakash Kumar, Rishav Choudhary, Gaurav Vardhan, Rajat Choudhary

## Prof. K. Sadashivappa, MIE

Department of Mechanical Engineering and Dean Academics, Bapuji Institute of Engineering and Technology, Davangere, Karnataka

**Title of Paper:** (a) "Investigation of Wear Behavior of PF based Wood Plastic Composite-A Taguchi Approach" and (b) "Experimental Investigation to Find Correlation between Brinell Hardness and Tensile Strength of Pf based Wood Plastic Composites", *Proceedings of International Conference on 'Hybrid and Composite Materials and Chemical Processing-2016' organised by St. Peters Engineering College at Hyderabad during October 25-27, 2016.*

Co-author(s): R. S. Ramesh, L. Sharanaprabhu



## Dr. Ambresh P. Ambalgi, MIE

Assistant Professor, Department of P.G. Studies and Research in Electronics, Mangalore University, Konaje, Mangalore

• **Title of Paper:** "Design and Study of Pentagonal, Square Slotted Patch Antenna for Wireless Applications", *International Journal on Emerging Technologies, Vol.7, No.2, October 2016, pp. 5-7.*

• **Title of Paper:** "Plus Shape Fractal Antenna with EBG Structure for Wireless Communication", *International Journal on Emerging Technologies, Vol.7, No.2, October 2016, pp. 14-20.*

• **Title of Paper:** "Coaxial Fed Microstrip Slotted Patch Antenna for Wideband Applications", *International Journal of Advancement in Engineering Technology, Management and Applied Science, Vol. 3, No.1, May 2016, pp.271-274.*



## Dr. R. Ravi Varma, MIE

Associate Professor, Department of Mechanical Engineering, GITAM University, Hyderabad, Telangana

**Title of Paper:** "Subsurface Barriers for Hazardous Waste Containment", *International Journal of Technology, Vol. 5, Issue 2, July-December, 2015.*





# Publications by Members

## Dr. Seshadhri Srinivasan, AMIE

**Title of Paper:** "Model Predictive Control-Based Optimal Operations of District Heating System with Thermal Energy Storage and Flexible Loads", *IEEE Transactions on Automation Science and Engineering*, Vol. PP, Issue 99, November 2016, pp. 1-11.

Co-author(s): Verrilli F., Gambino G., Canelli M., Himanka M., Del Vecchio C., Sasso, Maurizio, Glielmo L.



## Mr. Prashant Sathe, AMIE

Structural Engineer

**Title of Paper:** "Elasto-Plastic Damage Analysis Based on Strain-Space Plasticity", *Proceedings of 11th International Symposium on 'Plasticity and Impact Mechanics 2016'* organised by Indian Institute of Technology Delhi at New Delhi during December 11-14, 2016.

Co-author: Dr. B. M. Dawari



## Dr. B. Vinoth Kumar, MIE

Assistant Professor, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore, Tamilnadu



**Title of Paper:** "A Problem Approximation Surrogate Model (PASM) for Fitness Approximation in Optimizing the Quantization Table for the JPEG Baseline Algorithm", *Turkish Journal of Electrical Engineering and Computer Sciences*, Vol. 24, Issue 6, December 2016, pp. 4623-4636.

## Mr. Vijaykumar H. K., MIE

Assistant Professor, Department of Mechanical Engineering, Yenepoya Institute of Technology, Thodar, Moodbidri, Dakshin Kannada, Karnataka

**Title of Paper:** "A Review on Foundries Approaching Product Life Cycle Management", *International Journal of Advances in Science and Technology*, Vol. 12, Issue No. 25, (Special Issue), December 2016.



## Dr. Naveen Kumar Gupta, MIE, Chartered Engineer

Executive Engineer, Water Resources Department, Government of Rajasthan



**Title of Paper:** "Temporal Variation of Inflow to the Dams of Rajasthan State", *Proceedings of Hydro 2016 International Conference*, organized jointly by Central Water and Power Research Station (CWPRS) and Indian Society for Hydraulics, Pune at the premises of CWPRS Pune during December 08-10, 2016.

