



July 30th 2013

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# Indian Technology Congress 2013

*The Indian Technology Congress was conducted on 24th- 25th of July 2013 at the NIMHANS Convention Centre, Bangalore.*

## Inauguration



Indian Technology Congress 2013 had a celebratory feel at the Inauguration with close to 1000 people participating. **Dr. L.V. Muralikrishna Reddy** began with the Welcome speech, provoking the Technologists to be able to look at the mirror to shoulder the responsibility of supporting Societal needs and

Nation building. **Dr. Wooday Krishna**, captured the key takeaways of the two days of Indian Technology Congress crisply.

**Shri. T.B. Jayachandra, Hon'ble Minister for Law, Justice & Human Rights & Parliamentary affairs & Legislation, Govt. of Karnataka** have the Inaugural address and offered to take

the report and recommendations from the Indian Technology Congress to the Assembly and also take up the relevant concerns to the corresponding Ministries to ensure all the desired support in enabling technologists to address Societal needs.

Lt. Gen (Dr.) V.J. Sundaram, in his inaugural Key note address set an Inspiring and high thinking but most relevant thought on Systematic Engineering while presenting the way Prithvi Project was designed and delivered in the service of India.

Padma Shri Prof. R.M. Vasagam emphasized the need for collaborating in his Presidential address and the inaugural function was completed with the ote of Thanks by Shri Nanjunda Pratap Palecanda with the note Happy Innoberating !



**Dinesh Gundu Rao, Honable Ministers for Food and Civil Supplies, Govt. of Karnataka**

## The release of TIP Magazine



The Release of TIP Magazine

Hon'ble Minister also released the First ever Magazine from India focused at Technology Innovation and Productization called 'TIP'. He also released the Event Souvenir and a Book on Innovation, co-authored by Prof. Jay Rao and Fran Chuan, title: "Discipline and Culture of Innovation, A Socratic Journey", Published in India by NDRF.

## Guest of Honour– Shri Sudhakar Pai

Shri. Sudhakar Pai, the Guest of Honour addressed the gathering and shared the experience and challenges of creating an Innovative Product segment in the Market and beginning of a new Industry segment altogether. He was also gracious enough to inaugurate the

'Innoberate': First Crowd Sourcing Platform for Technologists to solve problems from Industries to Government, Societal needs to Commercial gain.



Shri Sudhakar Pai



## Key Note Speakers At the Conference

Shri. Dinesh Gundu Rao, Hon'ble Minister for Food and Civil Supplies, Govt. of Karnataka presided the Keynote address, Chaired by Dr. Sukumaran Nair and spoke on the need for better Technologies addressing Societal needs and also particularly in addressing the challenges he has in his ministry in delivering the promise of Food

security to all citizens. He also honored and lauded our Key note Speakers for their contributions from their Organizations and as Individuals and Leaders for sharing their thoughts and knowledge in such forums.



Shri. Dinesh Gundu Rao, Hon'ble Minister, Government of Karnataka, with Key note speakers.



## Inspiring Words by Inspiring Leaders



Dr. A. K. Balyan delivering the keynote

**Dr. A.K.Balyan**, Managing Director and CEO, Petronet LNG Ltd. delivered an inspiring Key note address and made a presentation on the way Innovation driving the change an enabling better Technology integration in delivering resources



Dr. Arup Basu delivering the keynote

**Dr. Arup Basu**, President, New Businesses and Innovation Centre, TATA Chemicals Ltd. in his Presentation on how TATA Chemicals is innovating and delivering products and particularly reaching essentials to consumers at most affordable prices retaining best of quality.



Shri. Rajnish Prakash delivering the keynote

**Shri. Rajnish Prakash**, Chairman and Chief Executive, Heavy Water Board, Dept. of Atomic Energy, presented the ways Nuclear Technologies touching the lives and contributing to society at large and particularly the innovations of Nuclear energy in crafting a safer and better tomorrow.



