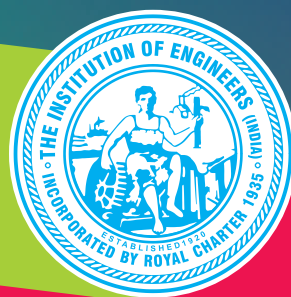


IEI EPITOME



Volume 9 | Issue 6 | June 2024

A Century of Service to the Nation

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DISCLAIMER

The information contained in IEI Epitome has been prepared solely for the purpose of providing information about the members of IEI to interested parties, and is not in any way binding on IEI.

IEI Epitome has been e-compiled in good faith by IEI, but no representation is made or warranty given (either expressed or implied) as to the completeness or accuracy of the information of the contents. You are therefore requested to verify this information with the concerned person/organization before you act upon it.

Editor

Maj Gen (Dr) MJS Syali, VSM (Retd)
Secretary & Director General

Special Contribution

Mr S Chakraverty, Dr K Sen, Mr D Nath, Mr A Deb, Mr A Das, Mr B Mukherjee,
Mr S Bagchi, Mr P Barik, Ms P Nath, Ms N Sikdar, Mr S K Mishra

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Ms H Roy

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Notification for IEI R&D Grant-in-Aid

Volume 9 | Issue 6 | June 2024

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.

Every year, the Institution invites applications for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing full time Diploma/UG/PG/PhD engineering program in AICTE/UGC/NAAC approved Institutions / Colleges / Universities. 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 of IEI. Membership criteria for student(s), guide(s) and institution(s) are as follows:

Project Category	Student/Applicant Membership	Guide(s) Membership	Institutional Membership
1. Diploma	Exempted [Membership of Student Chapter is desirable]	AMIE/MIE/FIE	Not Mandatory
2. UG (BE/BTech/ Equivalent)	'Student Member' (SMIE)	AMIE/MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA/NAAC Accreditation or valid NIRF Rank
3. PG (ME/MTech/ Equivalent)	AMIE/MIE/FIE	MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA/NAAC Accreditation or valid NIRF Rank
4. PhD	AMIE/MIE/FIE	MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA/NAAC Accreditation or valid NIRF Rank

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

The Deputy Director (Technical)

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

Kindly go through the guidelines (visit link: <https://www.ieindia.org/webui/IEI-Activities.aspx#RnD-Initiative>) before filling up the application.

Members in the News

Volume 9 | Issue 6 | June 2024



Prof Balachandran Ruthramurthy, FIE

Professor

Department of Electronics and Communication Engineering, School of Electrical Engineering and Computing, Adama Science and Technology University, P.O.Box No. 1888, Adama, Ethiopia.

✉ balachandran.ruthramurthy@ieee.org

Prof Balachandran Ruthramurthy is the one of the **Patentee** for a Design to “**Smart Digital Flow Control Valve**”.

Design Number	: 381315-001
Application Number	: 6259177
Priority Country Name	: UK
Priority Date of Filing Convention Country	: 30/01/2023
Filing Date	: 12/03/2023
Grant Date	: 12/04/2024
Article Name	: Smart Digital Flow Control Valve
Class	: 14-02-Data Processing Equipment as well as Peripheral Apparatus and Devices
Other Applicants' Names	: Dr Vinayak Malik Dr Bindu Kumar Karthikeyan Prasoon Prasenan Prameela Dr Raviteja Surakasi Prem Charles Immanuel
Design Office	: The Patent Office, Government of India, Kolkata

NOTIFICATION

Annual Technical Volume of Various Engineering Division Boards of IEI for the Year 2024 – Call for Articles

The Institution of Engineers (India) has instituted ‘Annual Technical Volume’ for all 15 Engineering Division Boards and Interdisciplinary Coordination Committee.

We welcome you to submit the soft copy of Original Papers/Case Studies/Articles of Professional Interest in MS-Word format on any of the topics mentioned in the list given [in the link below](#) and forward the same to the email address corresponding to the particular theme as given in the list for possible publication in the respective Annual Technical Volume, preferably within **31 July 2024**.

