

About Conference

Department of Civil Engineering, Nehru Institute of Technology (NIT), Coimbatore, Tamil Nadu, India and Cafet Innova Technical Society (CITS), Hyderabad, Telangana, India are jointly organizing 3rd International Conference on Earth Sciences and Engineering (ICEE-2016) during 17th - 18th June, 2016. Conference aims to bring together and provide a platform to Researchers, Engineers, Scientists and Academicians as well as Industrial Professionals from all over the globe to present, share and exchange their research results and developmental activities about all parts of earth sciences and engineering. ICEE-2016 is unique in itself due to fusing earth sciences with engineering, which helps the delegates to exchange their experiences face to face, establish research relations and to find global partners for future research collaboration.

3rd ICEE 2016

After 9 years of its existence, CITS has organized more than 35 national and international conferences, workshops, symposiums on its own banner and in association with various reputed universities from all over the globe. CITS has organized First International Conference on Earth Sciences and Engineering (ICEE-2010) during 21st- 22nd August, 2010 at Hyderabad, Telangana, India. 2nd ICEE, was organized during 20th-21st March, 2015 at Nehru Institute of Technology (NIT), Coimbatore, India. The third in series of ICEE, i.e. 3rd International Conference on Earth Sciences and Engineering (ICEE-2016) emphasis on recent scientific developments in Earth Sciences and Engineering.

About Nehru Institute of Technology

Nehru Institute of Technology established in the year 2008 is a private self-financing technical institution recognized by AICTE, New Delhi and affiliated to Anna University, Coimbatore. NIT is an Endeavour of Nehru College of Educational and Charitable Trust, established at an auspicious moment in the year 1968, with the primary objective of rendering selfless and dedicated service to the cause of higher education originally in the field of Aeronautical Engineering and subsequently in the rest of Engineering branches, Management, Arts, Science, and Paramedical Sciences. Over the period of nearly four decades, it has established and patronized a number of prestigious Educational Institutions, all of which have grown to the stature of being accredited with ISO13001:2008 certification by the International Certification Services. Nehru Institute of Technology is located at in the midst of Western Ghats, in an environmentally unpolluted locality at the outskirts of Coimbatore. The College has completed 7 years of its service with excellent state of art facilities and committed faculty members.

Department of Civil Engineering

Department of Civil Engineering was started in the year 2008 with highly qualified, committed and research oriented faculty members. The department functions as a centre of academic excellence by emphasizing the curriculum with special guest lectures and in-plant training for students every semester on various topics to meet the global challenges of engineering industry. The department is committed to develop internationally prominent educational and research programme that will benefit the society.

About CAFET-INNOVA TECHNICAL SOCIETY

The CAFET-INNOVA Technical Society (CITS) is an international non-profit organization helping the scientific community, laid its foundation in 2007 in Hyderabad, India. The main motto of CITS is to encourage the young talent towards the field of Research and Development (R&D) and harness their intellectual abilities for the betterment of industry.

CITS has been organizing various international/national conferences, Workshops and Guest lectures etc., across the world. CITS has been Publishing International Journals like International Journal of Earth Sciences and Engineering (IJEE)-ISSN 0974-5904, International Journal of Biological Sciences and Engineering (IJBE) - ISSN 0976-1519, International Journal of Industrial Electronics, Control and Robotics (IJICR)- ISSN 2231-4903 and an exclusive journal for Engineering and Science students is International Journal of Engineering and Science Students (IJESS) - ISSN 2278-7607.

International Journal of Earth Sciences and Engineering (IJEE) ISSN 0974-5904 [Scopus Journal Rating-0.15 & CSIR-NISCAIR, INDIA IF-0.13] is indexed in Scopus Compendex and Geobase (products hosted on Engineering Village) Elsevier, Amsterdam, Netherlands, Chemical Abstract Services-USA, Geo-Ref Information Services-USA and it emphasizes on Earth sciences and Engineering. International Journal of Biological Sciences and Engineering (IJBE) ISSN 0976-1519 is indexed in Directory of Open Access Journals (DOAJ), USA and it focuses on Biological Sciences and Engineering. International Journal of Industrial Electronics, Control and Robotics (IJICR) ISSN 2231-4903 focuses on Electronics, Electrical and Mechanical Engineering. International Journal of Engineering and Science Students (IJESS) ISSN 2278-7607 aims at providing platform to young researchers in the fields of Science and Engineering.

It is one of the World's first free student international journals to exclusively highlight the research contribution of undergraduate, Post graduate and Research students in the field of engineering and science. The journal believes that the true research potential of students can be realized by encouraging them to participate in research and acknowledging their achievements.



Founder Members
(Dr. Raju Aedla and Dr. Hafeez Basha R)

Prof. D. Venkat Reddy
President, Cafet Innova Technical Society



Andalas University, Indonesia

UNAND is the oldest university outside of Java Island, and the fourth oldest university in Indonesia. This university was established in 1956 following the Decree of Minister of Education and Culture No. 80016/Kab; 23 December 1955. UNAND was officially launched at 13 September 1956 by four of its founding fathers together with the Dr. st Mohammad Hatta, Indonesia's 1 Vice President, and the Minister of Education and Culture Bapak Sarino Mangoenpranoto. In its early years, UNAND had five faculties that were spread at different municipalities. Faculty of Agriculture in Payakumbuh, Faculty of Medicine and Faculty of Natural Science in Bukittinggi, Faculty of Law in Padang, and Faculty of Teaching and Education in Batusangkar. Then Faculty of Economics and Faculty of Animal Husbandry were established in the year 1961 and 1963, consecutively. Other faculties, i.e. Humanities, Engineering, Social and Politics, Pharmacy, Agricultural Technology, and Public Health have been established afterwards. In 1965, Faculty of Teaching and Education split from UNAND and has become Institute of Teaching and Education of Padang (IKIP) Padang. UNAND is now having 15 faculties and Postgraduate Program and is home for almost 25000 students. To date, UNAND has three campuses, i.e Campuss I in Padang covers the area of 500 ha (main campuss); campuss II in Payakumbuh for Animal Science and Economics; and campus III in Dharmasraya for Agroecotechnology.

Basha Research Corporation, Singapore

The Basha Research Corporation (BRCORP) aims at providing services to accelerate the scientific research globally, with a prime objective of bridging the gap between the scientific world and academic community. The organization is focused on creating discussion forums for technology innovation, platform to share research ideas, guidance to science investigators and publishing the associated literature. The insight of a strong visionary, founded Basha Research Corporation with a mission to exaggerate its services globally and attain the unreached. The strong values and dedicated resources of this organization shall make it competent with leading research and development service providers, technical committees and periodical publishers worldwide. [<http://basharesearch.com/>].