De. Wooday P.Krishna, Chairman, The Institute of Engineers



Dr. M.P Sukumaran Nair, Former Special Secretary o Chief Minister, Govt. of Kerala

## Technology Achievers Award



**Shri. S.M. Jamkhandi** for Technology Achievers Award for contributing to MSME Sector



**Shri. Mohan Suresh** for for Technology Achievers Award for contributing to Manufacturing Sector



**Shri. Rajnish Prakash** for Technology Achievers Award for contributing to Public Sector



**Shri. Prof. K. Venkata Subbaiah** for Technology Achievers Award for contributing to Academic Sector

### Making Indian Higher Education and Research, World Class



It was chaired by **Padma Shri Prof. R.M.Vasagam**. The Panel included, **Dr. B.V.A. Rao**, Chairman NDRF, **Padma Shri. Dr. B.N. Suresh**, **Vikram Sarabhai**, Distinguished Professor, ISRO, **Prof. K.Lal Kishore**, Vice Chancellor, JNTU Anantpur, **Dr. K. Sarukesi**, Vice Chancellor, Hindustan University, **Dr. K.Sekhar**, Vice Chancellor, VELS University **Shri. Ramji Raghavan**, Chairman AGASTYA International Foundation and **Dr. Nanua Singh**. The Panel not only discussed key issues but also triggered an active discussion from the participants as well.



Padma Shri Dr. B.N. Suresh,  
Vikram Sarabhai, Distinguished



Dr. B.V.A. Rao, Chairman,  
NDRF



Dr. K. Sarukesi, Vice Chancellor -  
Hindustan University





## Energy Engine for Economic Growth



Shri S. Selvakumar, IAS receiving bouquet of flowers from Prof. Vasagam

A Panel discussion chaired by **Shri. S Selvakumar**, IAS, Managing Director KPTCL, initiated the discussion with challenges in the renewable energy, particularly from the standpoint of dependency to consistently meet the growing energy demand in the current scenario. **Dr. M.P. Sukumaran**, Former Principal Secretary to Chief Minister, Government of Kerala, **Shri. N. Murugesan**, Director General, CPRI, **Shri. Srikanth N. Seelin**, President, Seelink Technologies, Santa Clara, CA, USA, **Shri. C.R. Srinivas**, V.P. Projects, Mytrah Energy Ltd. were the other experts and Industry Leaders participating in the illuminating and engaging Panel discussion.



Shri S. Selvakumar, Managing Director, KPTCL



Dr. M.P. Sukumaran Nair, Former Special Secretary to Chief Minister Government of Kerala

## Software defined Networks & Security threats and challenges faced by Indian Enterprises today

These sessions were hosted by IEEE. These sessions were chaired by **Shri. B.N.Pal**, IEEE Bangalore Section Industry Chair, while enriched by **Shri Amol Mitra**, VP & GM, HP Networking, Asia Pacific & Japan, **Shri. Vijay Mann**, Manager, IBM Research, New Delhi, **Shri. PVND Prasad**, Deputy Head, Delivery, Product Engineering Services, L&T Infotech, **Shri. Subhramanya Boda**, Chief Information Security Officer (CISO), GMR Group, **Shri. B.S.Bindhumadhava**, Associate Director, Real Time Systems & Smart Grid at Centre for Development of Advanced Computing (C-DAC), MCIT, DietY, GOI.



Shri Amol Mitra, VP and GM HP Networking,  
Asia Pacific and Japan



Shri B N Pal, IEEE, Bangalore Section Industry  
Chair



Shri Vijay Mann, Manager, IBM Research  
New Delhi

## Composite ++

The demand in the Industry and market was reflected by the serious participation and interest the Academic community showed at the Workshop. **Prof. E.S. Dwarakadasa**, CEO & MD, Karnataka Hybrid Micro Devices Limited, **Dr. N.Shamarao**, Formerly with ADE, DRDO, **Dr. C.S. Ramesh**, Profesor PESIT, **Padma Shri, Dr. T.S. Prahlad**, Scientist & former Director, NAL shared opportunities and future of Composites and the sessions was chaired by **Shri. Ranga Reddy**, Managing Directo, Enti Innovations. Many participating Colleges representatives were very keen in setting up of a Composites Centre of Excellence in their Institutions and the discussions included how they could do it at 1/6<sup>th</sup> the cost.