## Mr. Shahnawaz Mohsin, FIE

Associate Professor, Mechanical Engineering Section, University Polytechnic, AMU Aligarh, Uttar Pradesh

**Title of Paper:** "Ergonomic Evaluation of a CNC Milling Environment using Energy Expenditure Prediction Program", *Proceedings of 14th Annual International Ergonomics Conference on 'Humanizing Work and Work Environment 2016'* of the Indian Society of Ergonomics (ISE), organized by Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab at IT Park, NIT Jalandhar during December 08-11, 2016.

Co-author(s): Imtiyaz Ali Khan, Mohammed Ali



## Dr. M. Rengasamy, MIE

Assistant Professor, Department of Petrochemical Technology, Bharathidasan Institute of Technology, Anna University, Tiruchirapalli, Tamilnadu

**Title of Paper:** "Castor Leaf Mediated Synthesis of Iron Nanoparticles for Evaluating Catalytic Effects in Transesterification of Castor Oil", *RSC Advances*, Vol. 6, 2016, pp. 9261-9269.

Co-author(s): V. Pugalenth, K. Anbalagan, S. Kodhaiyolii



# Publications by Members

## Mr. Avijit Mallick, AMIE

Reliance Power Ltd. Madhya Pradesh



**Title of Paper:** "Flue Gas Desulphurisation : A Sustainable Development Technology For Thermal Power Plants", *Proceedings of 32nd National Convention of Mechanical Engineers and National Seminar on 'Indian Manufacturing Industries-Challenges and Opportunities' organised by The Institution of Engineers India, Jharkhand State Centre at Ranchi during December 10-11, 2016, pp. 36-40.*

## Mrs. M. Rama Subbamma, MIE

Director of Academics and Professor, Department of Electrical and Electronics Engineering, Global College of Engineering and Technology, Kadapa, Andra Pradesh



• **Title of Paper:** "A Variable Speed PFC Converter for Brushless SRM Drive", *International Journal on Cybernetics and Informatics, Vol. 5, No. 1, February 2016, pp. 31-44.*

• **Title of Paper:** "SRM Speed Control with Various Converter Topologies", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 5, Issue 6, June 2016, pp. 4939-4951.*

• **Title of Paper:** "Design and Simulation of PFC Converter for Brushless SRM Drive", *International Journal of Power Electronics and Drive Systems, Vol. 7, No. 3, September 2016, pp. 625-637.*



## Mr. S. A. Rizvi, MIE

Workshop Superintendent, University Polytechnic, JMI, New Delhi

• **Title of Paper:** "A Review on Machinability of Different Materials by Turning Process", *Journal of Mechanical and Mechanic Engineering, Vol. 2, No. 3, 2016, pp. 28-58.*

Co-author: Wajahat Ali

• **Title of Paper:** "Optimization of machining parameters affecting surface roughness of EN8 Steel in CNC Turning by using the Taguchi Technique", *Journal of Mechanical and Mechanics Engineering, Vol. 2, No. 3, 2016, pp. 59-71.*

Co-author: Wajahat Ali

• **Title of Paper:** "Application of Taguchi Technique to Optimize the Process Parameters Of MIG Welding on IS2062 Steel", *International Journal on Emerging Trends in Mechanical and Production Engineering, Vol. 2, Issue 2, 2016.*

Co-author(s): Prof. S. P. Tewari, Wajahat Ali



## Dr. H. N. Nagaraja, FIE

Principal and Director, Noble Group of Institutions, Junagadh, Gujarat

• **Title of Paper:** "DSP Based Proportional Integral Sliding Mode Controller for Photo-Voltaic System", *International Journal of Electrical and Power Systems, Elsevier, Vol. 71, October 2015, pp. 123-130.*

Co-author: Subramanya Bhat

• **Title of Papers:** (a) "Pattern Analysis and Methodology for Short Term Load Forecasting" and (b) "Design Analysis of Multistage Synchronous DC-DC converter for VRM Application", *Proceedings of 1st National Conference on 'Recent Trends in Engineering, Management and Pharmacy' organised by Noble Group of Institutions, Junagadh, Gujarat during March 11-12, 2016.*

