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# Ms Damyanti G Badagha, AMIE

PhD Research Scholar, Department of Applied Mechanics, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat



• Received Best Paper Award for her paper titled, 'Mix Proportioning and Strength Prediction of High Performance Concrete including Waste Using Artificial Neural Network' from the World Academy of Science, Engineering and Technology, Turkey in the 20th International Conference on 'Artificial Neural Networks in Civil Engineering' organized at Mumbai during February 22-23, 2018.

• Received IRDP Best Young Researcher National Award 2018 in Civil Engineering Field from the Innovative Research Developers and Publishers, Chennai on May 30, 2018 for her remarkable achievements in research and publications.

# **Prof. Amar Kumar Das**, MIE

Assistant Professor, Department of Mechanical Engineering, Gandhi Institute for Technology, Bhubaneswar, Odisha

Received Best Paper Award for his paper titled, 'Performance Measurement and Optimization of Biogas Produced from Municipal Solid Wastes using Artificial Neural Network (ANN)' in *International Conference on 'Computational Intelligence and Data Analytics'* 



organised during October 26-27, 2018 at Gandhi Institute for Technology, Bhubaneswar.

# Dr. Tadimety Chakrapani Rao, FIE

Former Head of Fuel & Mineral Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand



Conferred with the honour, 'Father of (Indian) Mineral Engineering' in recognition and appreciation of his immense contribution to the Mineral and Coal Processing Education, Research and Industry during the Inaugural Function of the *XVII International Seminar on Mineral* 

*Processing Technology 2018* held at Indian Institute of Technology (ISM) Dhanbad on October 10, 2018

# Dr. Prabhudev MS, FIE

Head, Section & Selection Grade Lecturer, Department of Mechanical Engineering, Government Polytechnic, Kalaburagi, Karnataka

Delivered a lecture on 'Green Campus Concept in Educational Institutes' on the occasion of 21st ISTE State Level Faculty Convention 2018 on 'Challenges and Opportunities in Engineering Education in India' jointly organized by Indian Society for



Technical Education (ISTE), New Delhi, ISTE Karnataka State Section and ISTE Chapter, Bheemanna Khandre Institute of Technology, (BKIT), Bhalki on November 3, 2018. He was invited as a Session Chair in the said event.

# Dr. Prathipati Vijaya Kumar, FIE

Southern Power Distribution Company of Andhra Pradesh Ltd., Kesavayanagunta, Tirupati, Andhra Pradesh

Obtained PhD from Acharya Nagarjuna University, Andhra Pradesh under the guidance of Prof. S Vijaya Raju, Department of Commerce, in the discipline of Electrical and Electronics Engineering on the topic 'Quality of



Hospital Services and Satisfaction of Patients in Corporate Hospitals in Andhra Pradesh' on October 05, 2018

Publications



# Mr. Damodar Mittal, FIE

EVP & Head (Iron Making), Jindal Steel & Power Ltd, Angul, Odisha



**Title of Paper:** 'Blast Furnace : Importance of Hearth Temperature & Quality of Hot Metal', *Steel & Metallurgy*, Kolkata (*a Monthly Publication on Steel & Non-ferrous Metal*), Vol. 20, No. 08, June 2018, pp. 26-28.

# Mr. Saadat Ali Rizvi, MIE

Workshop Superintendent, University Polytechnic, Jamia Milia Islamia, New Delhi

**Title of Paper:** 'Effect of Heat Input on the Microstructure and Mechanical Properties of a Welded Joint 3- A Review', *International Journal of Applied Engineering Research*, Special Issue, Vol. 13, No. 06, 2018, pp. 183-188.



# Prof. (Dr) Vijayan Gurumurthy Iyer, FIE

Department of Civil Engineering, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh



**Title of Paper:** 'Importance of Total Quality Management (TQM) or Continuous Improvement System (CIS) in an Education Sector and its Implementation Framework towards Sustainable International Development', *Proceedings of 6th* 

International Conference on 'Capacity Building for National Sustainable Development/ Exhibition 2018 held at International Conference Centre, Multimedia University Campus Centre, Nairobi, Kenya, Africa during August 19-31, 2018, (published by True Scholar Research Limited, London), pp. 157-171.

# Mr. Jitender Grover, AMIE

Research Associate, Indian Institute of Technology Roorkee, Uttarakhand

Title of Papers : a) 'Reliable and FaultTolerant IoT-Cloud Architecture' andb) 'Reliability based Resource Allocation

in Software Defined Edge Controller for IoT Infrastructure', *Proceedings of IEEE Sensors 2018*, (*a Flagship Conference of IEEE Sensors Council*) organised at New Delhi during October 28-31, 2018.



Co-authors : a) Garimella Rama Murthy b) Rhishi Pratap Singh, Garimella Rama Murthy

# Mr. M Coumarane, MIE

Deputy Chief Engineer (Electrical), Centre for Applied Research and Development, NLC India Ltd, Neyveli, Tamilnadu, India

**Title of Paper:** 'Role of Thermal Image Camera in Electrical Condition Monitoring,' *Proceedings of National Seminar on 'Emerging Energy Scenario in India – Issues, Challenges and Way Forward* 'organised by NLC India Ltd at Neyveli during October 22-23, 2018.



