

INDIAN TECHNOLOGY CONGRESS - 2016
Excellence in Engineering Practice: Networking and Collaboration
THURSDAY, 1 December 2016

Jnana Jyothi Auditorium Bengaluru	HALL	8.30 – 9.30 hrs	9.30 - 11.00 hrs	11.00 – 11.30 hrs	11.30 – 13.00 hrs SESSION I	13.00 – 14.00 hrs	14.00 – 15.30 hrs SESSION II	15.30 – 16.00 hrs	16.00 – 17.30 SESSION III	19:30 - 21:00 hrs
	MAIN HALL	REGISTRATION	INAUGURATION	TEA	Invited Talks: 'Make in India: Role of Engineering in Enhancing Manufacturing Competitiveness'	LUNCH	Engineering Education for a Sustainable Future	TEA	Internet of Things (IoT) Applications: Value Creation for Industry	DINNER
	HALL A						Technical Paper Presentation			
	EXHIBITION									

INDIAN TECHNOLOGY CONGRESS - 2016
Excellence in Engineering Practice: Networking and Collaboration
Friday, 2 December 2016

Jnana Jyothi Auditorium Bengaluru	HALL	9.30 – 11.00 hrs SESSION IV	11.00 – 11.30 hrs	11.30 – 13.00 SESSION V	13.00 – 14.00 hrs	14.00 – 15.30 hrs SESSION VI	15.30 – 16.00 hrs	16.00 – 17.30 hrs
	MAIN HALL	Successful Innovation to Productization Lifecycle: Case Studies	TEA	Transformational Technologies for Enhancing Global Competitiveness	LUNCH	Promoting Innovation, Incubation and Fostering Startups	TEA	VALEDICTORY SESSION ITC 2016
	HALL A			Technical Paper Presentation		Technical Paper Presentation		
	Exhibition							

Indian Technology Congress 2016
Excellence in Engineering Practice: Networking and Collaboration

Thursday, 1 December 2016
Inaugural Programme

MAIN HALL, Jnana Jyothi Auditorium, Bengaluru

09.30 – 11.00 hrs	Assembly Invocation Welcome	9.30 hrs Dr. L.V. Muralikrishna Reddy Chairman, Organising Committee - ITC 2016
	About the Congress	Dr. Wooday P. Krishna National President Indian Institution of Production Engineers
	LIGHTING THE LAMP	
	Inaugural Address	Justice Dr. M. Rama Jois Former Governor of Jharkhand and Bihar & Former Chief Justice-Punjab and Haryana High Court
	Presentation of Honours & Technology Excellence Awards	Shri. T. Suvarna Raju , CMD, HAL Shri. N. Vinaya Hegde , Chancellor, Nitte University Shri. S.K. Sharma , CMD, NPCIL Agni College of Technology , Chennai
	Presentation of Technology Excellence Awards & Address	Dr. B.N. Suresh Padma Shri and Padma Bhushan Awardee President - Indian National Academy of Engineering, Vikram Sarabhai Distinguished Professor, ISRO
	Key-note Address: Role of Collaboration in Development of Light Combat Aircraft, Tejas	Dr. Kota Harinarayana Padma Shri Awardee Formerly LCA Programme Director, Eminent Aeronautical Scientist & Former VC, University of Hyderabad
	Release of Publications & Address	Dr. Y.S. Rajan Padma Shri Awardee Former Distinguished Professor ISRO / DOS and Former VC, Punjab Technical University
	Presidential Address	Prof. R.M. Vasagam Padma Shri Awardee Chairman, National Advisory Committee - ITC 2016, Chancellor, Dr. MGR University Former VC, Anna University
	Vote of Thanks	Dr. K. Gopalakrishnan Council Member, The Institution of Engineers (India)

TEA

11.00 – 11.30 hrs

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SESSION I

PLENARY SESSION

“Make in India”: Role of Engineering in Enhancing Manufacturing Competitiveness

Thursday, 1 December 2016

11:30 – 13:00 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair

Lt. Gen. (Dr.) V.J. Sundaram,
PVSM, AVSM, VSM (Retd.)
Advisor, Micro, Nano, Bio Systems,
National Design and Research Forum