Co-author: (a) Swetha Shah; (b) Basavaraj Madoggond

## Mr. Aniruddha Basu, AMIE

**Title of Paper:** "Post Boost Track Processing Using Conventional DBMS Software", *Defence Science Journal, Vol. 66, Issue 2, March 2016, pp. 130-137.*





# Publications by Members

## Mr. Yogendra Arya, AMIE

Assistant Professor, Electrical and Electronics Engineering Department, Maharaja Surajmal Institute of Technology, New Delhi

- **Title of Paper:** "Optimal AGC with Redox Flow Batteries in Multi-area Restructured Power Systems," *International Journal of Engineering Science and Technology (Elsevier)*, Vol. 19, No. 3, September 2016, pp. 1145–1159.

Co-author: Narendra Kumar



- **Title of Paper:** "AGC of a Two-area Multi-source Power System Interconnected via

AC/DC Parallel Links under Restructured Power Environment," *Optimal Control Applications and Methods*, Vol. 37, No. 4, July-August, 2016, pp. 590–607.

Co-author(s): Narendra Kumar, Ibraheem

- **Title of Paper:** "AGC of a Multi-area Multi-source Hydrothermal Power System Interconnected via AC/DC Parallel Links under Deregulated Environment," *International Journal of Electrical Power and Energy Systems (Elsevier)*, Vol. 75, February 2016, pp. 127–138.

Co-author: Narendra Kumar

## Dr. M. Kedar Mallik, AMIE

Associate Professor, Department of Mechanical Engineering, Vidya Vihar Educational Trust, Purnea, Bihar

- Title of Paper:** "Influence of Heat Treatment on Tensile Properties of LENS Deposited Co-Cr-Mo Alloy", *Proceedings of 27th National and 6th International Conference on 'All India Manufacturing Technology, Design and Research 2016'* organised by AIMTDR Committee at College of Engineering, Pune during December 16-18, 2016.



## Mr. Fasludeen N. S., AMIE

Ph.D Research Scholar, Department of Post-Harvest Engineering and Technology, Aligarh Muslim University, Aligarh



- **Title of Paper:** "Performance evaluation of CIFT Hybrid Dryer", *International Conference on 'Science and Technology for National Development'* organised by the Indian Science Congress Association- Cochin Chapter at KUFOS, Kochi during October 25-26, 2016.

- **Title of Paper:** "Comparison of Performances of Different CIFT Dryers", *Proceedings of 26th Swadeshi Science Congress and National Seminar on 'Blue Growth'* organized by Swadeshi Science Movement- organised by Kerala Chapter of Vijana Bharati at CMFRI, Kochi during November 07-09, 2016.

- **Title of Paper:** "Standardisation of Protocol for Spiced Dehydrated Aonla Segments using Solar Drier", *India International Science Festival 2016* organised by Department of Science and Technology and CSIR at National Physical Laboratory New Delhi during December 07-11, 2016.

Co-author: Sujayashree O. J.

## Ms. Shraddha S. Suratkar, AMIE

Assistant Professor, Department of Computer Engineering and Rector Girls Hostel, VJTI Matunga, Mumbai, Maharashtra

- **Title of Paper:** "Evolution of Database Management System and Its Impact on Growth of Industries", *International Journal of Pure and Applied Research in Engineering and Technology*, Vol. 5(2), September 2016, pp. 309-318.

- **Title of Paper:** "Need of Digital Forensics in Cloud Computing Environment", *The International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 9, September 2016.