RM Vision Minds Private Limited, Hyderabad, India

RM Vision Minds Technologies is a global software services company focusing on Software Development and Products. We provide a complete suite of IT services in the business applications domain, specializing in multiple verticals including financial services, education and allied industries. Technology leadership is the most successful strategy to challenge competitors and consolidate our position since business and technology work hand in hand. Our firm's belief in this synthesis has motivated and enabled us to deliver solutions with a decisive competitive advantage. *RM Vision Minds Technologies*, today, is a new generation framework of technology innovators to accelerate growth. *RM Vision Minds Technologies* is best at offering fully fledged services for software development and engineering empowering effective near-shore management to its clients.

Organizing Committee

Chief Patron

Krishnadas P, Managing Trustee, Nehru Group of Institutions, INDIA
Krishnakumar P, CEO & Secretary, Nehru Group of Institutions, INDIA

Patron

Joseph Xavier R, Director of Academics, Nehru Group of Institutions, INDIA

Conference Chair

Venkat Reddy D, President, Cafet-Innova Technical Society, Hyderabad, INDIA

Technical Chair

Dwarakish G S, National Institute of Technology Karnataka, Surathkal, INDIA

Technical Co-Chair

HafeezBasha R, Vice-President, Basha Research Corporation, Singapore

Organizing Chair

Brema J, Principal, NIT, Coimbatore, INDIA

Raju Aedla, Founder & Secretary General, Cafet-Innova Technical Society, INDIA

Organizing Secretary

Vadivel M, Associate Professor, NIT, Coimbatore, INDIA

Organizing Members

Aarthi R

Akila V

Ashok Kumar K

Avinash A

Dibya J P

Gobinath S

Gowdhami V

Imran Udayagiri

Irish Nivitha

Madhan

Madhavi Vadla

Nafeesa Parveen

Samatha Adla

Samuel Thanaraj M

Sanjeev Adla

Santhoshini N R Aedla

Selvaram P

Shobana K

Sukumar S

Vijay Kumar P

International Advisory Committee

Alper Baba, Izmir Institute of Technology, TURKEY
Abdul Hakam, Andalas University, Padang, INDONESIA
Abhash Kumar, National Energy Technology Laboratory, Pittsburgh, USA
Amde Meskel Amde, University of Maryland, USA
Andrew Zhang, Maple Culture Exchange Services, CANADA
Arash Ebrahimabadi, Azad University, Qaemshahr, IRAN
Bambang Istijono, Andalas University, Padang, INDONESIA
Biswajeet Pradhan H, University Putra Malaysia, MALAYSIA
Das S, Indian Institute of Technology, Kharagpur, INDIA
Deepak T J, INTI International University, Kaula Lumpur, MALAYSIA
Defa Hu, Human University of Commerce, Humana, P R CHINA
Fwa Tien Fang, National University of Singapore, SINGAPORE
Ganesan N, National Institute of Technology, Calicut, Kerala, INDIA
Girish Gopinath, CWRDM, Kerala, INDIA.
Hany Farouk Shehata, Soil-Structure Interaction Group in Egypt, EGYPT
James E J, Director, Water Institute, Karunya University, INDIA
John L Daniels, The University of North Carolina at Charlotte, USA
Johnson Alengaram, University of Malaya, Kaula Lumpur, MALAYSIA
Jonna Maria Dulinska, Cracow University of Technology, POLAND
Kar S C, NCMRWF, Minister of Earth Sciences (MoES), INDIA
Katta Venkataramana, National Institute of Technology Karnataka, INDIA
Krishna R Reddy, University of Illinois, Chicago, USA
Linhua Sun, Suzhou University, Suzhou, CHINA
Madhav M R, Jawaharlal Nehru Institute of Technology, Hyderabad, INDIA
Mashamba Able, University of Johannesburg, SOUTH AFRICA
Murali Krishna I V, IST, JNTU, Hyderabad, INDIA
Narasimha Prasad N B, CWRDM, Calicut, INDIA
Neelamani S, Kuwait Institute for Scientific Research, KUWAIT
Paloma Pineda, University of de Sevilla, Seville, SPAIN
Pavanaguru, Osmania University, Hyderabad, INDIA
Pramila Goyal, Indian Institute of Technology, New Delhi, INDIA
Raj R Kallu, University of Nevada, Reno, USA
Raju Sarkar, Delhi Technological University, New Delhi, INDIA
Ramachandra Reddy P, NGRI, Hyderabad, INDIA
Reddy A G S, Rajiv Gandhi National Ground Water Training & Research Institute, Raipur, INDIA
Robert Jankowski, Gdansk University of Technology, POLAND
Saeed Khorram, Eastern Mediterranean University, Famagusta, CYPRUS
Saibaba Reddy E, Veer Surendra Sai University of Technology, Odisha, INDIA
Sangam Shrestha, Asian Institute of Technology, THAILAND
Shuichi TORII, Kumamoto University, JAPAN
Stefano Sorace, University of Udine, ITALY
Trilok N Singh, Indian Institute of Technology Bombay, INDIA
Umamaheshwar Rao, Indian Institute of Technology, Kharagpur, INDIA
Vladimir Vigdergauz, ICEMR, Russian Academy of Sci., RUSSIA
Zhuping Sheng, Texas A&M University System, USA