Dr. N Shama Rao, Formerly with ADE, DRDO



Shri E. Ranga Reddy, CEO & Founder Director,  
Enti Innovations Private Limited



Dr. C. S. Ramesh, Professor, PESIT



## Innovations as Culture in Industry

It started under the chairmanship of Padma Shri Prof. **R.M.Vasagam**, Former Senior Scientist, ISRO & Former VC, Anna University. **Dr. S.S. Iyengar**, Professor, Louisiana State University, USA, **Dr.P. Muthukumaran**, Professor, Concordia University, Canada, **Dr. N.Ramani**, Principal, NTTF were the Panelists and **Prof. Swee-Hin Teoh**, Chemical & Biomedical Engineering, Nanyang Technological University, who made presentations on process of invention and Invention. This Panel also engaged and enthused the audience significantly.



Padma Shri Prof. R.M.Vasagam, Former Senior Scientist, ISRO & Former VC, Anna University



Dr. S.S. Iyengar, Professor, Florida International University, USA



Prof Swee-Hin Teoh, Chemical and Biomedical Engineering Nanyang Technological University



From Left:Dr.P. Muthukumaran, Prof. R.M.Vasagam, Dr. S.S. Iyengar, Dr. N Ramani, Prof Swee-Hin Teoh



Dr. N Ramani, Principal, NTTF



Dr.P. Muthukumaran, Professor, Concordia University, Canada

## HealthCare – Challenges and What Next?

AEEE hosted Panel discussion, which was chaired by Shri. O.P.Khanna, Director Shilchar Technologies and Chairman, Needy Heart Foundation. While Ms. Reshmi Vasudevan, representing AEEE introduced the whole panel, Prof. Swee-Hin Teoh, Chemical & Biomedical Engineering, Nanyang Technological University, Shri. Ananthpadmanabhan U.K., Group President – Operations & Projects, Kauvery Hospitals Group, Trichy, Shri. Syed Shafeeq, Siemens Limited, Ms. Sukriti, **Malpani**, Bigtec Labs were the Panelists. There were very interesting points pertaining to challenges of Indigenous Technology companies having to compete with Trading companies, who could import whole products at cost far less than components that Indian companies have to import to manufacture products locally. This discussion was not only informative for audience but also engrossing.



Shri O.P Khanna, Director, Shilchar Technologies,  
Chairman, Needy Heart Foundations



Prof Swee-Hin Teoh, Chemical and Biomedical  
Engineering Nanyang Technological University



Shri Ananthpadmanabhan U.K, Group President,  
Operations & Projects, Kauvery Hospitals Group,  
Trichy



Ms. Sukriti Malpani, Bigtec Labs

## MSME Prime Movers of Design and Manufacturing

was the last Panel discussion at the Indian Technology Congress. **Shri. Srinivas Jamkhandi**, Director, MSME-DI-Bangalore, DC(MSME), Govt. of India, **Ms. Uma Reddy**, Board Member – NMCC – National Manufacturing Competitive Council, Govt. of India, **Shri. K.Sathia Nandan**, General Manager, SIDBI, **Dr. Sanjay Tyagi**, Addl. Director, STPI, Bangalore and **Shri. Arun Bhardwaj**, Mentor & Inspirational Speaker were the Panelist. These Panelists not only added the flavor in terms of their own profile but also made the whole discussion into a live wire session, which kept the audience highly energized and engaged.