For details click the link:

https://www.ieindia.org/webui/ajax/Downloads/WebUI_PDF/Call_for_Papers_for_ATV.pdf

Publication by Members

Volume 9 | Issue 6 | June 2024

Book



Dr Abdul Razzak Rumane, FIE

Advisor and Director

Construction Management, Sijjeel General Commerce & Contracting Co, Kuwait & Former Chairman, The Institution of Engineers (India), Kuwait Chapter

✉ rarazak@yahoo.com

Total Quality Management Applications and Concepts for Construction Projects

About the Book

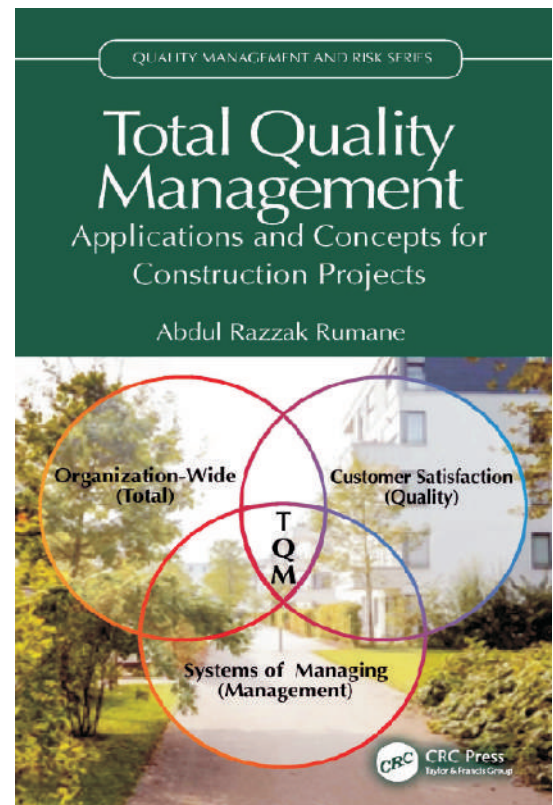
This book has been developed to provide significant information about the usage and application of the Total Quality Management (TQM) concept in a construction project environment. The content spans from the inception through to the closing of the project focusing on the TQM approach in each phase of the project.

Total Quality Management: Applications and Concepts for Construction Projects focuses on the application of the TQM concept in construction projects and contains many quick-reference figures and tables for easy comprehension. It offers a concise and complete implementation process for the application of TQM and helps achieve competitive advantages in the global marketplace resulting in the construction project being qualitatively competitive and economical. The book highlights the standards for TQM and gives a brief introduction to the quality management system along with providing an overview of the project, the quality, the types of project delivery systems, and the principles involved. Discussions of quality and the different steps it moves through within the project setting including inspection, statistical quality control, and quality assurance round out the book's offerings.

Construction and quality professionals, industrial engineers, project managers, students, academics, and trainers will find that this book satisfies their needs and meets their requirements for a book that specifically uses TQM in construction projects.

Details of the Book:

ISBN	:	978-1-032-58637-3 (hbk)
		978-1-032-58783-7 (pbk)
		978-1-003-45146-4 (ebk)
DOI	:	10.1201/9781003451464
First edition published	:	2024
Publishers	:	CRC Press, Taylor & Francis Group, Boca Raton, London, New York



Publication by Members

Volume 9 | Issue 6 | June 2024

Paper published in the Journals / Proceedings



Prof Balachandran Ruthramurthy, FIE

Professor

Department of Electronics and Communication Engineering, School of Electrical Engineering and Computing, Adama Science and Technology University, P.O.Box No. 1888, Adama, Ethiopia.

✉ balachandran.ruthramurthy@ieee.org

Title of Paper: Electrical Circuit Modeling for the Relaxor Response of Bismuth Magnesium Tantalate Pyrochlore

Journal of Science: Advanced Materials and Devices, Elsevier B V, 9(2), June 2024, Print ISSN: 2468-2284, Online ISSN: 2468-2179

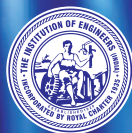
DOI: <https://doi.org/10.1016/j.jsamd.2024.100715>

Co-authors: P Y Tan, K B Tan, C C Khaw, H C Ananda Murthy, S K Chen, O J Lee, K Y Chan & M Lu