International Technical Committee

Amit Kumar Verma, Indian School of Mines, Dhanbad, Jharkhand, INDIA
Anand V Shivapur, SDM College of Engineering & Technology, Karnataka, INDIA
Anant B Parekh, Indian Institute of Tropical Meteorology, Pune, INDIA
Arkal Vittal Hegde, National Institute of Technology Karnataka, Surathkal, INDIA
Basavarajappa H T, University of Mysore, Manasagangotri, Mysore, INDIA
Bheemalingeswara K, Mekelle University, Mekelle, ETHOPIA
Chachadi A G, Goa University, Goa, INDIA
Chakraborty S, Indian Institute of Tropical Meteorology, Pune, INDIA
Deepak T J, INTI International University, Kaula Lumpur, MALAYSIA
Deva Pratap, National Institute of Technology Warangal, Telangana, INDIA
Elangovan K, PSG College of Technology, Coimbatore, Tamil Nadu, INDIA
Girish Gopinath, CWRDM, Kerala, INDIA
Glenn T Thong, Nagaland University, Kohima, INDIA
Gopal Krishan, National Institute of Hydrology, Roorkee, INDIA
Gopala Krishna GVT, PSNA College of Engineering and Technology, Dindigul, INDIA
Gopala Raju SSSV, GITAM University, INDIA
Jayaprakash, MITE, Moodabidri, Karnataka, INDIA
Jitendra Virmani, Thapar University, Punjab, INDIA
Kar S C, NCMRWF, MoES, INDIA
Karra Ramchandar, National Institute of Technology Karnataka, Surathkal, INDIA
Kishore S Kulkarni, K L E Dr. M S Sheshgiri College of Engineering and Technology, INDIA
Krishna Achutarao, Centre for Atmospheric Sciences, IIT Delhi, New Delhi, INDIA
Kumanan C J, Bharathidasan University, Tamil Nadu, INDIA
Kumar Raju B C, Jain University, Karnataka, INDIA
Madhu Chandra R Kalapureddy, Indian Institute of Tropical Meteorology, Pune, INDIA
Mahendran N, PSNA College of Engineering and Technology, Dindigul, Tamil Nadu, INDIA
Mahesh Kumar Jat, Malaviya National Institute of Technology, Jaipur, INDIA
Mandla V Ravibabu, Vellore Institute of Technology, Vellore, Tamil Nadu, INDIA
Manjaiah M, University of Johannesburg, SOUTH AFRICA
Manjula R, National Institute of Technology, Tiruchirapally, INDIA
Mohammed Sharif, Jamia University, New Delhi, INDIA
Muralidhar Avvari, University of Johannesburg, SOUTH AFRICA
Muthupriya P, Karunya university, Coimbatore, Tamil Nadu, INDIA
Muthupriya P, Karunya University, Coimbatore, Tamil Nadu, INDIA
Nadjadji Anwar, Institute of Technology Sepuluh Nopember (ITS), Surabaya, INDONESIA
Nalanth N, Noorul Islam University, Nagarcoil, Tamil Nadu, INDIA
Narayana R M, Dr. MGR University, Chennai, Tamil Nadu, INDIA
Natarajan C, National Institute of Technology Thiruchirapally, Tamilnadu, INDIA
Paresh Chandra Deka, National Institute of Technology Karnataka, Surathkal, INDIA

Pavanaguru, Osmania University, Hyderabad, INDIA
Poornachandra Pandit, Manipal Institute of Technology, Manipal, Karnataka, INDIA
Prabu Sevugan, VIT University Vellore, Tamil Nadu, INDIA
Pradeep Kumar R, Indian Institute of Information Technology Gachibowli, INDIA
Pradhan S P, IIT Roorkee, INDIA
Pratap Chandra Sathy, Sambalpur University, Odisha, INDIA
Rajeshwar Singh Banshtu, National Institute of Technology Hamirpur, INDIA
Rajeshwara Rao N, University of Madras, Tamilnadu, INDIA
Raju Sarkar, Delhi Technological University, New Delhi, INDIA
Ramanmurthy M V, Geological Survey of India, Bangalore, INDIA
Reddy A G S, Rajiv Gandhi National Ground Water Training & Research Institute, Raipur, INDIA
Sandi Kumar Reddy, National Institute of Rock Mechanics, Karnataka, INDIA
Saravanan S, National Institute of Technology, Tiruchirapally, INDIA
Satyanarayana Reddy C N V, Andhra University, Andhra Pradesh, INDIA
Shamsher B Singh, BITS Pilani, Rajasthan, INDIA
Shreelaxmi Prashanth, Manipal Institute of Technonoply, Manipal, Karnataka, INDIA
Shreerup Goswami, Ravenshaw University, Cuttack, Odisha, INDIA
Sivapragasam C, Kalasalingam University, Tamil Nadu, INDIA
Subba Rao Nadipati, Andhra University, Visakhapatnam, Andhra Pradesh, INDIA
Sunitha V, Yogi Vemana University, Kadapa, Andhra Pradesh, INDIA
Suresh Babu S, Adhiyamaan College of Engineering, Tamilnadu, INDIA
Suresh Gandhi M, University of Madras, Tamilnadu, INDIA
Swati Dixit, Birbal Sahni Institute of Palaeobotany, Lucknow, INDIA
Theingi Shwe, Yangon Technological University, Yangon, MyANMAR
Thirumalai R, SNS College of Technology, Coimbatore, INDIA
Tiwari R N, Govt. PG Science College, Rewa, Madhya Pradesh, INDIA
Vasudev Raman, TIST, Cochin, Kerala, INDIA
Vasumathi A M, KLN College of Information Technology, Pottapalayam, Tamilnadu, INDIA
Venkata Reddy K, National Institute of Technology Warangal, Warangal, Andhra Pradesh, INDIA
Vinayaka Ram V, Birla Institute of Technology & Science-Pilani, Hyd-Campus, INDIA



Adv. (Dr.) P. Krishnadas
Managing Trustee
Nehru Group of Institutions
INDIA

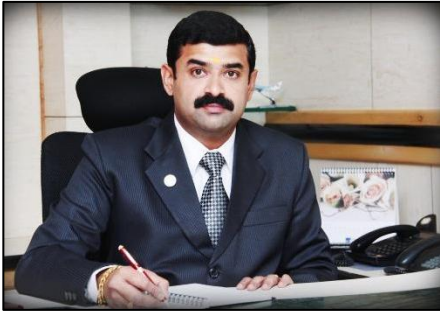
MESSAGE

The conference is a yearly event for a world-class gathering of researchers from academia and industry, practitioners, and business leaders, providing a forum for discussing cutting edge research, and to lay directions for new innovative business and technology.

I see that this International Conference on Earth Sciences include a highly selective technical sessions consisting of submitted papers, a small set of invited papers on important and timely topics from well-known leaders in the field. Such kind of focused workshops and panel discussions on emerging topics will allow for a lively exchange of ideas amongst experts.

I hope the international academicians invited for keynote address will share their perspectives, and will complement the technical programme. I'm also feeling delighted that, Cafet-Innova, the technical society associated with this conference is sharing the same vision as that of the home institution towards the precipitation of research ideas amongst the students of rural areas. At the outset, I wish the conference team a great success and the delegates to have a knowledge sharing two days.

Krishnadas P



Dr. P. Krishnakumar
CEO & Secretary
Nehru Group of Institutions
INDIA

MESSAGE

International Conference on Earth Sciences is one of the necessary events for its emerging global needs. Human civilization has always relied on various Earth resources for survival, growth and development. I hope this conference in association with Cafet – Innova Technical Society, provides a global intellectual platform for top notch academic and industry professionals to actively interact and share their groundbreaking research achievements.

Our institution has always been dedicated in promoting research and development and offers an inter-disciplinary intellectual platform for leading scientists, researchers, academicians and industry professionals across the country to actively interact and collaborate with their counterparts across the globe. With this strong belief, we motivate and promote organizing such conferences and seminars across all the disciplines of engineering in our institutions.

We are honored to be chosen as host for this conference by the technical society, Cafet-Innova, reflects our institutions role as a bridge between the academia and industry, where habitual practices meet the necessity.