- **Title of Paper:** "APACHE TIKA: An Effective Data Mining Tool for Regulatory Rules", *International Journal of Pure and Applied Research in Engineering and Technology*, Vol. 4(9), April 2016, pp. 503-514,

# Publications by Members

## Mr. B. Kesava Rao, AMIE

Research Scholar, Department of Civil Engineering,  
National Institute of Technology Karnataka, Surathkal

**Title of Paper:** "Fracture Characterization of Bone using Crack Equivalent Concept", *Proceedings of Structural Engineering Convection - 2016, organised by CSIR-Structural Engineering Research Center at CSIR-SERC, CSIR Campus, Taramani, Chennai during December 21-23, 2016.*



## Ms. M. Kavitha, MIE

Assistant Professor, Department of Electronics and Communication Engineering Government College of Engineering, Bargur, Tamilnadu

● **Title of Paper:** "Power Gating Techniques for Leakage Reduction in CMOS Circuits - a Brief Survey", *i-manager's Journal on Circuits and Systems, Vol. 4, Issue 1, February 2016, pp. 20-26.*



● **Title of Paper:** "Power and Ground Bounce Analysis of VLSI Circuits using Low Leakage Charge Recycling Technique", *Proceedings of 3rd National Conference on 'Emerging Trends in Advanced Computing and Communication' sponsored by TEQIP-II and organised at Government College of Engineering, Bargur sponsored by TEQIP-II during March 17-18, 2016.*

## Mr. Rajesh M., AMIE

Assistant Professor, Department of Mechanical Engineering,  
Gates Institute of Technology,  
Anatapuram, Andhra Pradesh



**Title of Paper:** "Investigation and Analysis of Turning Tool (High Manganese Steel) using Finite Element Method", *International Journal of Engineering and Management Research, Vol. 6, Issue 6, November-December 2016, pp. 178-184.*

Co-author(s): V. Siva Prasad, Dr. G. Nagamalleswa Rao

## Prof. K. R. Ramana, MIE

**Title of Paper:** "Initiatives to Make India The 'Skill Capital' of the World", *Indian Highways, Special Edition published on the occasion of 77th Indian Road Congress organised at Hyderabad during December 15-18, 2016, Vol. 44, No. 12.*



Co-author(s): Sajjan Singh Nahar, Bikshapathi Kondai

## Mr. H. N. Bhange, MIE

Assistant Professor, Department of Soil and Water Conservation Engineering, College of Agricultural Engineering and Technology, Dapoli, Maharashtra



**Title of Paper:** "Sustainable Management of Domestic Solid Waste of Urban Area: A Case Study", *Proceedings of All India Seminar on "Mechanical Composting of Municipal Solid Wastes for Using It as Farmland Fertilizer" organized by The Institution of Engineers (India),*

*Udaipur Local Center at Udaipur during December 23-24, 2016.*

Co-author(s): P. K. Singh, R. C. Purohit, P. M. Ingle, B. K. Gavitt

## Mr. Dayananda Shetty K., MIE

**Title of Paper:** "Measuring Port Performance and Productivity", *Proceedings of 21st ISH-HYDRO 2016 International Conference on 'Hydraulics, Water Resources and Coastal Engineering' organized by Central Water and Power Research Station, Pune under the aegis of The Indian Society for Hydraulics during December 8-10, 2016.*

Co-author: Dr. G. S. Dwarakish





# Publications by Members

## Dr. N. Venkatachalapathi, FIE

Professor and Head, Department of Mechanical Engineering, Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, Kadapa, Andhra Pradesh

### Title of Paper:

"Categorization and Characterization of Fatigue Performance of S235 Structural Steel – A Study of NDT Techniques", *International Symposium for Research Scholars on 'Metallurgy, Material Science and Engineering' organised by Indian Institute of Technology Madras at Chennai during December 21-23, 2016.*



## Dr. Parameshachari B. D., MIE

Professor and Head, Department of Telecommunication Engineering, G. S. S. S. Institute of Engineering and Technology for Women, Mysuru, Karnataka

● **Title of Paper:** "Application of Adaptive Filter - Hilbert Transform to Detect FECG", *International Journal of VLSI Design, Microelectronics and Embedded System, Vol. 1, Issue 2, December 22, 2016, pp. 17-24.*

● **Title of Paper:** "A Comparative Study of EMD and EEMD Based Adaptive Thresholding Method for Speech Enhancement", *International Journal of Radio, Space and Aerospace Engineering, Vol. 1, Issue 2, December 22, 2016, pp. 17-34.*