Abstract: The electrical properties of bismuth magnesium tantalate pyrochlore, $\text{Bi}_{3.30}\text{Mg}_{1.88}\text{Ta}_{2.82}\text{O}_{13.88}$ (BMT) were investigated by both inductor-capacitor-resistor (LCR) and impedance spectroscopy techniques covering a broad temperature range of 10–1073 K and a frequency range of 5 Hz - 1 MHz. At below ~180 K, BMT pyrochlore exhibited interesting relaxor behaviour that showed high dispersion characteristics in its frequency-temperature dependent dielectric constants, ϵ' and dielectric losses, $\tan \delta$, respectively. The maximum ϵ'_{max} of ~77 was obtained at the temperature maximum, T_m of 154 K. The frequency-independent ϵ' data above 154 K at a fixed frequency of 1 MHz can be well fitted with the Curie-Weiss law and the relaxation features of $\text{Bi}_{3.30}\text{Mg}_{1.88}\text{Ta}_{2.82}\text{O}_{13.88}$ obeyed the Vogel-Fulcher equation. The dielectric properties of $\text{Bi}_{3.30}\text{Mg}_{1.88}\text{Ta}_{2.82}\text{O}_{13.88}$ relaxor in the low temperature range of 20–320 K could be satisfactorily modeled with different equivalent circuits. In this perspective, a master circuit consisting of a parallel R-C-CPE element in series with a capacitor was required to accurately fit the low temperature data.

Keywords: Pyrochlore; Ac impedance; Relaxor; Dielectric; Equivalent circuit

ANNOUNCEMENT



IEI Industry Excellence Award & IEI Engineering Education Excellence Award Ceremony

19 December 2024, Hotel Novotel, Kolkata

organised by

The Institution of Engineers (India)

Published Articles in IEI Journals

Volume 9 | Issue 6 | June 2024



Journal of The Institution of Engineers (India): Series B

[Computer, Electrical, Electronics & Telecommunication Engineering]

(Electronic ISSN: 2250-2114; Print ISSN: 2250-2106)

[CiteScore: 2.2; h5 Index: 19]

[SCOPUS Indexed & UGC-CARE (India) listed]

For download, use Membership ID through: www.ieindia.org

Volume 105, Issue 3, June 2024

- Title: **Development of Smart Pill Expert System Based on IoT**
Authors: **P Dayananda & Amrutha G Upadhya**
Department of Information Technology, Manipal Institute of Technology Bengaluru, Manipal Academy of Higher Education, Manipal, 576104, India
College of Engineering, The University of Texas at Arlington, Texas, USA
DOI: <https://doi.org/10.1007/s40031-023-00956-2>
Publication date: 02 February 2024
Pages: 457 - 467
- Title: **Enhancing Plant Leaf Disease Prediction Through Advanced Deep Feature Representations: A Transfer Learning Approach**
Authors: **Veeranjaneyulu Naralasetti & Jyostna Devi Bodapati**
Department of Information Technology, Vignan's Foundation for Science Technology and Research, Guntur, India
Department of Advanced Computer Science and Engineering, Vignan's Foundation for Science Technology and Research, Guntur, India
DOI: <https://doi.org/10.1007/s40031-023-00966-0>
Publication date: 10 February 2024
Page: 469 - 482

ANNOUNCEMENT



39th Indian Engineering Congress

20-22 December, 2024

theme:

Irresistible India - a Global Engineering Powerhouse

Venue: Hotel Novotel, Kolkata

organised by

The Institution of Engineers (India), West Bengal State Centre



Published Articles in IET Journals

Volume 9 | Issue 6 | June 2024

- Title: **DVR Using Randomized Self-Structuring Fuzzy and Recurrent Probabilistic Fuzzy Neural-Based Controller**
- Authors: **Sabha Raj Arya, Khyati D Mistry & Prashant Kumar**
Department of Electrical Engineering, S V National Institute of Technology, Surat, Gujarat 395007, India
- DOI: <https://doi.org/10.1007/s40031-023-00973-1>
- Publication date: 22 February 2024
- Page: 483 - 502
- Title: **Novel Method Using Transformer Moisture Equilibrium for Removal of Absorbed Moisture from Cellulose Paper Insulation in Power Transformers**
- Authors: **Kudiyarasan Swamynathan, N Sthalasayanam, M Sridevi & A K Sudheesh**
Scientific Officer F (Electrical Group), Bharatiya Nabhikiya Vidyut Nigam Limited, Kalpakkam, Tamilnadu, 603102, India
Scientific Officer E (Electrical Group), Bharatiya Nabhikiya Vidyut Nigam Limited, Kalpakkam, Tamilnadu, 603102, India
- DOI: <https://doi.org/10.1007/s40031-023-00980-2>
- Publication date: 04 February 2024
- Pages: 503 - 513
- Title: **Impact Analysis of Demand Side Management for Maintaining the Voltage Profile of Distribution System**
- Authors: **Smriti Singh, R K Saket, Atma Ram Gupta & Jayant Mani Tripathi**
Department of Electrical Engineering, IIT BHU, Varanasi, Uttar Pradesh, India
Department of Electrical Engineering, Rajkiya Engineering College, Mainpuri, Uttar Pradesh, India
Shri Phanishwar Nath Renu Engineering College Araria, Bihar Engineering University, Patna, Bihar, India
Department of Science Technology and Technical Education, Bihar, India
- DOI: <https://doi.org/10.1007/s40031-023-00985-x>
- Publication date: 20 February 2024
- Pages: 515–531

ANNOUNCEMENT

Know-Your-Member (KYM)

The Institution of Engineers (India) is updating the database of all its Corporate Members along with their achievements for which a Know-Your-Member (KYM) form has been introduced.