May this Conference conducted in the spirit of open communication among all participant, yield scientific profit to all of you, so that in this way the meeting will contribute to promote the progress towards the conservation of earth resources. May it in this way contribute to further the prosperity and welfare of people.

I wish the conference team the best of efforts and the delegates and speakers eventful and fruitful scientific deliberations.

Krishnakumar P



Dr. D.Venkat Reddy
Conference Chair – ICEE 2016
President, Cafet-Innova Technical Society
Professor, Department of Civil Engineering
National Institute of Technology Karnataka,
Surathkal, Mangalore-575 025, India
President, Cafet –Innova Technical Society, Hyderabad, India
Email dvr1952@gmail.com, chiefeditor_ijee@yahoo.com

MESSAGE

I am delighted to know that the International Conference on Earth Sciences and Engineering (ICEE 2016) is being organized jointly by Department of Civil Engineering, Nehru Institute of Technology, Coimbatore, Tamil Nadu and Cafet-Innova Technical Society, Hyderabad, India in technical association with Andalas University, Indonesia and Basha Research Corporation, Singapore during 17th -18th June, 2016.

I am happy to note that International Conference is aimed at highlighting research innovativies in earth sciences and engineering. Cafet Innova Technical Society team is very happy to collaborate and join for the success of the conference as a research collaboration. Selected papers from ICEE 2016 will be considered for the publication in “International Journal of Earth Sciences and Engineering (IJEE)”, publishing by Cafet Innova Technical Society.

I am pleased to extend our collaboration with Andalas University, Indonesia and Basha Research Corporation, Singapore for their technical and reserch collaboration. I would like to congratulate the Prof. (Mrs). Brema J, Organizing Chair, Prof. Vadivel M and their team for organizing and supporting such an excellent international event.

I also thank Dr. Raju Aedla, Founder & Secretary General, CITS, who took responsibility to bring all into a common platform and making it to a grand success.

I am cofident that the two day conference will serve as a platform for exchanging the scientific & technical ideas among the participants belongs various research backgrounds.

I wish the conference a grand success.

D.Venkat Reddy



Dr. Shuichi TORII
Assistant Director, College of Cross-Culture and
Multidisciplinary Studies
Professor, Faculty of Engineering
Kumamoto University
JAPAN

MESSAGE

Congratulations! I would like to congratulate the success of the 3rd International Conference on EARTH SCIENCES AND ENGINEERING (ICEE 2016) which is organized by Nehru Institute of Technology (NIT) and CAFET INNOVA Technical Society (CITS), India. This conference intends to provide a common platform for bringing together researchers from participating institutions for expanding academic collaboration. As part of this conference, the researchers from abroad are invited and get exposed to its educational and research activities. The event focuses on the current research and development of the participating institutions on topics of mutual interest, with a special emphasis on “Science & Technology” based on “Engineering”. The emerging technology and scientific advancements are discussed during the conference. Presentations give new and innovative technologies in the relevant fields. The topics include a wide spectrum of themes covering all major disciplines of science and engineering.

The efforts put in by the faculty, the staff and the students in organizing this event are greatly appreciated. I sincerely hope that participants will find the contents of this conference useful and productive. I look forward to intense academic collaborations and research interactions and to achieve the common goal of technological advancement for global peace and prosperity.

I wish the ICEE all the very best in future endeavours. Once again, congratulations on the success of ICEE 2016.

Shuichi TORII



Dr. J.K. Kishore
Associate Project Director, SPADEX
IRS & SSS Programme
ISRO Satellite Center,
Bangalore 560017
INDIA

MESSAGE

It is important to act Today for Green Tommorrow

The International Conference on Earth Sciences is important in the context of the global thrust being given to Green Energy / Climate Change / Sustainable development / Low carbon economy etc., It provides a platform for exchange of ideas between academia, industry and business leaders to prepare the green citizens and economy of future. The ideas presented by the distinguished speakers can help MNRE which is working towards a Renewable Energy Act for India.

It is important to ensure both electricity and education in the rural areas to spread development and reduce migration to urban areas. This will reduce the pressure on the already overloaded urban infrastructure. In countries like India, care for elders is dependent on family support which has been seriously affected by migration from rural areas to urban areas. This has also resulted in increased labour costs as skilled people have to support themselves in urban locations and also their families in rural areas. The large scale displacement of people has hurt the social fabric of the nation. I am positive that Solar / Green India will result in improved energy, environmental and social security and lead to sustainable development across the nation.

This conference is concerned with sustainable development for protecting the earth for the future generations. The high quality of the technical papers, key note speakers and poster sessions will lead to exchange of ideas among all. I am really happy that Cafet- Innova, the technical society associated with this conference and NIT have taken the lead towards conducting such a conference. I wish the conference team a great success and the delegates a wonderful time.

Dr. J.K. Kishore



Dr. Deepak T J
Associate Professor
INTI International University,
Kuala Lumpur, Malaysia

MESSAGE

It is a great pleasure to know about 3rd International conference on “Earth Sciences and Engineering” (ICEE 2016) jointly organized by the Department of Civil Engineering, Nehru Institute of Technology Coimbatore and Cafet-Innova Technical Society, Hyderabad, India.

International Conference is aimed at highlighting research innovative in earth sciences and engineering, which is the spirit of open communication among all participants from all corners of the world to yield scientific profit, so that this platform may help everyone promote the progress towards the conservation of earth resources.

In this regard, I would like to thank the Prof. Breema and Prof. Vadivel from Nehru Institute of Technology, Coimbatore for taking lead with technical association of Cafet Innova Technical Society, India.

I also extend my sincere thanks to Prof. Venkat Reddy, President and Dr, Raju Aedla, Secretary General, Cafet Innova Technical Society, India for supporting technical evets to help the scientific community.

I wish organizing mmebers for the grand success of Two day International conference and best wishes to all the participants.

Deepak T J



Dr. Ranipet Hafeez Basha

Professor & Director

Basha Research Corporation

Block 690 B, # 05 - 170, Woodlands Drive: 75,

Woodlands - 732690, SINGAPORE

Email: hafeez@basharesearch.com

Website: www.basharesearch.com

MESSAGE

The discovery of Gravitational Waves after century of speculation, fifty years of trial & error, and twenty five years of perfection over cataclysmic event is a breakthrough in the field of Earth Sciences and Engineering. The predictions made by Albert Einstein ninety eight years ago are confirmed and the popular “Theory of Relativity” is completely proved in year 2016. The gravitational waves also offer a better understanding on how Pangaea travelled northwards and broke up from southern region to the current location of continents.

