November 2018, Volume 3, Number 11

۰



- **Members in the News**
- **Publications by Members**
- Forthcoming Activities by Institutional Members
- **Book Review**
- **Indian Engineering Congress**
- **Annual Technical Volumes**
- **Advertisement Rates in IEI Publications**
- **IEI-Springer Journal Series**



### Dr. P. S. Ambily, MIE

Senior Scientist, Advanced Materials Laboratory, CSIR-Structural Engineering Research Centre, Taramani, Chennai, Tamil Nadu



Received 'Young Scientist Award 2018' from Indian Concrete Institute sponsored by Prof V Ramakrishnan on September 22, 2018.

Delivered a talk on the topic 'Alternative Fine Aggregates from Industrial Slags' in the National Seminar on 'Alternatives for

River Sand-Sustainable Approach at PSG College of Technology' sponsored by TEQUIP-III at Coimbatore on August 10, 2018.

### Mr. Vijai Kumar Sharma, FIE

Former Additional General Manager, Ordnance Factory, Khamaria, Jabalpur, Madhya Pradesh



Appointed as Advisor in Institute of Technical and Scientific Research (ITSR), Jaipur with effect from September 2018.

### Mr. Harjeet Nath, AMIE

Department of Chemical and Polymer Engineering, Tripura University (Central University), Agartala, Tripura



Received 'Young Scientist International Travel Award' from SERB (Department of Science and Technology, Govt. of India) for attending 2nd International Conference by Elsevier on Bioresource Technology at Sitges, Spain during September 16-19, 2018.

He presented a paper on 'Characterization and Prospects of Biomass available in North East India for Syn-gas Generation using Fluidized Bed Gasifier' in the said Conference.

### Mr. Koppuravuri V Pratap, AMIE

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

Approved as Associate Member in Institution of Valuers, Delhi with effect from September 20, 2018.



### Mr. M Mahadeva, AMIE

Assistant Professor, Department of Civil Engineering, R N S Institute of Technology, Bengaluru, Karnataka

Appointed as Reviewer in KSCE Journal of Civil Engineering published by Springer.



### Dr. Shiv Kumar Yadav, AMIE

Department of Environmental Science & Engineering, Indian Institute of Technology (ISM), Dhanbad, Jharkhand

Obtained PhD on the topic 'An Investigation into Emission Inventory and Source Apportionment Study of Air Quality along Selected Road Network of Jharia Coal Field, Dhanbad, India.' from Department of Environmental Science and Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand in 2018.





### Mr. N Prakash, MIE

CEO & Director, Vahyu Techno Engineers Private Ltd., Chennai, Tamil Nadu



Elected as Vice-Chairman, Tamilnadu Chapter of Indian Institution of Plant Engineers (IIPE) for the term 2018-2020 during the 45th AGM at Chennai.

### Mr. Prodyut Maji, MIE

AGM, Coal to Liquid Project, Adani Synenergy Limited, Ahmedabad, Gujarat

Presented a paper on 'Future on Coal Based Generation' at *10th India Coal Summit* organized by Indian Chambers of Commerce at New Delhi on September 20, 2018.



### Dr. V K Jain, FIE

Professor, Department of Mechanical Engineering, Indian Institute of Technology Kanpur, Uttar Pradesh



Appointed as Editor-in-Chief for 'Journal of Micromanufacturing'- a new venture started by *SAGE* Publication.

### Dr. Shyam Kumar Karna, AMIE

Associate Professor & Head (Mechanical Engineering), JB Knowledge Park, Faridabad, Haryana

Obtained PhD on the topic 'Productivity Improvement by Parametric Optimization of Gravity Die Casting using Taguchi Technique' from Manav Rachna International Institute of Research and Studies, Faridabad under the guidance of Dr. Ran Vijay Singh



from Faculty of Engineering and Technology in 2018.

### Mr. S Senthil Murugan, MIE

Assistant Professor (Senior Grade), Department of Mechanical Engineering, Mepco Schlenk Engineering College, Sivakasi, Tamil Nadu



Organized a Workshop on 'Insights of Research in Welding Engineering and Additive Manufacturing', at Department of Mechanical Engineering, Mepco Schlenk Engineering College, Sivakasi during September 14-15, 2018.

