



# 3<sup>rd</sup> International Conference on EARTH SCIENCES AND ENGINEERING

17<sup>th</sup>-18<sup>th</sup> JUNE, 2016

Jointly Organized by

Nehru Institute of Technology (NIT), Coimbatore, Tamil Nadu, INDIA  
CAFET INNOVA Technical Society (CITS), Hyderabad, Telangana, INDIA  
<http://icee.cafetinnova.org/>



Cafet Innova Technical Society

## Program Schedule

Friday, 17 <sup>th</sup> June, 2016	Day - 01	Saturday, 18 <sup>th</sup> June, 2016	Day - 02
08:30 - 09:00	Registrations	09:30 - 10:00	Keynote Talk
09:00 - 10:30	Inaugural Ceremony	10:00 - 11:00	Parallel Sessions
10:30 - 10:45	Group Photo	11:00 - 11:10	Tea Break
10:45 - 11:15	High Tea Break	11:10 - 12:30	Parallel Sessions
11:15 - 12:00	Plenary Talk - I	12:30 - 01:20	Lunch
12:00 - 12:45	Plenary Talk - II	01:20 - 03:00	Parallel Sessions
12:45 - 02:00	Lunch	03:00 - 03:30	Valedictory Function
02:00 - 02:30	Keynote Talk	03:30 - 03:40	Tea Break
02:30 - 03:10	Parallel Sessions	03:40	Isha Temple Visit
03:10 - 03:30	Tea Break		
03:30 - 05:00	Parallel Sessions		
06:00 - 08:00	Cultural Program		
08:00 - 09:30	Conference Dinner		

**Venue:** Nehru Institute of Technology (NIT), Jawahar Gardens, Kaliyapuram, Thirumalayampalayam, Coimbatore- 641 105, Tamil Nadu, INDIA

**08:30 - 09:00 Registrations**

**09:00 - 10:30 Inaugural Ceremony**

**11:15 - 12:00 Plenary Talk - I**

**Prof. Shuichi TORII, Kumamoto University, Kurokami, Kumamoto City, JAPAN**

**12:00 - 12:45 Plenary Talk - II**

**Dr. Dr. J Krishna Kishore, ISRO Satellite Centre, Bengaluru, India**

**12:45 - 02:00 Lunch**

**02:00 - 02:30 Keynote Talks**

**Keynote Talk - I**

**Prof. Taufika Ophiyandri, Centre for Disaster Studies, Andalas University, Indonesia**

**Keynote Talk -II**

**Prof. Narayanan RM, Dr. M.G.R. Educational and Research Institute University, Chennai, India**

**Keynote Talk - III**

**Dr. Sandi Kumar Reddy, National Institute of Rock Mechanics (NIRM), Karnataka, India**

02:00 - 05:00

Technical Session - I

Friday, 17<sup>th</sup> June 2016

Session Chair:

**Prof. Uyung Gatot S Dinata**, *Andalas University, Indonesia*

Session Co-Chair:

**Prof. Abdul Hakam**, *Director of Centre for Disaster Studies, Andalas University, Indonesia*

02:00 - 02:30

**Keynote Talk - I**

**Prof. Taufika Ophiyandri**, *Centre for Disaster Studies, Andalas University, Indonesia*

02:30 - 02:40	Paper Id-14	Role of Time Buffer on Project Monitoring and Forecasting of Steel Structures - A New Approach to Structural Planning	
02:40 - 02:50	Paper Id-35	A critical review of multi criteria decision making methods for infrastructure planning and sustainability assessment of infrastructure projects	
02:50 - 03:00	Paper Id-41	Optimum configuration of Rigid barriers to mitigate Avalanche Hazard	
03:00 - 03:10	Paper Id-61	Use of Gold Mine Tailings in Production of Concrete-A Feasibility Study	
03:10 - 03:30	<b>Tea Break</b>		
03:30-03:40	Paper Id-62	Experimental Investigation on the Behaviour of Bagasse Ash Reinforced Concrete Structural Members	
03:40-03:50	Paper Id-74	Flexural Behaviour of Cold Formed Steel Hat Shaped Beams	
03:50-04:00	Paper Id-79	Economic Design of Reinforced Concrete Columns under Direct Load and Uniaxial Moments	
04:00-04:10	Paper Id-86	Influence of Floating Columns on Seismic Response of Multi-storey Buildings	
04:10-04:20	Paper Id-90	Analysis and Design of Transmission Tower Using STAAD.PRO	
04:20-04:30	Paper Id-94	Study on the Structural Behavior of Concrete Encased Steel Composite Members	
04:30-04:40	Paper Id-98	Experimental Study on the Structural Performance of Composite Beam with J-hook Connectors	
04:40-04:50	Paper Id-99	Influence of fly ash on durability and performance of concrete	
04:50-05:00	<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>		