Every Corporate Member is requested to kindly fill up the form and forward it along with the self-attested copy of photo ID proof to the address given below:-

The Deputy Director (Membership)

The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020

Email: datamemb@ieindia.org

The form can be accessed & downloaded at :

https://www.ieindia.org/WebUI/ajax/Downloads/WebUI_PDF/HIGHLIGHTS_DOCUMENT-3332.pdf

Published Articles in IEI Journals

Volume 9 | Issue 6 | June 2024

- Title: **Real-Time Implementation of Controlled Energization of Coupled Power Transformer Using Multi-Stepped PIR, Part-1**
- Authors: **K A Bhatt, Bhavesh R Bhalja, U L Makwana, F A Macwan, A K Giri & B Chittibabu**
Department of Electrical Engineering, L D College of Engineering, Ahmedabad, Gujarat, India
Department of Electrical Engineering, Indian Institute of Technology, Roorkee, Uttarakhand, India
Department of Electrical Engineering, Government Engineering College, Modasa, Gujarat, India
Department of Electrical Engineering, Government Engineering College, Bharuch, Gujarat, India
Department of Electrical Engineering, Indian Institute of Information Technology, Design, and Manufacturing, Kancheepuram, Tamil Nādu, India
- DOI: <https://doi.org/10.1007/s40031-023-00986-w>
- Publication date: 02 February 2024
- Pages: 533–540
- Title: **Intelligent Intrusion Detection Framework for Anomaly-Based CAN Bus Network Using Bidirectional Long Short-Term Memory**
- Authors: **Ch Ravi Kishore, D Chandrasekhar Rao, Janmenjoy Nayak & H S Behera**
Department of Information Technology, Veer Surendra Sai University of Technology, Burla 768018, India
Department of Computer Science, Maharaja Sriram Chandra Bhanja Deo University, Baripada, Odisha, 757003, India
- DOI: <https://doi.org/10.1007/s40031-023-00987-9>
- Publication date: 30 January 2024
- Pages: 541–564

ANNOUNCEMENT

Elevate your status as a Certified Professional Engineers (PE) and International Professional Engineers (IntPE)

Professional Engineers (PE) Certification by IEI

Eligibility Requirement

To attain the Professional Engineers (PE) certification through The Institution of Engineers (IEI), you must meet the following eligibility criteria:

1. Hold a BE/BTech or equivalent degree recognized by a Statutory Authority or the Government of India.
2. Have accumulated five years or more of professional experience.
3. Be a member of a recognized professional engineering institution or association.
4. Maintain a satisfactory level of Continued Professional Development (CPD).

Please visit the following link :

https://www.ieindia.org/webui/IEI_PE_Certification.aspx

International Professional Engineers (IntPE) Certification by IEI

Eligibility Requirement

To be eligible for IntPE Certification by IEI, candidates must meet the following criteria:

1. Hold a BE/BTech or equivalent degree recognized by the Statutory Authority or the Government of India.
2. Possess seven years or more of professional experience.
3. Have a minimum of two years of professional experience in a significant engineering activity.
4. Be a member of a recognized professional engineering institution or association.
5. Maintain a satisfactory level of Continued Professional Development (CPD).