Topic

Keynote Speaker

“Make in India”: Role of Engineering in
Enhancing Manufacturing Competitiveness’

Shri. T. Suvarna Raju
Chairman and Managing Director
Hindustan Aeronautics Limited (HAL)

Nuclear Energy: Towards Safer Reliable Power
for Future India

Shri. S.K. Sharma
Chairman and Managing Director
Nuclear Power Corporation of India Ltd

“First Time Right” through
Engineering Excellence

Shri. Anup Vittal
Managing Director and Member of the Board
Safran Engineering Services India

LUNCH

13.00 – 14.00 hrs

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SESSION II

Engineering Education for a Sustainable Future

Thursday, 1 December 2016

14.00 - 15.30 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair and Address: Quality Enhancement in Engineering Education for a Sustainable Future	Prof. D.N. Reddy Chairman, Appellate Committee, National Board of Accreditation Ex-Chairman, RAC, DRDO Ex-Member, University Grants Commission
Topic	Speaker
Promoting Engineering Education Through Open Learning	Prof. S. Sancheti President, Manipal University Jaipur
Road Map for World Class Universities	Dr. S. Ravichandran Vice Chancellor St Peter's University
Value for Money: Quality Initiatives and Role of Stakeholders	Dr. K. Anand Joshi Vice Chancellor CMR University
INTERACTION SESSION	

TEA

15.30 – 16.00 hrs

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Excellence in Engineering Practice: Networking and Collaboration

SESSION III

Internet of Things (IoT) Applications: Value Creation for Industry

Thursday, 1 December 2016

16.00 - 17.30 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair and Address: IoT Hype Cycle and the Road Ahead	Mr. Somushubhro (Som) Pal Choudhury IoT Consultant and Advisor, Board/Exc Council Member, IESA, IOT Next Co-chair, TiE Charter Member
Topic	Speaker
IoT - A Perspective for Agriculture Sector	Mr. Ravi Mundada Management Consultant. TiE Charter Member NASSCOM Lead for IoT in Agriculture & Energy
Towards Sustainable IoT Solutions	Mr. Srinivasan R Chary Head - Internet of Things Practice Digital Services, Global Business Services IBM India Pvt. Ltd
IoT: Integrated Solutions for Future	Mr. Puneet Gupta Global Chief Technology Officer Brillio
INTERACTION SESSION	

DINNER

19.00 – 20.30 hrs

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SESSION IV

Successful Innovation to Productization Lifecycle: Case Studies

Friday, 2 December 2016

09:30 to 11:00 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair

Dr. (Ing) B.V.A. Rao
Former Chairman NDRF and
President, Indian Institution of Plant Engineers

Topic

Speaker

Shock Waves - From Lab to Land: Personal Musings

Dr. G. Jagadeesh
Department of Aerospace Engineering
Indian Institute of Science

"R&D to Business: Innovation as the key Bridging Glue on Successful Introduction of New Products into Market"

Dr. R.R. Sonde
Executive Vice President
Research, Technology and Innovation
Thermax Limited

Prototype to Product: Lifecycle Approach

Mr. Vijay Anand
Senior Vice President
India Development Center, Intuit India

INTERACTION SESSION

TEA

11.00 – 11.30 hrs

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Excellence in Engineering Practice: Networking and Collaboration

SESSION V

Transformational Technologies for Enhancing Global Competitiveness

Friday, 2 December 2016

11:30 to 13:00 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair

Dr. M.P. Sukumaran Nair
Chairman, Public Sector Restructuring and
Internal Audit Board
Government of Kerala

Topic

Speaker

Make in India - Through Manufacturing
Excellence - BEML's Experience

Shri. Prasad .S
Former Executive Director (Rail & Metro)
BEML Limited, Bengaluru

A Perspective on Aerospace Propulsion
an Indian Scenario

Shri. N. Balamurali Krishnan
Outstanding Scientist &
Project Director (Small Turbofan Engine)
Gas Turbine Research Establishment,
DRDO, Bengaluru