Gravitational waves can carry energy and transfer it to bodies like earth while passing around them which can slowly add heat over years and rise temperature. Also, the main sources of energy for movement of the continental tectonic plates which cause earthquakes in regions of discontinuity can be explained by the gravitational waves thus giving better understanding of Geology according to Professor Jammi Srinivasa Rao, President & CEO of BRCORP.

The 3rd International Conference on Earth Sciences and Engineering is the right platform for such important discussions. I appreciate the Conference Chairs Dr. Raju Aedla, Secretary General, Cafet-Innova Technical Society and Dr. J. Brema, Principal, Nehru Institute of Technology for organizing the conference consequently in series. It is also notable that participants will be benefitted with publication in indexed International Journal of Earth Sciences and Engineering, ISSN 0974-5904.

Ranipet Hafeez Basha



Dr. (Mrs.) J. Brema
Principal
Organizing Chair – ICEE 2016
Nehru Institute of Technology, Coimbatore
Tamil Nadu, INDIA
Email id: bjayanarayanan@yahoo.co.in
bjayanarayanan@gmail.com

MESSAGE

I am extremely happy to know that the Department of Civil Engineering of NIT is organizing an “International Conference on Earth Sciences (ICEE 16)” on 17th and 18th June, 2016. Civil engineers in the present day scenario have a challenge to provide reliable earth sources and supplies for the better living of the human. It is essential for those professionals of civil and earth sciences to get newest updates of their field and its advanced applications to meet the challenges.

I hope that this conference would certainly induce innovative ideas among the participants paving way for new inventions and technologies in the earth sciences sector. On behalf of the management, I thank the joint organizer Cafet - Innova Technical Society for their technical support and expertise. I extend my appreciation to the entire team that worked for the creation of such an expert forum. I also congratulate the national and international delegates and participants who would certainly induce innovative ideas among the other participants paving way for new inventions and new technologies in the civil engineering and earth sciences sector.

At the outset, I always believe in the phrase, “Two things help success in life. The way you manage when you have nothing, the way you manage when you have everything”. I hope this conference ICEE ‘16 will be enjoyable, memorable, and productive for participants and new technological innovative techniques will emerge to manage our earth resources.

J. Brema



Dr. Raju Aedla
Organizing Chair – ICEE 2016
Founder and Secretary General & Editor –International Journals
Café Innova Technical Society
Hyderabad, India
Mobil No.: +91-9985545035
Email: rajuaedla@cafetinnova.org

MESSAGE

I am immensely delighted to be a Organizing Chair of the 2nd International Conference on Earth Sciences and Engineering (ICEE 2016), is being organized jointly by Department of Civil Engineering, Nehru Institut of Technology (NIT), Cimbatore, Tamil Nadu and Cafet-Innova Technical Society, Hyderabad, India during 17th -18th June, 2016.

I am very thankful to Andalas University, Indonesia and Basha Research Corporation (BRCORP), Singapore for technically associating with ICEE 2016.

I am happy to note that International Conference is aimed to bring together and provide a platform to Researchers, Engineers, Scientists and Academicians as well as Industrial Professionals from all over the globe to present, share and exchange their research results and developmental activities about all parts of earth sciences and engineering. ICEE-2016 is unique in itself due to fusing earth sciences with engineering, which helps the delegates to exchange their experiences face to face, establish research relations and to find global partners for future research collaboration. Cafet Innova Technical Society team is very happy to associate with Nehru Group of Institutions and Nehru Institute of Technology (NIT) jointly organizing ICEE 2016 conference.

I congratulate all the authors for selecting papers for the publication in International Journal of Earth Sceinces and Engineering (IJEE) publishing by Cafet-Innova Technical Society, Hyderabad, India.

I thank, management of NIT for taking lead to organize the conference and associate with CITS. I also thank, Prof. Mrs. Brema Jayanarayanan, Principal, NIT for continuous support and efforts. I also thank Prof. Vadivel M, Organizing Secretary for his continuous support and organizing members for their outstanding timely help and support in organizing international event with colloborative efforts with industry and institute. I convey my sincere thanks to advisory and technical committee members of the conference.

I am confident that the Two day international conference will serve as a best platform for exchanging advanced research methods in earth sciences and engineering to save the earth planet.

I wish all the delegates have a great research platform.

Raju Aedla



Mr. M. Vadivel
Organizing Secretary – ICEE 2016
Head of the Department,
Civil Engineering Dept.,
Nehru Institute of Technology,
Coimbatore – 641105, Tamil Nadu, INDIA
Email id: vadivelnitbe@gmail.com
Mobile-+919865980098

MESSAGE

I would like to personally welcome each of you to the International Conference on Earth Sciences (ICEE 2016). It's an exciting time for Department of Civil Engineering of NIT as we continue to grow and adapt, remaining always adaptable, motivated and responsive. Our organization is confronting a time of many changes and we're meeting these changes during a time of larger nation-wide and global change. The world of Civil Engineering is an exciting area in which to work/study, and we'll continue to meet and bring inspired people together in forums like this, to ensure our Nehru Institute of technology remains at the cutting edge.

I'd like to give you an idea of what you can expect and what we hope to achieve over the next few days. This ICEE 2016 conference covers a wide range of fields in science and engineering innovation and aims to bring together engineering technology expertise. The professional from the industry, academic and government to discourse on research and development, professional practice in the science and engineering fields are welcome to the ICEE 2016. This conference enables interdisciplinary collaboration between science and engineering technologists in the academic and industrial fields. . All aspects of civil engineering will be incorporated into the conference, with special focus on the latest research findings, technical innovations, and project excellence in the civil engineering profession.

Before I close, I'd like to thank Cafet – Innova Technical Society, Hyderabad, India for their technical support and each of your for attending our conference and bringing your expertise to our gathering. You, as organization leaders, have the vision, the knowledge, the wherewithal and the experience to help us pave our way into the future. You are truly our greatest asset today and tomorrow, and we could not accomplish what we do without your support and leadership. Throughout this conference, I ask you to stay engaged, keep us proactive and help us shape the future of Nehru Institute of technology. My personal respect and thanks goes out to all of you.