02:00 - 05:00

Technical Session - II

Friday, 17<sup>th</sup> June 2016

**Session Chair:** Dr. J Krishna Kishore, *ISRO Satellite Centre, Bengaluru, INDIA*  
**Session Co-Chair:** Dr. Raju Aedla, *GSST, Kumamoto University, Kumamoto, JAPAN*

**02:00 - 02:30** **Keynote Talk - II**  
**Prof. Narayanan RM**, *Dr. M.G.R. Educational and Research Institute University, Chennai, India*

02:30 - 02:40	Paper Id-07	An immediate review of flood characteristics on delta lowland Sumatera using D8 Model Spatial Analysis	
02:40 - 02:50	Paper Id-28	RS - GIS based Operational Monitoring of Indian Maritime and Environs	
02:50 - 03:00	Paper Id-40	Integrated River Basin Plan for Achencoil River in Kerala	
03:00 - 03:10	Paper Id-66	Satellite based Precursor Observation Technique (SPOT) - A study on Earthquakes occurred during Jan - March, 2016 with magnitude greater than 7.0	
03:10 - 03:30	<b>Tea Break</b>		
03:30-03:40	Paper Id-68	An Advanced GIS based Storm Water Drainage Networking Design For Bhimrad Area of Surat City, India	
03:40-03:50	Paper Id-78	Predictions of Vulnerability Flood and Flood Prone Areas in Watershed West Sumatra Province Using Arc-GIS and Category Value	
03:50-04:00	Paper Id-88	Assessment of Flood Induced Area using Geo-spatial Technique	
04:00-04:10	Paper Id-96	Hot Pixel Identification using Satellite Hyper-spectral Data	
04:10-04:20	Paper Id-100	Performance Comparison of Band ratio and Derivative ratio Algorithms in Chlorophyll-a Estimation using Hyperspectral data	
04:20-04:30	Paper Id-104	Groundwater Prospects mapping in Korapuzha River basin, Kerala, India - An integrated approach using Multicriteria Decision Making and GIS	
04:30-04:40	Paper Id-107	Study on reduction in delay due to road accidents using variable message sign	
04:40-04:50	Paper Id-110	Spatial and Temporal Variation in Groundwater Quality and Impact of Sew Water in the Cauvery Delta, South India	
04:50-05:00	<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>		

02:00 - 05:00

Technical Session – III

Friday, 17<sup>th</sup> June 2016

**Session Chair:** Prof. Shuichi TORII, Kumamoto University, Kurokami, Kumamoto City, JAPAN  
**Session Co-Chair:** Prof. Deepak T J, INTI International University, Kaula Lumpur, MALAYSIA

**02:00 – 02:30** **Keynote Talk – III**  
**Dr. Sandi Kumar Reddy**, National Institute of Rock Mechanics (NIRM), Karnataka, India