### Dr. Pranjal Kumar Phukan, MIE

Global Mentor, International Supply Chain Education Alliance SC Next India, Executive Council Member, GLG, Hong Kong, Brand Ambassador, International Academy of Science, Engineering & Technology, New Delhi

Received the title 'Procurement Leader of the Year 2018', as the Winner of 6th Procurement Excellence Award during the 12th ELSC Conclave held at Mumbai on October 04, 2018.



Publications

by Members

### Dr. Itagi Ravi Kumar, MIE

### Associate Professor, Swami Vivekananda Yoga



Anusandhana Samsthana, Bengaluru, Karnataka

**Title of Paper:** 'Seed Germination with Influence of Omkara', *Life Sciences Leaflets*, Vol. 103, 2018, pp. 04-07. Co-author: Mallina Karthik

### Mr. Vinod Mishra, AMIE

Technical Officer, Optical Devices and System, Central Scientific Instruments Organisation, Chandigarh



**Title of Book Chapter :** 'Ultra-precision Diamond Turning Process', *Micro and Nano Machining of Engineering Materials*, (*Springer*), October 2018, pp. 65-97.

Co-author: Harry Garg, Vinod Karar, Gufran S. Khan.

### Dr. Dharmendra Prasad Mahato, AMIE

Assistant Professor, Department of Computer Science and Engineering, BIT Sindri, Dhanbad, Jharkhand

Title of Paper: 'Load Balanced Scheduling and

Reliability Modelling of Grid Transaction Processing System using Coloured Petri Nets', *ISA Transactions (Elsevier, SCI)*, 2018. Co-author: Ravi Shankar Singh



**Title of Paper:** 'Maximizing Availability for Task Scheduling in On-

demand Computing based Transaction Processing System using Ant Colony Optimization, Concurrency and Computation : Practice and Experience', *Wiley Online Library (SCIE)*, January 2018, *DOI:10.1002/cpe.4405*.

### Dr. P. S. Ambily, *MIE*

Senior Scientist, CSIR-Structural Engineering Research Centre, CSIR Campus, Taramani, Chennai, Tamil Nadu

**Title of Paper:** 'Sustainable Cleaner Production of Concrete with High Volume Copper Slag', *Journal of Cleaner Production*, Vol.193, 2018, pp.43-58. Co-authors: Prem P. R, Verma M



### **Dr. R Visvanathan**, *FIE*

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



Tamil Nadu

**Title of Paper:** 'Rheology of Cooking of Broken Rice Flour Paste for Vadam Preparation', *Agricultural Engineering Today*, Vol:42 (3), 2018, pp. 50-55. Co-authour: Dr. B Manjula

### Mr. K Gobivel, AMIE

Assistant Professor, Department of Mechanical Engineering, KCG College of Technology, Chennai, Tamil Nadu

**Title of Paper:** 'Finite Element Analysis of High-Speed Machining of CFRP Material', *Lecture Notes in Mechanical Engineering*, (*Springer-Scopus*), Vol: Advances in Materials and Metallurgy, Chapter No. 15, 2018, pp. 137-147.



Publications

by Members

### Ms. Sasmita Bal, MIE

Assistant Professor, Department of Design and Engineering, Alliance University, Bangalore, Karnataka

**Title of Paper :** 'Optimization of Spray Parameters for Effective Microchannel Cooling Using Surface Response Methodology', *International Journal of Heat and Technology*, Vol. 36, No. 3, September 2018, pp. 973-980.



Co-authors: Purna C. Mishra, Ashok K. Satapathy

#### Dr. Ashish Manoria, FIE

Professor, Samrat Ashok Technological Institute, Vidisha, Madhya Pradesh

**Title of Paper:** 'Using Six Sigma and Shain in System Tools to Improve the Coating Process in the Manufacture of Compact Fluorescent Lamps', *Six Sigma Forum Magazine*, Vol.17, No. 2, 2018.



Co-authors: Raunak Gupta, Dr. P. L. Verma, Prof. Sanjay Jain

### **Prof (Dr) AKA Rathi**, FIE

Former Director and Former Chief Technical Advisor, CEPT University, Government of Gujarat, Ahmedabad, Gujarat



**Title of Paper:** 'Environmental Management in the Indian Context', Journal of Environmental Analysis and Ecological Studies, Crimson Publishers, New York, September 2018.

### Mr Chandra Prakash Kumar, FIE

Scientist 'G', National Institute of Hydrology, Roorkee Uttarakhand



**Title of Paper :** 'Water Resources Issues and Management in India', *Journal of Scientific and Engineering Research*, Vol. 5, No. 9, 2018, pp. 137-147.