M. Vadivel

LIST OF PAPERS

Plenary Papers

Propagation Phenomenon of Thermal Wave in Very Thin Film

By *SHUICHI TORII*

Kumamoto University, Kurokami, Kumamoto, JAPAN

Green Initiatives for 100GW: Solar India for Energy, Environment and Social Security by 2020

By *J K KISHORE*

ISRO Satellite Center, Bangalore, Karnataka, INDIA

Keynote Papers

Factors Contributing to the Success of a Resettlement Project: A Case Study on Batanghari Dam Project, Indonesia

By *TAUFIKA OPHIYANDRI, UYUNG GATOT S DINATA, TAFDIL HUSNI, BAMBANG ISTIJONO, AND ADI PUTRA*

Andalas University, Padang, Indonesia

The Performance of the Accessibility to BRT Stop: A Case Study on Transpadang Metro Bus

By *BAMBANG ISTIJONO, BAYU MARTANTO ADJI, TAUFIKA OPHIYANDRI, JOVI Satrios, YOSRITZAL, RAHMI FAUZIA*

Andalas University, Padang, Indonesia

Investigation on Properties of Concrete with Palm Oil Fuel Ash as Cement Replacement and Cocunut Shells as Coarse Aggregates Replacement

By *DEEPAK T J AND JEN WEI*

INTI International University, Malaysia

West Sumatra Landslide During In 2012 To 2015

By *ABDUL HAKAM AND BAMBANG ISTIJONO*

Andalas University, Indonesia

Stability Analysis of a Waste Dump in Chromite Mine: Existing state and Planned Heightening

By *SANDI KUMAR REDDY AND RAJAN BABU A*

National Institute of Rock Mechanics, Karnataka, India

Vulnerability Mapping and Coastal hazards - An Indian Experience

By *RM NARAYANAN AND SIVAKUMAR*

Dr. M.G.R Educational and Research Institute University Chennai, INDIA

Participation Papers

Structures and Construction Engineering

14	Vishnu S Pillai and C. Rajasekaran	Role of Time Buffer on Project Monitoring and Forecasting of Steel Structures – A New Approach to Structural Planning
35	B. Suresh, Erinjery Joseph James and Jegathambal P	A critical review of multi criteria decision making methods for infrastructure planning and sustainability assessment of infrastructure projects
41	Vinay Chaudhary, R K Varma and Man Mohan Singh	Optimum configuration of Rigid barriers to mitigate Avalanche Hazard
61	B M Ramalinga Reddy, K S Satya Narayanan, H N Jagannatha Reddy and N Partha Sarathi	Use of Gold Mine Tailings in Production of Concrete-A Feasibility Study
62	S Aishwarya, K Dakshayini and P Gajalakshmi	Experimental Investigation on the Behaviour of Bagasse Ash Reinforced Concrete Structural Members
65	Xiaoming Wang, Xiaoming Lei and Quanzhe Yan	Bridge Safety Assessment Based on State inspection and WIM Traffic Data
74	Ashok M, Jayabalan P and Jaya Prabhakar K	Flexural Behaviour of Cold Formed Steel Hat Shaped Beams
79	Sonia Chutani and Jagbir Singh	Economic Design of Reinforced Concrete Columns under Direct Load and Uniaxial Moments
86	Nabeel Musthafa	Influence of Floating Columns on Seismic Response of Multi-storey Buildings
90	Sai Avinash Palvadi, Rajasekhar Venkata Ayyappa Potina, Siva Raghava Siddhardha Rajana, Hari Narayanan R, Chamandeep Panwar and Yashdeep Saini	Analysis and Design of Transmission Tower Using STAAD.PRO
94	Elakeya Umashankar, Bhuvanesh Sre and Gajalakshmi P	Study on the Structural Behavior of Concrete Encased Steel Composite Members
98	Sarath Kumar S, Sivachidambaram M and Revathy J	Experimental Study on the Structural Performance of Composite Beam with J-hook Connectors
99	Seshasayee V., Bharatkumar B.H. and Gajalakshmi P.	Influence of fly ash on durability and performance of concrete

Remote Sensing and GIS Applications

7	Nurhamidah, Ahmad Junaidi and Librina Anggraini	An immediate review of flood characteristics on delta lowland Sumatera using D8 Model Spatial Analysis
28	Dr. Pusuluri Kesava Rao, Dr. Jandhyala Krishna Kishore, Dr. L.J. Vijaya Kumar and Dr. Remilla Murthy	RS - GIS based Operational Monitoring of Indian Maritime and Environs
40	Linda James and Dr.A B Anitha Anitha	Integrated River Basin Plan for Achencoil River in Kerala
66	Venkatanathan Natarajan, Venkatesh W. S. and Hareesh V	Satellite based Precursor Observation Technique (SPOT) – A study on Earthquakes occurred during Jan – March, 2016 with magnitude greater than 7.0
68	Manisha Desai and Dr. Jayantilal Patel	An Advanced GIS Based Storm Water Drainage Networking Design For Bhimrad Area Of Surat City, India
78	Darwizal Daoed, Bujang Rusman, Bambang Istijono and Abdul Hakam	Predictions of Vulnerability Flood and Flood Prone Areas in Watershed West Sumatra Province Using Arc-GIS and Category Value
88	Ajeet Singh Chhabra, Snigdhadip Ghosh and Vijay Kumar Dwivedi	Assessment of flood induced area using Geo-spatial technique

96	Piyush Kumar Gaurav, Vivek Gautam, Palani Murugan and Mylswamy Annadurai	Hot Pixel Identification using Satellite Hyper-spectral Data
100	Palani Murugan, Ramamurthy Sivakumar, Ramalingam Pandiyan and Mylswamy Annadurai	Performance Comparison of Band ratio and Derivative ratio Algorithms in Chlorophyll-a Estimation using Hyperspectral data
104	Amal P Sivadas, Jesiya N.P and Girish Gopinath	Groundwater Prospects mapping in Korapuzha River basin, Kerala, India - An integrated approach using Multicriteria Decision Making and GIS
107	Gangha G, Arunima Jayakumar and Nirmal Kumar	Study on reduction in delay due to road accidents using variable message sign
110	Aswin Kokkat, P Jegathambal and E J James	Spatial and Temporal Variation in Groundwater Quality and Impact of Sew Water in the Cauvery Delta, South India
160	Sukumar S, Devadass C S C and Brema, J	Rainfall Distribution And Variability In Coimbatore District, Tamilnadu Using GIS Technique

Material Sciences and Engineering

11	V.C Prabha and V Revathi	Mechanical Properties of High Calcium Flyash Geopolymer Concrete
18	Venkata Lakshmi Yarlagadda and Beulah M	Utilization of Ground Granulated Blast Furnace Slag and Pulverized Fly ash in the manufacture of Stabilized mud blocks
20	Joju Jose and Nabil Hossiney	Characteristic of Concrete Containing Waste Foundry Sand and Slag Sand
25	Prasad Mlv, Prasenjit Saha, Abhilasha Sharma and Md Faisal Karim	Eco-efficient Fiber Reinforced Self-Compacting Concrete for Replacements of Cement and Natural Sand with Waste Materials
56	Nivethitha D and Dharmar S	Influence of Zinc Oxide Nanoparticle on Strength And Durability of Cement Mortar
59	Kavitha S and Dr.T.Felix Kala	Effectiveness of bamboo fiber as an strength enhancer in concrete
72	Seeram Apoorva, Saiharan Muthuraman, M Aravinthan, Thamim Ansari and M Neelamegam	Impact Study on Ferrocement Slabs With Different Types of Mortar Matrices
93	Pramod K Kolase, Dr Atul Desai and Shivamanth A	Strength Properties of Roller Compacted Concrete Pavements Containing Fly Ash and Triangular Polyester Fibre
113	M. S. Ranadive and Vinayak Bobade	Viscosity graded approach for quality control of bitumen
117	Preeti Kulkarni	Experimental Investigation for modulus of elasticity of Recycled aggregate concrete