02:30 – 02:40	Paper Id-11	Mechanical Properties of High Calcium Flyash Geopolymer Concrete	
02:40 – 02:50	Paper Id-18	Utilization of Ground Granulated Blast Furnace Slag and Pulverized Fly ash in the manufacture of Stabilized mud blocks	
02:50 – 03:00	Paper Id-20	Characteristic of Concrete Containing Waste Foundry Sand and Slag Sand	
03:00 – 03:10	Paper Id-25	Eco-efficient Fiber Reinforced Self-Compacting Concrete for Replacements of Cement and Natural Sand with Waste Materials	
03:10 – 03:30	<b>Tea Break</b>		
03:30-03:40	Paper Id-56	Influence of Zinc Oxide Nanoparticle on Strength and Durability of Cement Mortar	
03:40-03:50	Paper Id-59	Effectiveness of bamboo fiber as an strength enhancer in concrete	
03:50-04:00	Paper Id-72	Impact Study on Ferrocement Slabs with Different Types of Mortar Matrices	
04:00-04:10	Paper Id-93	Strength Properties of Roller Compacted Concrete Pavements Containing Fly Ash and Triangular Polyester Fibre	
04:10-04:20	Paper Id-113	Viscosity graded approach for quality control of bitumen	
04:20-04:30	Paper Id-117	Experimental Investigation for modulus of elasticity of Recycled aggregate concrete	
04:30-04:40	Paper Id-		
04:40-04:50	Paper Id-		
04:50-05:00	<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>		

09:30 - 12:30

Technical Session – IV

Saturday, 18<sup>th</sup> June 2016

**Session Chair:** Prof. Taufika Ophiyandri, Centre for Disaster Studies, Andalas University, Indonesia

**Session Co-Chair:** Dr. Sandi Kumar Reddy, National Institute of Rock Mechanics (NIRM), Karnataka, India

09:30 – 10:00

**Keynote Talk – IV**

Prof. Deepak T J, INTI International University, Kaula Lumpur, MALAYSIA

10:00 – 10:10	Paper Id-26	Psychological Effects of Travel Time Use	
10:10 – 10:20	Paper Id-81	Investigation on Partial Replacement of Coarse Aggregate Using E-Waste In Concrete	
10:20 – 10:30	Paper Id-87	Performance on the Study of Nano Materials for the Development of Sustainable Concrete	
10:30 – 10:40	Paper Id-112	An Experimental investigation on effect of hybrid fiber on High strength Self-Compacting Concrete and Vibrated Concrete	
10:40 – 10:50	Paper Id-115	Effects of Domestic Raw Sewage on Mechanical Properties of Concrete Incorporating GGBS (Ground Granulated Blast Furnace Slag)	
10:50-11:00	Paper Id-130	Study on Concrete with Sugarcane Bagasse Ash as a Partial Replacement of Cement Using HCl Solution	
11:00-11:10	<b>Tea Break</b>		
11:10-11:20	Paper Id-131	Dispersion Characteristics and Flexural Behavior of Concrete Using Nano Titanium Dioxide	
11:20-11:30	Paper Id-133	Managing the Building Constraints in India by Comparing With Developed Countries Using Ant Colony Method of Optimization	
11:30-11:40	Paper Id-134	Flextural strength behaviour of pervious concrete using Fiber and Mineral Admixtures	
11:40-11:50	Paper Id-135	Rate Analysis and Mitigation of Cost Overrun by Forecasting Escalation	
11:50-12:00	Paper Id-136	Flexural Behaviour and Durability Study of Concrete on Using Low Density Aggregates	
12:00-12:10	Paper Id-137	Study on Mechanical Properties of Low Density Concrete with Partial Replacement of Coarse Aggregate	
12:10-12:20	Paper Id-138	Study on Strength Behavior of Axially Loaded Cracked and Non-Cracked Short Column Using Wrapped FRP Wire Mesh	
12:20-12:30	Paper Id-139	Study of Temperature Variations in High Volume Fly Ash Concrete Pavement Slab	
<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>			

09:30 - 12:30

Technical Session - V

Saturday, 18<sup>th</sup> June 2016

Session Chair: **Dr. Yosritzal**, *Andalas University, Indonesia*

Session Co-Chair:

09:30 - 10:00

Keynote Talk - V

**Prof. Uyung Gatot S Dinata**, *Andalas University, Indonesia*

10:00 - 10:10	Paper Id-140	Study on Magnesium Potassium Phosphate Cement Blended With Fly Ash by Concentric Loading Test	
10:10 - 10:20	Paper Id-141	Experimental Investigation of Geopolymer Concrete with E-Waste	
10:20 - 10:30	Paper Id-142	Flexural behavior of concrete using Waste Paper Sludge Ash	
10:30 - 10:40	Paper Id-143	Effect of Different Types Of Super plasticizer on Fresh and Hardened properties of Self Consolidating Geopolymer Concrete	
10:40 - 10:50	Paper Id-144	Optimization of Construction Resource Levelling By Comparing Primavera and MAT Lab	
10:50-11:00	Paper Id-145	Effect and Strength Behaviour of Column in Self Compacting Using Partial Replacement by Mineral Admixture	
11:00-11:10		<b>Tea Break</b>	
11:10-11:20	Paper Id-146	Experimental Investigation on Graphene Oxide Composites with Fly Ash Concrete	
11:20-11:30	Paper Id-147	L & L Mitigation Aid For Effective Project Management System	
11:30-11:40	Paper Id-148	Experimental Investigation on Strength Properties of Concrete Using Colour Adsorbed Fly Ash	
11:40-11:50	Paper Id-149	Experimental Studies on Coconut Fibre and Banana Fibre Reinforced Concrete	
11:50-12:00	Paper Id-150	Experimental study on Magnesium Silicate Hydrate Cement Blended with Partial replacement of GGBS	
12:00-12:10	Paper Id-151	Innovative Use of Light Weight Fiber Reinforced Concrete as 'Concrete Car Bumper'	
12:10-12:20	Paper Id-152	Flexural Behaviour of Reinforced Beam using Self-Compacting Concrete	
12:20-12:30	Paper Id-153	Realizing Carbon Emission in the Engineering College Campus towards Energy Sustainability	
		<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>	

09:30 - 12:30

Technical Session - VI

Saturday, 18<sup>th</sup> June 2016

Session Chair:

Session Co-Chair:

09:30 - 10:00

**Keynote Talk - VI**

**Prof. Abdul Hakam**, Director of Centre for Disaster Studies, Andalas University, Indonesia

10:00 - 10:10	Paper Id-06	Transformation of Chennai City as Nucleus of Regional Development through the emergence of Sub-CBD's	
10:10 - 10:20	Paper Id-24	A Short Review of Anaerobic Co-Digestion and Feasibility of Anaerobic Co-Digestion of Sewage and Food Waste for Sustainable Waste Management	
10:20 - 10:30	Paper Id-31	Feasibility Study of Powdered Curry Leaf and Amla Fruit as Potential Filter Media for Treating Contaminated Lake Water	
10:30 - 10:40	Paper Id-34	Using QSWAT for simulating streamflow in a highland catchment of humid tropics	
10:40 - 10:50	Paper Id-37	Estimation of PMP and Precipitations for Various Return Periods Using Statistical Approach	
10:50-11:00	Paper Id-43	Properties of Bitumen Containing Powdered Gondorukem Rubber Additives	
11:00-11:10		<b>Tea Break</b>	
11:10-11:20	Paper Id-45	Adsorption of Vat Dye from Aqueous Solution Using Agricultural Solid Waste (ASW) after UV lamp irradiation with TiO <sub>2</sub> : Isotherm and Kinetic Studies	
11:20-11:30	Paper Id-49	Quality Control of Cationic Emulsion Modified Cold Mix in Flexible Pavement	
11:30-11:40	Paper Id-54	Investigation of Influence of Terrain on Rainfall for Vembanad Basin, Kerala	
11:40-11:50	Paper Id-70	Parents perception toward road safety related to the potential of cycling to school in urban area	
11:50-12:00	Paper Id-111	Waste Water Treatment by Phyto- Remeadation Technique	
12:00-12:10	Paper Id-127	Experimental Studies on the Effect Of Bagasse Ash And M-Sand On Mechanical Behaviour of Concrete	
12:10-12:20	Paper Id-128	Impacts of Climate Change in Fruit Production	
12:20-12:30	Paper Id-159	Pollution Dispersion Modelling For Concentrations of PM, Sox and Nox around Manali Region, India	
		<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>	



01:20 - 03:00

Technical Session - VII

Saturday, 18<sup>th</sup> June 2016

**Session Chair:** Dr. Bambang Istijono, *Centre for Disaster Studies, Andalas University, Indonesia*  
**Session Co-Chair:**