Please visit the following link:

https://www.ieindia.org/webui/IEI_IntPE_Certification.aspx

The eligible candidate can submit application in the prescribed format to:
The Deputy Director (Technical), The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020
For any query and assistance, please send email to: pe@ieindia.org

Published Articles in IET Journals

Volume 9 | Issue 6 | June 2024

- Title:** Hippocampus Segmentation Using Fuzzy C Means-Based Level Set Local Ternary Pattern with Enhanced Edge Indicator
- Authors:** Jhansi Rani Kaka & K Satya Prasad
Department of Electronics and Communication Engineering, Jawaharlal Nehru Technological University, Kakinada, India
Department of Electronics and Communication Engineering, Vignan's Foundation for Science, Technology and Research (VFSTR), Guntur, India
- DOI:** <https://doi.org/10.1007/s40031-024-00989-1>
- Publication date:** 17 February 2024
- Pages:** 565–574
- Title:** Improved Switching Performance in T Type Inverters for High Voltage Induction Motor Application
- Authors:** Kudiyaarasan Swamynathan & Sitangshu Sekhar Biswas
Electrical Group Bharatiya Nabhiya Vidyut Nigam Limited, DAE, Kalpakkam, Tamilnadu 603102, India
DAE, Training Group Bharatiya Nabhiya Vidyut Nigam Limited, Kalpakkam, Tamilnadu 603102, India
- DOI:** <https://doi.org/10.1007/s40031-024-00990-8>
- Publication date:** 03 February 2024
- Pages:** 575–583
- Title:** Comparative Power Quality Performance Evaluation of Grid-Connected Solar PV System
- Authors:** Pradeep Kumar, Rajesh Ranjan & Amit Kumar Yadav
Department of EEE, NIT Sikkim, Ravangla, India
- DOI:** <https://doi.org/10.1007/s40031-024-00991-7>
- Publication date:** 03 February 2024
- Pages:** 585–594
- Title:** Improving Early Detection of Lung Disorders: A Multi-head Self-Attention CNN-BiLSTM Model
- Authors:** V Indumathi & R Siva

ANNOUNCEMENT



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ISSN Electronic 2250-2157

Series A

CiteScore 2022
2.1

Google Scholar h5 Index 2022
19



ISSN Print 2250-2106
ISSN Electronic 2250-2114

Series B

CiteScore 2022
2.2

Google Scholar h5 Index 2022
19



ISSN Print 2250-0545
ISSN Electronic 2250-0553

Series C

CiteScore 2022
2.2

Google Scholar h5 Index 2022
22



ISSN Print 2250-2122
ISSN Electronic 2250-2130

Series D

CiteScore 2022
2.2

Google Scholar h5 Index 2022
15



ISSN Print 2250-2483
ISSN Electronic 2250-2491

Series E

CiteScore 2022
1.8

Google Scholar h5 Index 2022
10



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Published Articles in IET Journals

Volume 9 | Issue 6 | June 2024

- DOI: <https://doi.org/10.1007/s40031-024-00992-6>
Publication date: 17 February 2024
Pages: 595–607
Title: **Classification of Plant Leaf Disease Using Deep Learning**
Authors: **K Indira & H Mallika**
Department of Electronics and Communication Engineering, M S Ramaiah Institute of Technology, Bangalore, India
- DOI: <https://doi.org/10.1007/s40031-024-00993-5>
Publication date: 19 February 2024
Pages: 609–620
Title: **Classifying Electrical Faults in a Distribution System Using K-Nearest Neighbor (KNN) Model in Presence of Multiple Distributed Generators**
Authors: **Saurabh Awasthi, Gagan Singh & Nafees Ahamad**
Department of Electrical and Electronics and Communication Engineering, DIT University, Dehradun, India
- DOI: <https://doi.org/10.1007/s40031-024-00994-4>
Publication date: 06 February 2024
Pages: 621–634
Title: **Frame Shuffling Forgery Detection Method for MPEG-Coded Video**
Authors: **Kharat Jayashree Prashant & Kharat Prashant Krishnrao**
Department of Electronics and Telecommunication Engineering, DKTE' Textile and Engineering Institute, (Affiliated to Shivaji University, Kolhapur), Ichalkaranji, Maharashtra, 416115, India
Department of Information Technology, Walchand College of Engineering, (Affiliated to Shivaji University, Kolhapur), Sangli, Maharashtra, 416416, India
- DOI: <https://doi.org/10.1007/s40031-024-00995-3>
Publication date: 04 February 2024
Pages: 635–645
Title: **An Imaging Prognosis Model for Particle Pollution**
Authors: **S Pushpa Mala, Suhiepha Sameer, M Sneha Shree & Sneha**
Department of Electronics and Communication Engineering, Dayananda Sagar University, Kudlu Gate, Bengaluru, Karnataka, 560100, India
- DOI: <https://doi.org/10.1007/s40031-024-00997-1>
Publication date: 09 February 2024
Pages: 647–656
Title: **A Novel Deep Learning Approach Toward Efficient and Accurate Recommendation Using Improved Alternating Least Squares in Social Media**
Authors: **Sanjeev Dhawan, Kulvinder Singh, Amit Batra, Anthony Choi & Ethan Choi**
Department of Computer Science and Engineering, University Institute of Engineering and Technology, Kurukshetra University, Haryana, India
Department of Electrical and Computer Engineering, Mercer University, Macon, GA, USA
- DOI: <https://doi.org/10.1007/s40031-024-00999-z>