INTERACTION SESSION

Lunch

13:00 – 14:00 hrs

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SESSION VI

Promoting Innovation, Incubation and Fostering Startups

Friday, 2 December 2016

14:00 to 15:30 hrs

MAIN HALL

Jnana Jyothi Auditorium, Bengaluru

Chair

Prof. Mathew Manimala
Formerly IIM Professor and
Chairman, NSRCEL, IIM Bangalore

Co-Chair

Dr. S K Prasad
Professor and Dean
Dayananda Sagar University

Topic

Speaker

SIDBI Initiatives in Promoting Innovation,
Incubation and Fostering Startups

Mr. Anadi Charan Sahu
General Manager
Small Industries Development Bank of India

Outcome Based Education: Metrics to
Bring-out the Best

Dr. V. Kovaichelvan
Senior Vice-President (HR)
TVS Motor Company

Innovation & Deep Thinking

Mr. Srinivas Jamkhandi
Director, IISc - MSME Centre of Excellence
Indian Institute of Science, Bengaluru

"Golden Compass" - The importance of aligning
passion, technology and market for commercial
success.

Mr. Seshadri Shankar
Director
SEC Communications Pvt Ltd

Myths and Realities of Startups:
Challenges Ahead

Prof. Raman Gujral
Regional Director,
Entrepreneurship Development Institute of India

INTERACTION SESSION

TEA

15.30 – 16.00 hrs

TECHNICAL PAPER PRESENTATION

Ref. No.	Thursday, 1 December 2016	HALL A	14.00 hrs to 15.30 hrs
23	Hybrid Shape Optimization Techniques and FEM Analysis of An Aero Engine Squirrel Cage Elastic Ring Bearing Support Thennavarajan Subramanian, Navin Karanth P, Jeyaraj P and Soumendu Jana		
86	Optimization of GTAW (Gas Tungsten Arc Welding) Process Parameters for Improving The Ultimate Tensile Strength G. Rambabu, D. Balaji Naik, M. Kalyan Kumar and G. Sindhura		
125	Manufacturability Function Deployment Er. K.S. Ramalingam		
96	Analyzing Remote Sensing Data using Big Data Architecture and Predicting Changes in Land and Sea Parameters Anusha Itnal and Sujata Umarani		
97	Performance Acceleration in selective Encryption for Videos using GPGPU Rucha Sahakari and Shubhada Kulkarni		
98	Effect of Water Cooling on the Performance Solar Efficiency Yogesh S. Bijjargi and Kale .S.S		
103	Nano Solar Sail - A Fuel Less Aerospace Thruster (Simulation, Fabrication and Ground Testing) Dr. A. Saravana Kumar, B. Madhan Kumar and R. Souhith		
104	Design and Analysis Of Solar Sail For aerospace Propulsion System Dr. A. Saravanakumar, R. Souhith and B. Madhan Kumar		
112	Systematization of Internet by Web Semantics Shekhar Gupta		
Ref. No.	Thursday, 1 December 2016	HALL A	16.00 hrs to 17.30 hrs
105	A Novel Method of Automatic Modulation Classifier for Cognitive Radio Application Sharanagouda N. Patil and P.V Hunagund		
120	Future Conceptual Design to Secure the Aircraft at the Time of Catastrophic Failure of Landing Gear Modern Engineering Practice and Trend for Conceptual Aircraft Landing Davalsab. M. Ladammanavar		
107	Application of Genetic Algorithm for Avoiding Obstacle Collision in Parallel Robota Chandra Shekhar and Dr. G. Satishbabu		
122	Multi-Objective Optimisation of Surface Roughness and MRR with Desirability and TLBO Approaches during the Hard Turning with Wiper Ceramic Insert K. Venkata Subbaiah, Ch. Raju and Ch. Suresh		
030	Optimization of Wire EDM Process Parameters using TAGUCHI and Grey Relational Analysis Ch. Suresh, Dr. K. Venkata Subbaiah, Ch. Raju		
033	Mechanical Properties and Wear behaviour of Sugarcane BAGASSE Ash Reinforced AA6061 Composite		
037	Optimisation of Cutting Parameters in CNC Milling using Taguchi Technique Dr. K. Brahma Raju, Dr. K. Venkata Subbaiah, Ch. Suresh3		
115	Precision Medicine - Therapy with the Right Drug at the Right Dose in the Right Patient Peush Prasannan		
116	Collaboration of Technology With Conventional Techniques of Construction Gajendra Pratap Singh and Akshay Singh		