### **Jitender Grover**, *AMIE*

Research Scholar, SPCRC, IIIT-Hyderabad, Telengana

**Title of Paper :** 'Dynamic Channel Allocation in Small Cells', *Proceedings* of *IEEE 7th International Conference on Reliability, Infocom Technologies and Optimization 2018* organised by Amity University at Noida during August 29-31, 2018.



Co-authors : Gadiraju Divija Swetha, Garimella Rama Murthy

### Prof. Darshan J. Mehta, AMIE

Assistant Professor, Faculty of Civil Engineering, Dr. S & S. S. Ghandhy Government Engineering College, Surat, Gujarat

**Title of Paper:** 'Use of Design Thinking Tools to Promote Innovations in Engineering Students', *Proceedings of National Conference on Emerging Startup and Innovation in Engineering and* 



*Technology* organised by Government Engineering College, Dahod on October 05, 2018. Co-authors: Keyur Prajapati

### Mr. Venkata Ajay Kumar G, AMIE

Assistant Professor, Annamacharya Institute of Technology & Sciences, Rajampet, Andhra Pradesh



**Title of Paper:** 'Multi-objective Optimization in WEDM of Inconel 750 Alloy:Application of TOPSIS embedded Grey Wolf Optimizer', *Proceedings of International Conference of Advanced Engineering Optimization through Intelligent Techniques* organized by Department of Mechanical Engineering,

SVNIT, Surat, Gujarat during August 3-5, 2018.

Publications

by Members

### **Prof (Dr) Vijayan Gurumurthy Iyer,** *FIE*

Department of Civil Engineering, Koneru Lakshmaiah Education Foundation and DEBM Coordinator, EDI of India, Vaddeswaram, Guntur, Andhra Pradesh

**Title of Paper**: 'Strategic Environmental Assessment (SEA) Process for Green Information Technology and Management Engineering Systems towards Sustainable Education Process', *Abstract Book of International* 



*Conference on Information Technology and Management Engineering 2018* organised at Beijing, China during August 26-27, 2018, pp.7-8. He was invited and served as General Chair in the said Conference.

**Title of Paper:** 'Strategic Environmental Assessment (SEA) Process for Applied Mechanics, Mechatronics and Materials Towards Sustainable Development' subtitled 'Sustainability Excellence Achievements', *Proceedings of the Part of Series: Atlantis Highlights in Intelligent Systems, Atlantis Press*, Vol. I, October 2018.

### Mr. Giridhar Maji, MIE

Faculty Member, Department of Electrical Engineering, Asansol Polytechnic, Department of Technical Education, (Training and Skill Development), Asansol, West Bengal

Title of Paper : 'An Integrated Blood Donation Campaign



Management System, Proceedings of 1st International Conference on Contemporary Advances in Innovative and Applicable Information Technology 2018, Organised by Kingston Educational Institute, Kolkata, during March 24-25, 2018, Publisher: Springer

Technical Sponsor : *Springer*, *Computer Society of India* (CSI) Division-IV.

### Dr. Sushovan Chatterjee, MIE

Associate Professor and Head, Department of Mechanical Engineering, Cooch Behar Government Engineering College (under Department of Science & Technology and Biotechnology, Government of West Bengal), Cooch Behar, West Bengal

**Title of Paper :** 'Structural Analysis for Exhaust Gas Flow through an Elliptical Chamber Muffler under Static and Dynamic Loading Condition', *Advances in Modelling and Analysis B*, Vol. 61(2), June 2018, pp. 92-98.



Title of Paper : 'Waste Snail Shell

Derived Heterogeneous Catalyst for Biodiesel Production by the Transesterification of Soybean Oil', *RSC Advances*, Vol. 8, 2018, pp. 20131-20142, DOI: 10.1039/C8RA02397B.

**Title of Paper :** 'Analysis of Design and Material Selection of a Spur Gear Pair for Solar Tracking Application,' *Materials Today Proceedings*, Vol. 5, No. 1, Part 1, February 03, 2018, pp 789-795.

### Mr. Vinay Anand, AMIE

Assistant Professor and Head, Department of Electrical Engineering, Sanskriti University Chhata, Mathura, Uttar Pradesh



**Title of Paper:** 'Application of Technology in Management of a Natural Calamity-An Origin of Disaster,' KRITI Journal of Management Research, Edition 3, School of Business and Commerce, Sanskriti University, Mathura, September 2018.