Architecture and Building Engineering

26	Yosritzal	Psychological Effects of Travel Time Use
81	Balasubramanian B, Dr.Gopala Krishna Gvt and Dr.Saraswathy V	Investigation on Partial Replacement of Coarse Aggregate Using E-Waste In Concrete
87	S Sanju, S Sharadha and J Revathy	Performance on the Study of Nano Materials for the Development of Sustainable Concrete
112	Sai Nitesh K J N and Venkateswara Rao S	An Experimental investigation on effect of hybrid fiber on High strength Self Compacting Concrete and Vibrated Concrete
115	Shilpa Ratnoji, Praveen Mallapur, Shashank Kanavalliand Prakash K. B.	Effects of Domestic Raw Sewage on Mechanical Properties of Concrete Incorporating GGBS (Ground Granulated Blast Furnace Slag)
130	Naga Bhargavi Sarikonda and Anand Babu Y	Study on Concrete With Sugarcane Bagasse Ash As A Partial Replacement Of Cement Using Hcl Solution
131	Aravind R, Devasena M, Sreevidya V, M Vadivel	Dispersion Characteristics and Flexural Behavior of Concrete Using Nano Titanium Dioxide
133	Aswathy Nandakumar, K Shobana, M Vadivel	Managing the Building Constraints in India by Comparing With Developed Countries Using Ant Colony Method of Optimization
134	Bhuvanesh K V, Dr.Sreevidya.V, Dr.Hema.S, M.Vadivel	Flextural Strength Behaviour of Pervious Concrete Using Fiber And Mineral Admixtures

135	Christina Eldho, M.Vadivel	Rate Analysis and Mitigation of Cost Overrun by Forecasting Escalation
136	Dharma Prakash.R, Dr.Sreevidya.V, Ms.Jenifar Monica.J	Flexural Behaviour and Durability Study of Concrete on Using Low Density Aggregates
137	Dinesh.a, Dr. I. Padmanaban, Dr. M. Maruthachalam	Study on Mechanical Properties of Low Density Concrete with Partial Replacement of Coarse Aggregate
138	Eldho John, Dr.I.Padmanaban	Study on Strength Behavior of Axially Loaded Cracked and Non Cracked Short Column Using Wrapped FRP Wire Mesh
139	Sindhuja J, Dr.Sreevidya.V, M.Vadivel	Study of Temperature Variations in High Volume Fly Ash Concrete Pavement Slab
140	Dr.Lenin Sundar.M, Tinesh.Tha, M.Vadivel	Study on Magnesium Potassium Phosphate Cement Blended With Fly Ash by Concentric Loading Test
141	Dr.M.Lenin Sundar, Sherine Raj, M.Vadivel	Experimental Investigation of Geopolymer Concrete with E-Waste
142	Dr. Lenin Sundar.M, Jeeva. D, m.vadivel	Flexural behavior of concrete using Waste Paper Sludge Ash
143	Mahima Ganesh, Amarnath. M, Dr. V. Sreevidya, MS. A. Sangeetha	Effect of Different Types Of Super plasticizer on Fresh and Hardened properties of Self Consolidating Geopolymer Concrete
144	Merin Saji, k. Shobana, M. Vadivel	Optimization of Construction Resource Levelling By Comparing Primavera and MAT Lab
145	S.Muthumanickam, A.Vennila, Dr.R.Venkatasubramani, Dr.V.Sree Vidya	Effect and Strength Behaviour of Column in Self Compacting Using Partial Replacement by Mineral Admixture
146	S.Nandhini I., I.Padmanaban	Experimental Investigation on Graphene Oxide Composites With Fly Ash Concrete
147	R. Neethish, k. Shobana, M. Vadivel	L & L Mitigation Aid For Effective Project Management System
148	Prathaban S, Dr.S.Hema, M.Vadivel	Experimental Investigation on Strength Properties of Concrete Using Colour Adsorbed Fly Ash
149	Raphael Chacko, Dr.S.Hema, M.Vadivel	Experimental Studies on Coconut Fibre and Banana Fibre Reinforced Concrete
150	Dr. Padmanaban.I, Sathyanathan.V	Experimental study on Magnesium Silicate Hydrate Cement Blended with Partial replacement of GGBS
151	Sherin Thomas, M. Vadivel	Innovative Use Of Light Weight Fiber Reinforced Concrete As 'Concrete Car Bumper
152	V.Sre adethya, A. Vennila, Dr.R.Venkatasubramani, Dr.V.Sree Vidya	Flexural Behaviour of Reinforced Beam using Self Compacting Concrete
153	Sruthi Ravindran, P. Selvaram, M. Vadivel	Realizing Carbon Emission In The Engineering College Campus Towards Energy Sustainability
154	Surya C D, R. Aarthi, M. Vadivel	Re-Building Public-Private Partnership And Its Procurement In India On The Basis Of Risk And Delay Analysis
155	Bhuvaneshwari M, Tamilarasan S	Experimental Studies On The Effect Of Bagasse Ash And M-Sand On Mechanical Behaviour Of concrete
156	Tariq Ahmed M.A, A.Vennila, Dr. R. Venkatasubramani, Dr.Sreevidya.V	Seismic Investigation of Self-Compacting Concrete Beam – Column Joint
157	M.Vadivel, Dr.R.Venkatasubramani	Robustness Study of Hybrid Fiber Reinforced Concrete with Steel and Synthetic fiber
158	P.Yazhini, A.Vennila, R.Venkatasubramani, V Sreevidya	Experimental Investigation on Self Compacting Concrete with Foundry Sand and Tile Powder
161	Ranjith. V, Sreevidya.V, M vadivel	Experimental Stability Analysis Of Porotherm Infill Slabs