01:20 – 01:30	Paper Id-154	Re-Building Public-Private Partnership and Its Procurement in India on the Basis of Risk and Delay Analysis	
01:30 – 01:40	Paper Id-155	Experimental Studies on the Effect of Bagasse Ash and M-Sand on Mechanical Behaviour of Concrete	
01:40 –01:50	Paper Id-156	Seismic Investigation of Self-Compacting Concrete Beam – Column Joint	
01:50 –02:00	Paper Id-157	Robustness Study of Hybrid Fiber Reinforced Concrete with Steel and Synthetic fiber	
02:00 –02:10	Paper Id-158	Experimental Investigation on Self-Compacting Concrete with Foundry Sand and Tile Powder	
02:10-02:20	Paper Id-		
02:20-02:30	Paper Id-		
02:30-02:40	Paper Id-		
02:40-02:50	Paper Id-		
02:50-03:00	Paper Id-		
<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>			



01:20 - 03:00

Technical Session – VIII

Saturday, 18<sup>th</sup> June 2016

**Session Chair:** Dr. J Krishna Kishore, *ISRO Satellite Centre, Bengaluru, INDIA*

**Session Co-Chair:** Prof. Narayanan RM, *Dr. M.G.R. Educational and Research Institute University, Chennai, India*

01:20 – 01:30	Paper Id-12	Assessment of wave energy potential along South Maharashtra coast	
01:30 – 01:40	Paper Id-22	Numerical analysis of bucket foundations under eccentric lateral loading in medium dense sand	
01:40 –01:50	Paper Id-36	Soil Structure interaction in Indian seismic code: Recommendations for inclusion of potential factors	
01:50 –02:00	Paper Id-57	A Review On Seismic Performance Of Reinforced Masonry Structures	
02:00 –02:10	Paper Id-67	Modeling and Controlling of an Coordinated Power Control Grid Connected Hybrid System With Wind, PV And Fuel Cell Sources	
02:10-02:20	Paper Id-71	Linkages between catchment landscape dynamics and the natural flow regime	
02:20-02:30	Paper Id-89	Deformational behaviour of coal measure rocks	
02:30-02:40	Paper Id-101	Structural Response of FRP Strengthened PSC Beams	
02:40-02:50	Paper Id-106	Optimum position of multi outrigger belt truss in tall buildings subjected to earthquake and wind load	
02:50-03:00	Paper Id-118	Geotechnical Characteristics of Volcanic Soils in and around Taiz City, Yemen	
<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>			

01:20 - 03:00

Technical Session – IX

Saturday, 18<sup>th</sup> June 2016

**Session Chair:** Dr. Abdul Hakam, *Director of Centre for Disaster Studies, Andalas University, Indonesia*

**Session Co-Chair:**

01:20 – 01:30	Paper Id-01	Analysis of Effect of Reinforcement on Stability of Slopes	
01:30 – 01:40	Paper Id-02	Influence of Operational Parameters on the Efficiency of Rod Mill: A Design of Experiments Approach	
01:40 – 01:50	Paper Id-13	Experimental Investigation on Strength Aspects of Glass Fiber-Reinforced Fine Grained Soil	
01:50 – 02:00	Paper Id-29	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	
02:00 – 02:10	Paper Id-48	Development of Subsurface Profile Using Geophysical Test Data	
02:10-02:20	Paper Id-58	Effect of Waste Paper Sludge Ash on Engineering Behaviors of Black Cotton Soils	
02:20-02:30	Paper Id-76	Observation of earthquake precursors - A study on OLR scenario prior to the earthquakes of Indian and neighbouring region occurred in 2016	
02:30-02:40	Paper Id-77	Stability assessment of a hill slope – an analytical and numerical approach	
02:40-02:50	Paper Id-103	Strength and setting times of F-type Fly ash-based Geopolymer mortar	
02:50-03:00	Paper Id-132	Experimental Investigation on Blended Geopolymer Mortar Dome Using GGBS	
<b>Closing Remarks, Certificate Distribution to Presenters and Announcement of Best Paper Awards</b>			

03:00-03:30

**Valedictory Function**

03:30-03:40

**Tea Break**

03:40

**Isha Temple Visit**

3rd ICEE 2016