## FORTHCOMING &CTIVITIES BY INSTITUTION&L MEMBERS

International Conference on 'Mechanical : Innovative & Emerging Trends' to be organised by : Meerut Institute of Engineering & Technology (MIET) Meerut, Uttar Pradesh December 04-05 , 2018 National Seminar on 'Potential Benefits of Nanotechnology in Engineering Applications' to be organised by : Gandhi Institute for Technology (GIFT) Bhubaneswar, Odisha December 15-16, 2018

National Workshop on 'Artificial Intelligence and

Machine Learning' to be organised by: Adi Shankara Institute of Engineering and Technology Ernakulam, Kerala December 14-19, 2018 National Symposium on

**'Modern Materials and Manufacturing Techniques'** 

to be organised by :

Amaljyothi College of Engineering

Kanjirappally, Kerala December 17-19, 2018

International Conference on 'Artificial Intelligence, Smart Grid and Smart City Applications : AISGSC 2019' to be organised by:

**PSG College of Technology** 

Coimbatore, Tamilnadu January 03-05, 2019

## FORTHCOMING &CTIVITIES BY INSTITUTION&L MEMBERS

### International Conference on

Nascent Technologies in Engineering : (ICNTE 2019)'

to be organised by:

Fr. C Rodrigues Institute of Technology Navi Mumbai, Maharashtra January 04-05, 2018 National Seminar on 'Technological Progress and Challenges in Smart Grid Integration with Distributed Generation'

to be organised by : K S Rangasamy College of Technology Namakkal, Tamilnadu February 01-02, 2019

National Workshop on 'Ethical Hacking' to be organised by: Srinivasa Ramanujan Institute of Technology

Ananthapur, Andhra Pradesh January 04-05, 2019

### National Workshop on

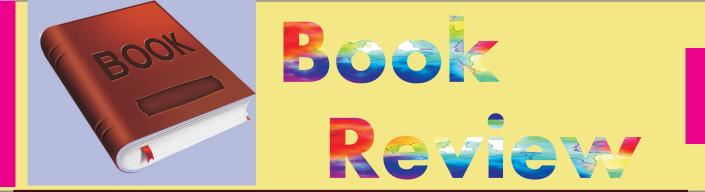
Solar PV Installation and Application for Domestic Needs' to be organised by: SNS College of Technology Coimbatore, Tamilnadu February 21-22, 2019

All India Seminar on 'Energy System : Generation, Utilization and Control'

to be organised by :

Budge Budge Institute of Technology Kolkata, West Bengal January 31-February 01, 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

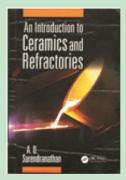


## An Introduction to Ceramics and Refractories

### **Prof. A O Surendranathan**, *FIE*

Department of Metallurgical and Materials Engineering, National Institute of Technology Karnataka, Surathkal

Ceramics and Refractories cover a wide range of fields and applications, and their relevance can be traced as far back as 24000 BC to the first man-made piece of earthenware, and as recently as the late 1900s when ceramics and ceramic matrix composites were developed to withstand ultra-high temperatures. Beginning with a detailed history of ceramics, the author examines every aspect of ceramics and refractories and explores the connection between them. The book establishes refractories as a class of ceramics with high fusion points, introduces the



fundamentals of refractories and ceramics, and also addresses several applications for each. The book details the applications for natural and synthetic ceramics, as well as traditional and engineering applications. It provides a basic knowledge of the fundamentals of refractories and ceramics and presents a clear connection between refractory behaviour and ceramic properties to the practicing engineer.