Published Articles in IET Journals

Volume 9 | Issue 6 | June 2024

- Publication date: 06 February 2024
Pages: 657–675
Title: **Performance Analysis of Enlighten GAN on Low-Light Enhancement and Denoising**
Authors: **Moomal Panwar & Sanjay B C Gaur**
Electronics and Communication, Jodhpur Institute of Engineering and Technology, Jodhpur, Rajasthan, India
DOI: <https://doi.org/10.1007/s40031-024-01004-3>
- Publication date: 20 February 2024
Pages: 677–684
Title: **Comparative Analysis of Object-Based Big Data Storage Systems on Architectures and Services: A Recent Survey**
Authors: **Anindita Sarkar Mondal, Madhupa Sanyal, Hrishav Bakul Barua, Samiran Chattopadhyay & Kartick Chandra Mondal**
Department of Information Technology, Jadavpur University, Kolkata, West Bengal, India
Genpact, Bengaluru, Karnataka, India
Robotics and Autonomous Systems Group, TCS Research, Kolkata, West Bengal, India
DOI: <https://doi.org/10.1007/s40031-023-00983-z>
- Publication date: 08 February 2024
Pages: 685–700
Title: **Systematic Review and Meta-analysis of DC Circuit Breaker Technologies for Sustainable DC Grids**
Authors: **Jnaneswar Kolli & Ankur Singh Rana**
Department of Electrical and Electronics Engineering, National Institute of Technology -Tiruchirappalli, Tiruchirappalli, India
DOI: <https://doi.org/10.1007/s40031-024-01018-x>
- Publication date: 09 March 2024
Pages: 701–712
Title: **Measurement and Analysis of Voltage Sag and Swell in Large Penetrated Grid-Connected Wind Farm**
Authors: **Kishor V Bhadane, Mohan Thakre & Rohit Devikar**
Electrical Engineering, Amrutvahini College of Engineering, Sangamner Dist, Ahmednagar, M.S., India
Electrical Engineering, Shri Vithal Education and Research Institute College of Engineering, Pandharpur, M.S., India
Information Technology, Amrutvahini College of Engineering, Sangamner Dist, Ahmednagar, M.S., India
DOI: <https://doi.org/10.1007/s40031-024-01023-0>
- Publication date: 04 May 2024
Pages: 713–732
Title: **A Unified Approach Toward Security Audit and Compliance in Cloud Computing**
Authors: **Y S Rajesh, V G Kiran Kumar & Asmita Poojari**
MS UpGrad Education Private Limited, Nishuvi, 75, Dr. Annie Besant Road, Worli, Mumbai, 400018, India
PSOM Technologies Pvt Ltd, Bengaluru, India

Published Articles in IEI Journals

Volume 9 | Issue 6 | June 2024

DOI:	https://doi.org/10.1007/s40031-024-01034-x
Publication date:	23 March 2024
Pages:	733–750
Title:	Correction: Quality Assessment of Seed Using Supervised Machine Learning Technique
Authors:	Ramanath Kini M G & Rekha Bhandarkar Department of Electronics & Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Karnataka, India Department of Electronics and Communication Engineering, NMAMIT, Nitte, Deralakatte, Karnataka, India
DOI:	https://doi.org/10.1007/s40031-024-00996-2
Publication date:	08 February 2024
Pages:	751

ANNOUNCEMENT



Engineering Staff College of India (ESCI)

Autonomous organ of The Institution of Engineers (India)

www.escihyd.org

DIRECTOR (ENGINEERING STAFF COLLEGE OF INDIA)

ROLE

Director is the academic as well as the administrative head of ESCI and is expected to have proven administrative capabilities, with an excellent academic / industrial background with leadership qualities, to head an Institution of National repute.

PROFILE

- A) Graduate degree in Engineering and/or Technology, preferably with Post Graduate degree in Engineering and/or Technology / Management / Ph D.
- B) Preferably having Publications in National / International journals.
- C) Minimum 20 years of experience out of which 5 years as Head of an Academic Institute of National Importance / in very senior position in R&D establishments / Private or Public Undertakings / Government Organizations.
- D) Experience of conducting focused training programmes leading to skill development and certification.