# Mr. Omkar Suresh Vaidya, MIE

Department of Electronics & Telecommunication Engineering, Sandip Foundation's Sandip Institute of Technology and Research Centre, Nashik, Maharashtra



**Title of Paper:** 'The Study of Preprocessing and Post processing Techniques of Image Stitching', *Proceedings of IEEE International Conference on 'Advances in Communication and Computing Technology-2018*,' organized by Amrutvahini College of Engineering, Sangamner, Ahmednagar, Nashik during

February 8-9, 2018, pp. 431-435. Co-author : Dr. Sanjay T. Gandhe

Publications



# Dr. B Venkateswara Rao, MIE

Associate Professor, Department of Electrical and Electronics Engineering, V R Siddhartha Engineering College (Autonomous), Kanuru, Vijayawada, Andhra Pradesh



**Title of Paper:** 'Nondominated Sorting based Disruption in Oppositional Gravitational Search Algorithm for Stochastic Multi Objective Shirt Term Hydrothermal Scheduling', *Soft Computing*,(Springer), July, 2018, pp. 1-20.

Co-authors: Gouthamkumar N, Srinivasarao B, PVRL Narasimham

Title of Book Chapter: 'Economic Load Dispatch in Microgrids Using Real-Coded Genetic Algorithm', *Soft Computing in Data Analytics, Advances in Intelligent Systems and Computing Book Series*, (Springer, Singapore), Vol. 758, Chapter 38, August 22, 2018, pp 377-386.

Co-authors: Nadakuditi G, Mohan Rao U, Pandi S

\_\_\_\_\_

# Mr. Srinivasan Nagaraju, FIE

Scientific Officer-G, Homi Bhabha National Institute & Bhabha Atomic Research Center, Mumbai, Maharashtra



**Title of Paper:** 'Zone-wise Investigation of Creep Behaviour 9Cr–1Mo Steel Weld Joints', *Materials Science and Technology (Taylor & Francis*), November 2018.

Co-authors: Surya D Yadav, P Vasantharaja, Florian Riedlsperger, M Vasudevan

## Mr. Shaik Riyazuddien, MIE

Department of Electronics & Communication Engineering, Vasireddy Venkatadri Institute of Technology, Nambur, Guntur, Andhra Pradesh

Title of Papers : a) 'Smart Garbage Monitoring System,'

International Journal for Scientific Research and Development, Vol. 05, No. 12, February 2018.

b) 'An Efficient High Speed Multiplier using Nikhilam Method based ECC Processor, *International Journal of* 



Management, Technology and Engineering, Vol. 08, No. 07, July 2018, pp.130-138.

c) 'A Novel Framework for Medical Applications with Integrated Blockchain and IoT Architecture', *Journal of Advanced Research in Dynamical and Control Systems*, (Scopus indexed), Vol.10, Special Issue 04, September 2018, pp. 1934-1938.

# Mr. Cawas Phiroze Nazir, FIE

Techno Surge, Kolkata, West Bengal

**Title of Paper :** 'Coastal Power Plant- a Hybrid Solar-hydro Renewable Energy Source', *Clean Energy Journal*, Vol. 2, No. 2, 2018, pp. 102-111.



# Mr. Panchumarthy Murali Krishna, MIE

Associate Professor, Department of Civil Engineering, VSB Engineering College, Karur, Tamil Nadu

**Title of Paper:** 'Study of Post Monsoon Water Quality Parameters in Pulicat Lake Ecosystem using Remote Sensing and GIS', *International Journal of Research*, Vol. 7, No. X, October 2018.



Publications



# Mr. Doredla Nagaraju, AMIE

Assistant Professor, Department of Civil Engineering, Narasaraopeta Engineering College (Autonomous), Narasaraopet, Guntur, Andhra Pradesh

**Title of Paper:** 'Time History Analysis of the Multistory Building with and without Masonry Structure and Shear Wall for Various Seismic Zones', *International Journal of Pure and Applied Mathematics (Online)*, Vol. 120, No. 06, June 2018, pp. 4305-4322.



Co-author: Venkata Rao

# Dr. Supreet Singh, MIE

Assistant Professor, Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, Punjab



**Title of Paper :**'Performance Analysis of Energy Harvesting based Two-way Multi-relay Wireless Network,' *Proceedings of 28th IEEE International Telecommunications and Applications Conference* organised by University of New South Wales at Sydney, Australia

during November 21-23, 2018.

# Mr. Anil Kumar, MIE

Chartered Mechanical Engineer, Independent Consultant and Researcher, Pune, Maharashtra

**Title of Paper :** 'An Assessment of Health Hazards in Valves for Gaseous Oxygen Service : Sources and Preventive Measures', *Proceedings of International Mechanical Engineering Congress and Exposition 2018* organised by The American Society of Mechanical



Engineers at Pittsburgh, Pennsylvania, USA during November 9-15, 2018.