Publisher: CRCPress, Taylor & Francis Group

## **INDIAN ENGINEERING CONGRESS**

Udaipur, December 21-23, 2018

Theme:

Integration of Technologies: Emerging Engineering Paradigm

organized by: The Institution of Engineers (India)

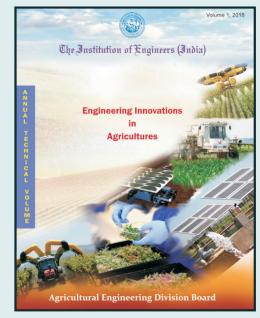
### Hosted by: Udaipur Local Centre

Contact : Organising Secretary, 33rd Indian Engineering Congress, The Institution of Engineers (India), Udaipur Local Centre 128 Hiran Magri, Sector 11, Near Seva Charitable Hospital, Udaipur 313002 E-mail: udaipurlc@ieindia.org

## **Annual Technical Volumes of IEI are now available online**

## **Agrilcultural Engineering Division Board**

Theme: "Engineering Innovations in Agricultures"



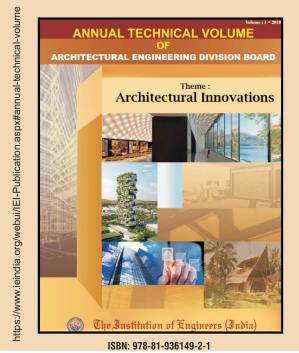
ISBN: 978-81-936149-4-5

## **Interdisciplinary Coordination Committee**

Theme: "Make in India to Made in India"

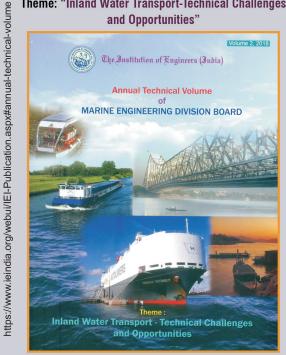
Che Institution of Engineers (India) Theme : Make in India to Made in India **Interdisciplinary Coordination Committee** 

## **Architectural Engineering Division Board**



**Marine Engineering Division Board** 

Theme: "Inland Water Transport-Technical Challenges and Opportunities"



https://www.ieindia.org/webui/IEI-Publication.aspx#annual-technical-volume

https://www.ieindia.org/webui/IEI-Publication.aspx#annual-technical-volume

# Advertisement Rates in IEI Publications

### IEI News (Printed + online)

**Reach :** 1,25,000 members by email + 3200 hard copies to industries, Government Departments and others + Available online

Schedule : Monthly - 12 issues in a year

### Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)	
Inside Full Page	20.6 cm (width) x 27.6 cm (height)	Colour	50,000	
Inside Half Page	20.6 cm (width) x 13.75 cm (height)	Colour	30,000	
Inside Quarter Page	10.3 cm (width) x 13.75 cm (height)	Colour	15,000	
5% discount for advertisement in 6 consecutive issues 10% discount for advertisement in 12 consecutive issues				

### IEI Epitome (Online)

**Reach :** 1,25,000 members by email + Available online perpetually **Schedule :** Monthly - 12 issues in a year

### Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)	
Inside Full Page	18.9 cm (width) x 23.1 cm (height)	Colour	30,000	
Inside Half Page	18.9 cm (width) x 11.55 cm (height)	Colour	15,000	
Inside Quarter Page	9.46 cm (width) x 11.55 (height)	Colour	8,000	
5% discount for advertisement in 6 consecutive issues 10% discount for advertisement in 12 consecutive issues				

## Annual Technical Volumes of Engineering Divisions (Printed + online)

Aerospace Engineering Division	Agricultural Engineering Division		
Architectural Engineering Division	Chemical Engineering Division		
Civil Engineering Division	Computer Engineering Division		
Electrical Engineering Division	Electronics & Telecommunication Engineering Division		
Environmental Engineering Division	Marine Engineering Division		
Mechanical Engineering Division	Metallurgical and Materials Engineering Division		
Mining Engineering Division	Production Engineering Division		
Textile Engineering Division	Interdisciplinary Coordination Committee		

 ${\it Reach:1,25,000}$  members by email + 500 hard copies to industries and Government Departments + Available online

Schedule : One issue in a year per Engineering Division

### Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)
Back Cover Page	16.8 cm (width) x 22.6 cm (height)	Colour	30,000
Inside Cover Page	16.8 cm (width) x 22.6 cm (height)	Colour	25,000
Inside Full Page	16.8 cm (width) x 22.6 cm (height)	Colour	20,000
Inside Full Page	16.8 cm (width) x 22.6 cm (height)	B/W	15,000
Inside Half Page	16.8 cm (width) x 11.3 cm (height	B/W	8,000

For booking, Please write to:

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

Email: technical@ieindia.org

[Payment is to be made by 'at par' cheque drawn in favour of The Institution of Engineers (India)]

## **IEI – Springer Journal Series**

### Series A: Civil, Architecture, Environment, Agriculture

URL: http://link.springer.com/journal/40030

Editor-in-Chief:

Prof K Ramamurthy, Dept. of Civil Engg., IIT Madras Associate Editors:

Prof Deepankar Choudhury, Dept. of Civil Engg., IIT Bombay, Mumbai

Prof R G Robinson, Dept. of Civil Engg., IIT Madras, Chennai Prof Siva Sivakugan, College of Science & Engineering, James Cook University, Australia

Prof Rajesh Srivastava, Dept. of Civil Engg., IIT Kanpur

Prof (Ms.) Suparna Mukherji, Centre for Environmental Science and Engineering, IIT Bombay

Prof T I Eldho, Dept. of Civil Engg., IIT Bombay, Mumbai Prof S C Dutta, Dept. of Civil Engg., Indian School of Mines Dhanbad

Dr (Ms.) Lelitha Devi V, Dept. of Civil Engg., IIT Madras, Chennai

- Prof S Dutta Gupta, Department of Agricultural and Food Engineering, IIT Kharagpur
- Dr S N Jha, Indian Council of Agricultural Research, New Delhi
- Dr E Rajasekar, Department of Architecture and Planning, IIT Roorke Dr Bhupinder Singh, Department of Civil Engineering, IIT Roorkee





ISSN Print: 2250-2149 ISSN Online: 2250-2157



### Series B: Electrical, Computer and Electronics & Telecommunication URL: http://link.springer.com/journal/40031

Editor-in-Chief:

Prof. P. P. Das, Department of Computer Science & Engineering, IIT Kharagpur Associate Editors:

Prof. Vikram M Gadre, Dept. of Electrical Engg., IIT Bombay

Prof. Debaprasad Kastha, Dept. of Electrical Engg., IIT Kharagpur

Dr. Siva Kumar K, Dept. of Electrical Engg., IIT Hyderabad

Dr. Indranil Sengupta, Dept. of Computer Science & Engg., IIT Kharagpur

ISSN Online: 2250-2114

#### Series C: Mechanical, Production, Marine, Aerospace URL: http://link.springer.com/journal/40032

Editor-in-Chief:

Prof. Gautam Biswas, Director, IIT Guwahati

Associate Editors:

Prof. Suman Chakraborty, Dept. of Mech. Engg., IIT Kharagpur Dr. N. C. Murmu, CMERI, Durgapur Prof. Amitava De, Dept. of Mech. Engg., IIT Bombay Prof. U. S. Dixit, Dept. of Mech. Engg., IIT Guwahati Dr. B. K. Saxena, Principal, Tolani Maritime Inst., Pune Prof. A.K.Agarwal, Dept. of Mech. Engg., IIT Kanpur



ISSN Online: 2250-2130

### Series E: Chemical, Textile

URL: http://link.springer.com/journal/40034 Editor-in-Chief:

Prof Arun K Tangirala Department of Chemical Engineering, IIT Madras, Chennai

Associate Editor: Prof Kaustubha Mohanty, Department of Chemical Engineering, IIT Guwahati

Prof Abhijit Majumdar, Department of Textile Technology, IIT Delhi Dr Kishalay Mitra, Department of Chemical Engineering, IIT Hyderabad

Prof Shampa Chakraborty, Department of Chemical Engineering, University of Calcutta, Kolkata, India



#### Series D: Metallurgical & Materials and Mining URL: http://link.springer.com/journal/40033

Editor-in-Chief:

Prof. N. R. Bandyopadhyay, School of Materials Science & Engineering Indian Institute of Engineering Science and Technology, Shibpur Associate Editors:

Prof. Shubhabrata Dutta, SRM University, Chennai Prof S. P. Banerjee, Indian School of Mines, Dhanbad



ISSN Print: 2250-2483

ISSN Online: 2250-2491

SCOPUS Index

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



### President : Mr Sisir Kumar Banerjee

Editor: Maj Gen (Dr.) S Bhattacharya, VSM (Retd)

Associate Editor: Ms A Dutta

Special Contributors: Mr N Sengupta, Mr S Chaudhury, Dr S Ghosh, Mr K Sen, Mr T Chakraborty, Mr A Basu, Ms H Roy, Mr P Chakraborty, Mr S Bagchi, Mr P Mukhopadhyay Telephones: 91-33-2223 8311/14/15/16 E-mail: newsletter@ieindia.org

Web: http://www.ieindia.org