## Dr. N. Bhanu Prakasham Reddy, AMIE



**Title of Paper:** "Bed Slope Effect on Non-uniform Flow through Porous Media", *Journal of The Institution of Engineers (India), Series A, Vol. 97, Issue 3, July-September 2016, pp. 205-219.*

Co-author(s): Dr. S. Krishnaiah, Dr. M. Rama Krishna Reddy

## Dr. R. Visvanathan, FIE

Professor, Anbil Dharmalingam Agricultural College and Research Institute, Tamil Nadu Agricultural University, Trichirappalli

**Title of Paper:** "Non-destructive Determination of Cocoa Bean Quality using FT-NIR Spectroscopy", *Computers and Electronics in Agriculture, Vol. 124, June 30, 2016, pp. 234-242.*

Co-author(s): Sunoj S., C. Igathinathane



## Dr. Ramesh S. Sharma, MIE

Department of Mechanical Engineering, R. V. College of Engineering, Bangalore

● **Title of Paper:** "Mid Frequency Structure-Borne Noise Modeling in a Trimmed Automotive Vehicle", *Journal of Aerospace Sciences and Technologies, Aeronautical Society of India, Vol. 68, Issue 1, February 2016, pp. 1-6.*

Co-author(s): Prashanth Makam, Nanjundaradhya N. V.

● **Title of Paper:** "Enhancement of Directional Tensile Properties of Glass/Epoxy Composite using Alumina Nanoparticles", *Advanced Composites Letters, Vol. 25, Issue 1, 2016, pp. 16-21.*

Co-author(s): Rajanish M, Nanjundaradhya N. V.

● **Title of Paper:** "Effect of Notch Diameter and Fiber Orientation on Tensile Strength of Glass/Epoxy Laminated Composites", *Journal of Mechanical and Mechanics Engineering, Vol. 2, Issue 3, September 2016, pp. 1-11.*

## Mr. Daljeet Singh, MIE

Sub Divisional Engineer (Civil)

**Title of Paper:** "Strength Evaluation of Soil Subgrade using in-situ Tests", *Civil Engineering and Architecture, Vol. 4(6), December 30, 2016, pp. 201-212.*

Co-author(s): J. N. Jha, K. S. Gill



# ***Institutional Members***

## **Achievement of Institutional Member**



Inspired by 'Clean India' vision of Union Government, three engineering students of E. G. S. Pillay Engineering College (Institutional Member) have designed a prototype of solar powered street sweeping machine with a project funded by The Institution of Engineers (India). The machine weighs around 10kg and can clean both dust and hard particles from ground. It is powered by a 120 mAH rechargeable battery which is connected to a solar panel. Once fully charged, the device can clean a room of 100 sq.ft. for about 30min at a stretch. The matter was published in Indian Express on December 01, 2016.

## ***Welcome to IEI : New Institutional Members***

- **Sasi Institute of Technology & Engineering**  
Kadakatla Tadepalligudem, Dist. Godavari, Andhra Pradesh
- **Sandip Foundation's Sandip Institute of Engg. & Management**  
Mahiravani, Trimbak Road, Dist. Nashik, Maharashtra
- **Vignan Institute of Technology & Science**  
Deshmukhi, Pochampally Mandal, Dist. Nalgonda, Telangana
- **WSP Consultants India Pvt.**  
FC-24, 1st Floor, Sector - 16A, Film City, Noida, Uttar Pradesh
- **Aditya Institute of Technology & Management**  
Tekkali, Dist. Srikakulam, Andhra Pradesh
- **Shroff S R Rotary Institute of Chemical Technology**  
Block No. 402, Ankleshwar - Valia Road, Dist. Bharuch, Gujarat
- **Noida Institute of Engineering & Technology**  
19, Knowledge Park - II, Institutional Area, Greater Noida, Uttar Pradesh
- **Dr Babasaheb Ambedkar Technological University**  
Mangaon, Dist. Raigad, Maharashtra
- **Velalar College of Engineering and Technology**  
Thindal, Erode, Tamilnadu