Environmental Science and Engineering

5	Qiu Luo, Zhang Xike and Yu Deqing	Remote Sensing Analysis of Abnormal Elements in Chang-Zhu-Tan Urban Agglomeration Based on Singular Value Decomposition and Joint Sparse Model
6	Dhanapalan Karthikeya	Transformation of Chennai City as Nucleus of Regional Development through the emergence of Sub-CBD's
8	Qi Kuan, Tan Zhuo-Ying and Li Ji-Yang	Multi-targeted Orthogonal Fuzzy Optimization Method for Road Dust-suppressant in Open Pit Mine
24	Diwakar Somani, Harshita Srivastava, Sabumon Chacko and Anjali Gopakumar	A Short Review Of Anaerobic Co-Digestion And Feasibility Of Anaerobic Co-Digestion Of Sewage And Food Waste For Sustainable Waste Management
27	Qiu Luo, Xiong Qiming and Zhang Gui	Predicting the Potential Spatial Distribution of Mikania micrantha in Guangzhou Based on BP Neural Network
31	Natarajan N, Hemanth Kumar D, Naveen K Sai Saran, Akhil K, Ganesh Babu K A, Jyothsna Laxmi A and Vasudevan M	Feasibility Study of Powdered Curry Leaf and Amla Fruit as Potential Filter Media for Treating Contaminated Lake Water
34	Celine George, Aswathy Mohan and Anjali A	Using QSWAT for simulating streamflow in a highland catchment of humid tropics
37	Diravia Balan S and Krishnaveni M	Estimation Of PMP And Precipitations For Various Return Periods Using Statistical Approach
39	Yangzhen Fan, Jiantao Zhang, Meng Chen and Linshuang Liu	Effects of controllable factors on wastewater treatment ecological floating bed system
43	Elsa Eka Putri and Puja Perdana	Properties of Bitumen Containing Powdered Gondorukem Rubber Additives
45	Moly A and Shahul Hameed A	Adsorption of Vat Dye from Aqueous Solution Using Agricultural Solid Waste (ASW) after UV lamb irradiation with TiO ₂ : Isotherm and Kinetic Studies
49	Mahadev Ranadive and Anup Kumawat	Quality Control of Cationic Emulsion Modified Cold Mix in Flexible Pavement
54	Raktim Haldar and Rakesh Khosa	Investigation of Influence of Terrain on Rainfall for Vembanad Basin, Kerala
70	Bayu Martanto Adji, Mohammed Rehan Karim, Bambang Istijono and Taufika Ophiyandri	Parents perception toward road safety related to the potential of cycling to school in urban area
91	Yalei Zhang and Zhipan Niu	Shock wave and micro jet of cavitation bubbles
111	Aditya Vikram Chopra	Waste Water Treatment By Phyto- Remeadation Technique
127	Bhuvaneshwari M and Tamilarasan S	Experimental Studies On The Effect Of Bagasse Ash And M-Sand On Mechanical Behaviour Of Concrete
128	Santhoshini Cnr, Kazuhisa Iki and Riken Homma	Impacts Of Climate Change In Fruit Production
159	Edwin D Thangam, Narayanan RM and Raju Aedla	Pollution Dispersion Modelling For Concentrations of PM, Sox and Nox around Manali Region, India

Energy Science and Engineering & Geology

12	Justin Thomas, Kiran Barve and Ranganath L.R.	Assessment of wave energy potential along South Maharashtra coast
22	<u>Tanmoy Kumar Deb and Baleshwar Singh</u>	Numerical analysis of bucket foundations under eccentric lateral loading in medium dense sand
36	Dr. Ravi Kant Mittal, Aditi Chauhan and Sanket Rawat	Soil Structure interaction in Indian seismic code: Recommendations for inclusion of potential factors
57	Umadevi R, Dr. A S Arun Kumar and Dr. B V Ravi Shankar	A Review On Seismic Performance Of Reinforced Masonry Structures

67	Ramakrishna Ssnuvvula, Dr G N Gaonkar and Bharathi Gs	Modeling And Controlling Of An Coordinated Power Control Grid Connected Hybrid System With Wind, PV And Fuel Cell Sources
71	Vinay S, Bharath H A, Subash Chandran M D, Shashishankar A and Ramachandra T V	Linkages between catchment landscape dynamics and the natural flow regime
89	Ashutosh Tripathy, Bankim Mahanta and Tn Singh	Deformational behaviour of coal measure rocks
101	Vignesh C K, Sivarajan D and Revathy J	Structural Response of FRP Strengthened PSC Beams
106	Jagadheeswari A S Srinivasan and Freeda Christy C	Optimum position of multi outrigger belt truss in tall buildings subjected to earthquake and wind load
118	Janardhana Mysore and Abdul Aleam Ahmed Al-Quadi	Geotechnical Characteristics of Volcanic Soils in and around Taiz City, Yemen

Geotechnical & Soil Sciences and Engineering

1	Akshay Kumar Jha, Madhav Madhira and GVN Reddy	Analysis of Effect of Reinforcement on Stability of Slopes
2	Dr. K Ram Chandar, Ashwin J. Baliga, B.S.S Rao and R.K Bisen	Influence of Operational Parameters on the Efficiency of Rod Mill: A Design of Experiments Approach
13	Suchit Kumar Patel and Baleshwar Singh	Experimental Investigation on Strength Aspects of Glass Fiber-Reinforced Fine Grained Soil
29	Jafril Tanjung and Makoto Kawamura	Simulation of Damage of Waterfront Structure of Port of Kobe during Hyogo-ken Nanbu Earthquake by Using Three-Dimensional Non-linear Parallel Finite Element Analysis
44	Shouyun Liang, Wanjong Wu, Ruishou Ba and Yutian Ke	Analysis of Historical Strong Earthquake Impacts on Landslides at the Gansu Segment in the Bailongjiang River Basin, China
47	Huawang Shi	Integration of Support Vector Machine with Particle Swarm Optimization in Quality Modeling of CFG Composite Foundation
48	Shivamanth Angadi, Mayank K Desai and Goudappa R Dodagoudar	Development of Subsurface Profile Using Geophysical Test Data
58	<u>Barani Dharan and Maryrebekah Sharmila S</u>	Effect of Waste Paper Sludge Ash on Engineering Behaviors of Black Cotton Soils
76	Venkatanathan Natarajan, Hareesh V and Venkatesh W. S.	Observation of earthquake precursors - A study on OLR scenario prior to the earthquakes of Indian and neighbouring region occurred in 2016
77	Bhritashree Buragohain, Jagadish Kundu, Kripamoy Sarkar and Trilok Nath Singh	Stability assessment of a hill slope – an analytical and numerical approach
103	Ramujee Kolli	Strength and setting times of F-type Fly ash-based Geopolymer mortar
132	Arun Nv, Dr.V Sree Vidya, M Vadivel	Experimental Investigation on Blended Geopolymer Mortar Dome Using GGBS

3rd International Conference on Earth Sciences and Engineering (ICEE 2016)
17th–18th June, 2016
<http://icee.cafetinnova.org/>