APPLICATION FORMAT : Visit www.ieindia.org to download the [Application Form](#)

Age : Applicant should normally be below 58 years of age (relaxation in case of exceptional candidates). The appointment will be on contractual basis for a period of five years, as per usual terms and conditions.

CTC : 18 Lakhs per annum (Negotiable for exceptional candidates).

Location : ESCI, Hyderabad

APPLICATION PROCESS

The applicant shall submit the application (in MS Word format only) latest by 31 July 2024 in the prescribed format by e-mail to THE CHAIRMAN, SEARCH COMMITTEE FOR DIRECTOR-ESCI and two sets of hard copies of the application have to be posted to the following address in an envelope superscribing “**Application for the post of Director-ESCI**” :

The Chairman, Search Committee for Director-ESCI

C/o Secretary & Director General

The Institution of Engineers (India)

8, Gokhale Road, Kolkata 700020

Email ID : search.committee@ieindia.org



Journal of The Institution of Engineers (India): Series E

[Chemical & Textile Engineering]

(Electronic ISSN: 2250-2491; Print ISSN: 2250-2483)

[CiteScore: 1.8; h5 Index: 10]

[SCOPUS Indexed & UGC-CARE (India) listed]

For download, use Membership ID through: www.ieindia.org

Volume 105, Issue 1, June 2024

- Title:** **Gate: Gate Life Cycle Analysis and Environmental Profiles of Aquafeed Extrusion Mill for Sustainable Aquaculture**
- Authors:** **Pradeep Ramesh, Ayesha Jasmin S, Mohammad Tanveer & Gokul Raj R**
Department of Aquacultural Engineering, College of Fisheries Engineering, Tamil Nadu Dr. J. Jayalalithaa Fisheries University, Nagapattinam, TN, 611002, India
Agricultural and Food Engineering Department, Indian Institute of Technology Kharagpur, Kharagpur, West Bengal, 721 302, India
- DOI:** <https://doi.org/10.1007/s40034-023-00281-9>
- Publication date:** 20 January 2024
- Pages:** 1 - 10
- Title:** **Comprehensive Characterization of Waste Tire Rubber Powder**
- Authors:** **Khan Zahir Ahmed & Mohammad Faizan**
Department of Mechanical Engineering, A.M.U, Aligarh, India
- DOI:** <https://doi.org/10.1007/s40034-023-00282-8>
- Publication date:** 07 January 2024
- Page:** 11–20
- Title:** **The Identification of Critical Limits of Crown Diameter and Jet Height in Terms of Thermophysical Properties of Liquid Pool and Droplet**
- Authors:** **Kollati Prudhvi Ravi Kumar, Jagannath Debasis Parhi, Abanti Sahoo & Soumya Sanjeeb Mohapatra**
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- DOI:** <https://doi.org/10.1007/s40034-023-00283-7>
- Publication date:** 29 January 2024
- Page:** 21–32
- Title:** **Optimizing Dyeing Parameters for Indigo on Cotton Yarn: A Comparative Study of Exhaust Dyeing and Continuous Dyeing Techniques**
- Authors:** **Jitendra Meena & Harshvardhan Saraswat**
Department of Textile Technology, MLV Textile and Engineering College, Bhilwara, Rajasthan, India
- DOI:** <https://doi.org/10.1007/s40034-024-00285-z>
- Publication date:** 23 March 2024
- Pages:** 33–40
- Title:** **Development of a Novel 120-Hook Punched Card Reader to Regenerate the Woven Designs**
- Authors:** **R Kumaravelu & S Poornima**
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Published Articles in IET Journals