TECHNICAL PAPER PRESENTATION

Ref. No.	Friday, 2 December 2016	HALL A	11.30 hrs to 13.00 hrs
124	An Inter-Disciplinary Research Platform For Dental Healthcare through Collaborative Research Dr. C.K.P. Nair		
111	A Feasibility Study on Developing Cardiac Framework for Rural India Uma Arun and N. Sriraam		
108	An Automated Pre-Processing Techniques Forearly Qualitative Assessment of Epileptic Seizures S. Raghu, N. Sriraam and G. Pradeep Kumar		
94	Pain Assessment of Pre-Term Newborns - A Pilot Study Tejaswini .S, N. Sriraam and Pradeep .G.C.M		
93	Newborn's Cry Detection Using Power Spectral Density Features N. Sriraam, Shraddha .G.S, Prafulla .V, Raksha .S.G, Tejaswini .S and Pradeep .G.C.M		
102	A Non Invasive Tool for Assessment of Bilirubin Prabhu Ravikala Vittal and N. Sriraam		
95	Multichannel EEG Seizures Detection Using Power Spectral Domain Features N. Sriram, S. Raghu, S. Kadeeja Tamanna, Leena Narayan and Mehraj Khanum & A.S. Hegde		
132	Implantation of Radio Frequency Identification Technology into Pets Suhaz Bharadwaj .G.R		
126	Use of Videos to Facilitate Effective Learning in Technical Institutions: An Institutional Perspective Dr. Niranjana N. Chiplunkar and Dr. Srinivasa Pai .P		
Ref. No.	Friday, 2 December 2016	HALL A	14.00 hrs to 15.30 hrs
129	CFD Analysis of Spacecraft Vehicle Fuel Tank To Reduce Sloshing by using ANSYS Fluent Nitin Dattatreya Kamitkar and Dr. Pravin V. Honguntkar		
128	Fabrication, Deformation and Finite Element Studies of A7075 Alloy/Fly-Ash/Sic Hybrid Composites P. Manikanta		
114	Performance of Waste Coconut Shell as Partial Replacement of Natural Coarse Aggregate in Concrete Abdullah Anwar, Sabih Ahmad and Syed Aqeel Ahmad		
131	Design and Stress Analysis of Disc Wheel using FEA Ravi Kishore and P. Mahesh		
130	An Experimental Investigation on Performance and Emissions of a Compression-Ignition Engine with Lemon-Peel Oil & Diesel Blends using Exhaust-Gas Recirculation A. Naresh Kumar, Dr. K. Brahma Raju, Dr. P. Srinivas Kishore, K. Narayana		
133	Performance Study of CI Engine Fuelled with Blended Honge Biodiesel Shashikant K, Noel .D, Lohit .C and Amaresh		
134	Performance, Emission and Combustion Characteristics of Diesel Engine using Rapeseed Biodiesel Satish Kumar .M		
135	Optimization of Weld Parameters of TI 6AL 4V Cruciform Shape Weldjoint to Improve Weld Strength based on Taguchi Method Srinivasareddy Vempati, Dr. K. Brahma Raju and Dr. K. Venkata Subbaiah		
119	Microstructure and Hot Corrosion Behavior of Inconel 718 and ASS 316 Dissimilar joints in GTAW Process K. Balaji, Dr. K. Brahma Raju and Dr. K.V. Subbaiah		
136	CO ₂ as Fuel In Internal Combustion Engines U V Satyanarayana .D and Chaitanya Krishna .P		