# book review

**Mr. Challa Soma Sundaram, FIE**

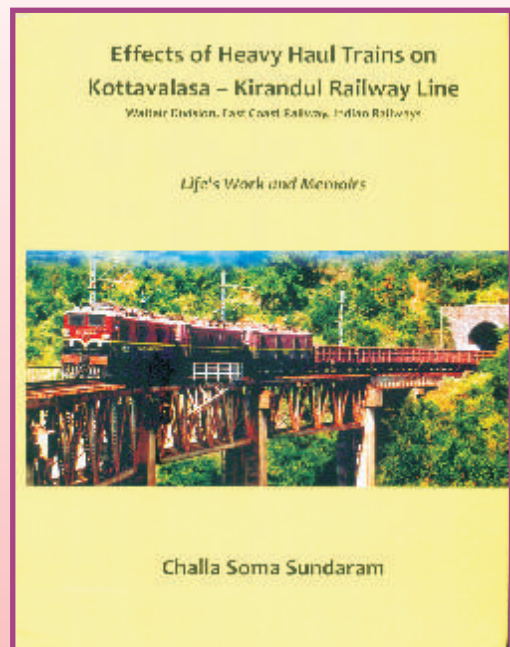
General Manager, IRCON (Retired)

**Publisher: Scientific Publishers**

## **Title: Effects of Heavy Haul Trains on Kottavalasa-Kirandul Railway Line**

The book is very well written and very thoroughly researched, yet a model of brevity and lucidity. It is very timely and should serve as a great motivator for the 21st Century generation of railway building adventurers from snow bound Kashmir to the evergreen North East. This book brings out the problems faced by the author, during his tenure of maintaining the line for 8 years (1974-82).

The subject matter is covered in six relatively independent Chapters. Chapter 1 gives a brief of the K-K Line in Waltair Division of East Cost Railway under Ministry of Railways. Chapter 2 presents arrangements made by MMTC at Kirandul and Bachel, transportation facilities created by S E Railway, construction of Outer Harbor by VPT and coordination arrangements done by MMTC. Chapter 3 recalls accounts of (a) survey of the three new railway lines by S E Railway, (b) formation of a separate zonal railway called as D B K Railway with headquarters at Visakhapatnam, (c) organization and construction of the railway lines by adopting laid down specifications of engineering, (d) details of Tunnels and Gorge Bridges, and (e) opening the K-K Line for traffic in 1968. Chapter 4 deals with track problems faced while moving iron ore trains from Kirandul to Visakhapatnam Port for export to Japan. Chapter 5 describes in detail a few serious accidents that occurred on the K-K Line. Chapter 6 presents the closing comments.



# Members' Speak

I feel very happy to read 'Epitome', November 2016 issue, highlighting the research and innovative works in different branches of engineering being carried out by young engineers from all over the country. Role played by The Institution of Engineers (India) in R&D activities is praiseworthy. It will help our endeavour to strengthen our research base, essentially needed for competing with other developed countries in the world.

**Prof. S. K. Mazumder, FIE**  
*Former AICTE Emeritus Professor  
Delhi Technology University, Delhi*

I take this opportunity to thank The Institution of Engineers (India) for introducing "Epitome". It has opened a window for the members to understand more about IEI. I am sure it will encourage more Engineers to join the Institution. Cheers to the Team.

**Mr. Jude D'Silva, MIE**  
*Area Quality Manager  
Arabian Construction Company, Doha-Qatar*

The details of successful candidates of IEI members published in Epitomes by you are very much encouraging and motivating to other members of Institution also. I wish all members of our Institution a Happy new year 2017. The new year must give us a great success.

**Mr. P. Thrivikrama Reddy, AMIE**  
*Chartered Engineer (India), Project Engineer, Aurora Group of  
Educational Institutions, Hyderabad, Telangana*

IEI Epitome newsletter is really a very useful publication that takes the members closer to the Institution by providing information on various facts of the activities of its members. I am sure this will encourage the engineers, especially the new engineers. My congratulation to the team for bringing out IEI Epitome so worthy and beautiful.

**Mr. P. V. Asok Kumar, MIE**  
*"ASHMA", Ramanunni Road, Karuvasseri, Calicut, Kerala*

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