Volume 9 | Issue 6 | June 2024

- Executive, Product Development, KP Technologies, Thirupanangadu, Thiruvannamalai District, 604410, India
DOI: <https://doi.org/10.1007/s40034-024-00286-y>
Publication date: 11 May 2024
Pages: 41–50
Title: **Ethylene Adsorption Study by Using Various MOFs in the CMC Film for Application in Postharvest of Fruit**
Authors: **Tontrakarn Pongpai, Sasina Kerdsiri & Tanwawan Duangthongyou**
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DOI: <https://doi.org/10.1007/s40034-024-00287-x>
Publication date: 19 March 2024
Pages: 51–65
Title: **Modeling of Lycra/Cotton Core Spun Yarn for Strength and Elastic Recovery Using Adaptive Neuro-Fuzzy Inference System (ANFIS)**
Authors: **Kasimi Nurussaba, Avishek Sinha, Dinesh Bhatia, Anish Sachdeva & S K Sinha**
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Department of Industrial and Production Engineering, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India
DOI: <https://doi.org/10.1007/s40034-024-00288-w>
Publication date: 28 March 2024
Pages: 67–75
Title: **Cleaner Dyeing of Pineapple Fabric Using Musa acuminata Natural Dye and Acacia nilotica Bio-Mordant with Enhanced Functionality**
Authors: **Angika Kushwaha, Satendra Singh & Kavita Chaudhary**
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Department of Textile and Fibre Engineering, Indian Institute of Technology, New Delhi, India
DOI: <https://doi.org/10.1007/s40034-023-00284-6>
Publication date: 20 February 2024
Pages: 77–88
Title: **Potential Use Calophyllum inophyllum Oil as Biodiesel Feedstock: A Scientometric Analysis and Review of the Production Process**
Authors: **S Sudalai, S Ishwaryarani, Jeff Frankklin Philip, M G Devanesan & A Arumugam**
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Bioprocess Intensification Laboratory, Centre for Bioenergy, School of Chemical and Biotechnology, SASTRA Deemed University, Thirumalaisamudram, Thanjavur, Tamil Nadu, 613401, India
DOI: <https://doi.org/10.1007/s40034-024-00289-9>
Publication date: 25 April 2024
Pages: 89–102

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CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMMES (CPDP) FOR THE MONTH OF JULY 2024

Sl. No.	Name of the Course	Scheduled Dates
1.	O&M of Sewerage network System and treatment plants	01 - 05 Jul 24
2.	Certification on Microsoft Power BI Data Analyst	02 - 05 Jul 24
3.	Cost reduction by Energy Auditing, Management & Design of Solar Energy Systems	02 - 05 Jul 24
4.	Smart Mining with Digital Technologies - Application of Internet of Things (IoT), Smart Sensors and Artificial Intelligence, Robotics, Remote Operations, Men-Tracking	03 - 05 Jul 24
5.	Safety Management in Construction and Civil Structures	08 - 12 Jul 24
6.	Design & Optimization of UAV's for Industrial Applications (Defense, Mining & Construction)	08 - 11 Jul 24
7.	NDT Level II Certification in Dye Penetrant Inspection (DPI) and Magnetic Particle Inspection (MPI) (in Accordance with ASNT Document No. SNT-TC-1A 2011)	08 - 12 Jul 24
8.	Assessment of Irrigation Demand and Irrigation Scheduling using Latest Software Applications	08 - 11 Jul 24
9.	Capacity Building Programme for Technical Personnel of Defense, Government and PSU's	09 - 11 Jul 24
10.	Smart Grid & Smart Metering Technologies & Applications	09 - 12 Jul 24
11.	Carbon Markets post COP28 - Renewable Energy Transition	10 - 12 Jul 24
12.	MS Azure Cloud Administration	15 - 18 Jul 24
13.	Occupational Safety & Health Challenges in Coal & Iron Ore Mining	15 - 19 Jul 24
14.	Best Practices in O&M of Industrial Valves & Actuators for Heavy Industries & Power Plants	17 - 19 Jul 24
15.	Calibration in Engineering Industry	17 - 19 Jul 24
16.	Advanced Intelligent Transportation System Applications for Highways	22 - 26 Jul 24
17.	Developing Cost-Effective Humanoid Robots	22 - 24 Jul 24
18.	Web Development using MERN Stack	22 - 26 Jul 24
19.	Operation, Maintenance and Performance Monitoring of Centrifugal Pumps, Blowers and Compressors (including Reciprocating and Screw Compressors)	22 - 26 Jul 24
20.	ISO 9001:2015 QMS - Lead Auditor Training (CQI - IRCA - UK Certified)	22 - 26 Jul 24
21.	Networking and use of sensors for on farm Irrigation Water Management	22 - 24 Jul 24
22.	Faecal Sludge and Septage Management	23 - 25 Jul 24
23.	Training on Risk Management for Engineers, Scientists and Managers.	23 - 25 Jul 24
24.	Gas Insulated Substations - Design features, Construction, Testing, Operation and Maintenance	23 - 26 Jul 24
25.	Energy Security – Exploration & Mining of Critical Minerals & Elements	24 - 26 Jul 24
26.	Leadership Styles and Teambuilding Skills for Organizational Development.	29 - 31 Jul 24
27.	Conflict Management, Decision Making and Problem-Solving Skills	29 Jul - 01 Aug 24