# Mr. Jacob John, MIE

Assistant Professor, Department of Mechanical Engineering, Dayananda Sagar College of Engineering, Bangalore, Karnataka

**Title of Paper :** 'Investigation of Friction Stir Processing Effect on AA 2014-T6,' *Materials and Manufacturing Processes, Taylor & Francis*, August 8, 2018, pp. 1-18.

Co-authors: SPShanmuganatan, MBKiran, VSSenthil Kumar, RKrishnamurthy



### Notification for R&D Grant-in-Aid

To promote appropriate technology, assist in building up design & research talents and, most importantly, to help in nurturing potential R&D venture amongst engineering students pursuing Diploma/UG/PG/PhD courses, The Institution of Engineers (India) had instituted the R&D Grant-in-Aid program way back in 2001. Like every year, the Institution invites applications for the session 2017-2018 for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing Diploma/UG/PG/Ph. D courses. The application form and guidelines are available in our website https://www.ieindia.org. The projects should be carried out under the guidance of faculty members who are Corporate Members (AMIE/MIE/FIE) of IEI. Membership criteria for students are as follows:

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PG (M.E/M.Tech/Equivalent)	Should be 'Corporate Member'
PhD	Should be 'Corporate Member'

The soft copy of the duly filled-up applications (in editable format), as per the given proforma, should be sent through email to research@ieindia.org and one printed copy of the same should reach the following address:

**Director (Technical)** 

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

Applications received in format other than that available on our website will not be accepted. Application should be forwarded through the Guide, Head of the Department or Head of the Institution. Please note that preference will be given to project proposals received from Institutions who are members of The Institution of Engineers (India). Kindly go through the guidelines

(visit link https://www.ieindia.org/PDF\_IMAGES/R&D/General%20Guidelines.pdf) carefully before filling up the application.

The grant is not intended for the faculty members who have access to other avenues of research funding. Proposals received will be scrutinized and the recipients of R&D Grant will be informed accordingly.

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Kolkata, West Bengal January 31-February 01, 2019

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> to be organised by : K S Rangasamy College of Technology

> > Namakkal, Tamilnadu February 01-02, 2019

# National Workshop on

'Solar PV Installation and Application for Domestic Needs' to be organised by:

> SNS College of Technology Coimbatore, Tamilnadu February 21-22, 2019

National Workshop on

'Water Management of the River Mahanadi for Better Productivity from Mahanadi Basin'

to be organised by :

# Raajdhani Engineering College

Bhubaneswar, Odisha

February 23-24, 2019



# Book Review

# Data Structure and Algorithm withC

# Dr. Debdutta Pal, MIE

Head, Department of Computer Science and Engineering, Calcutta Institute of Engineering and Management, Kolkata



This book is designed as a stepping stone for the students to enter into the world of Computer Science and Engineering. All the students irrespective of domain of study can build career in the field of Computer Science and Engineering. In that case, they must have enough knowledge in data structures. The data structure is a course that helps students to accumulate knowledge about how data are stored and manipulated in the memory of any computing device. This book is written for the students who have knowledge about C and now are going to open their eyes in the domain of data structure. Hence, the prospective headers for this book consists primarily of sophomores and juniors majoring in Computer Science or Computer Engineering.

Co-author: Suman Halder

# Architectural and Engineering Graphics

# Dr. Balagopal T S Prabhu, FIE

# Former Professor, National Institute of Technology Calicut, Kerala

Drawing is the universal language used by Architects and Engineers to explain the design and construction of buildings, structures, machines and circuits. The techniques of drawing are based on Graphic Science which covers plain and solid geometry, pictorial projections and graphic symbols. This book presents these topics in Graphic Science from its elementary to advanced level, systematically in 21 modules. It generally covers the syllabus on Graphics for degree and diploma level courses in Architecture and Engineering offered by all Indian Universities and Technical Education Boards.

In each module, wherever possible, pictorial views are given to help the students to visualise the problems and reach the solutions. The teacher can cover one module in a session of two hours duration. Two sets of exercises are given at the end of each module. The student can complete. One set of exercises in a sketch book. The other set can be completed in a drawing session using instruments. This approach will help the learning process by



- a) Understanding the subject,
- b) Developing the sketching art and
- c) Perfecting the drafting skill.

Some of the modules in this book cover advanced topics such as Oblique Planes and Interpenetration of Solids. Similarly there are topics on Perspective view and Shades and Shadows. These topics are of great fascination to explain the science behind drawing realistic 3D views of objects and their shadows. Hence they are included in this book for the completeness of the subject. The module on Orthographic Projection covers application of graphic science in technical drawing with special emphasis on machine parts. Small buildings, building elements like doors and windows or pieces of furniture etc. can also be taken to serve this purpose equally well. In fact for a first year student in Architecture and Engineering these are more familiar objects. Hence a module on Application of Graphics in Building Drawing, with simple practical exercises is introduced in this book.

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