Shri. Srinivas Jamkhandi, Director, MSME-DI-Bangalore, DC,(MSME), Govt. of India



Ms. Uma Reddy, Board Member, National Manufacturing Competitive Council, Govt. of India



Shri. Arun Bhardwaj



Dr. Sanjay Tyagi, Addl. Director, STPI, Bangalore



## Collaborative Research & Funding Opportunities

was coordinated by **Shri. C.J. Jagadeesha** and chaired by **Dr. B.V.A. Rao**. The Panel Members included, **Dr. A.N.Prasad**, Former Director, BARC, Mumbai, **Dr. C.P. Ramanarayanan**, Director, GTRE – DRDO, **Dr. K.R. Sridharamurthy**, Vice President, International Institute of Space Law; Adjunct Faculty NIAS; Adjunct Professor, IIAEM, Jain University, **Dr. U. Chandrasekhar**, Chairman, R&D Committee – IEI, Bangalore, **Dr. K. Ganesh raj**, Dy. Director, RESPOND, ISRO, Bangalore, **Dr. K. Venkateswarlu**, Principal Research Scientist, CSIR, CSIR-NAL, **Dr. S.S. Iyengar**, Director, CSD, Florida International University, USA, **Dr. P. Muthukumaran**, Professor, Concordia University, Canada, **Dr. Y. Dilip**, Programme Director, NPMICAV / ADE, Bangalore, **Prof. N.R. Bandyopadhyay**, Chairman, CATE-IEI, Kolkata and **Shri. Arvind K. Kulkarni**, TEQUIP. These sessions had particularly evinced huge interest and participation from Academia and they were happy to have the takeaways as expected.



Dr. B.V.A. Rao, Chairman, NDRF



Dr. Nil Ratan Bandyopadhyay, Chairman, CATE- IEI, Kolkata



Dr. B.V.A. Rao & Dr. A.N.S. Prasad, Former Director, BARC, Mumbai



Dr. C.P. Ramanarayanan, Director, GTRE – DRDO



Dr. K. Ganesh Raj, Deputy Director, RESPOND, ISRO

## TSP Green Growth

had **Shri. Manish Singhal**, Angel Investor, Indian Angel Network, **Shri. Venkat Raju**, Angel Investor, Indian Angel Network, **Shri. Ankur Saxena**, Investment Professional, Helion Ventures, **Ms. Sunitha Prasad**, Vice President, Indian Angel Network, Bangalore and **Shri. Praveen Jhjhria**, Coordinator – Incub@te Program, TATA Elxsi met and evaluated 7 Startups and have shortlisted **Rajashekhar M.B. of Tycoon Technologies Pvt. Ltd.** for next level of discussions on funding.



From Left: Hari D.K, Senior Engineer, Flux Gen, Lawrence Surendra, Chairman TSP, Dr. Harish Hande, Shri Srikanth N. Seelin, President, Seelink Technologies, Santa Clara, CA, USA



# NATIONAL RESEARCH DESIGN FORUM- MOU

INDIAN TECHNOLOGY CONGRESS 2013

NDRF has signed MOU's with the following organizations:



Nitte Meenakshi  
Institute of Technology.



V Design Technologies



Hitech Robotic Systems Limited





NDRF is in talks with the above organisations for collaborative research proposals in Advanced technologies for Micro Air Vehicles such as Vision Based Control, Guidance and Navigation, Secured Communication links etc

A) NP-MICAV [ National Program on Micro Air Vehicles] is a National Program supported and funded by AR&DB [ Aeronautical R&D Board] and DST[ Department of Science & Technologies]. There are over 60 projects sanctioned to various work centres of the National Program such as – NDRF [Consortium] , NAL , IISC Bangalore, IIT Bombay , IIT Kanpur , IIT Madras, JNCASR , IRIS , MSRSAS etc. The Program office is situated in ADE , Bangalore with Sri Y Dilip as the program Director.

B) National Program on Underwater vehicles : NDRF is in discussion with number of organisations such as NIOT , MSRSAS , RVCE , Academic institutions and Industry partners to collaborate for research and development towards technology for Under Water vehicles in areas such as Control, Guidance , Navigation, Vision, Sensors , Communication Propulsion etc. NRB [ Naval Research Board] has evinced interest based on which NDRF is planning to propose a National Program on Under Water vehicles.

C) PISAT –Student Built Satellite Initiative : IEI/NDRF have given seed money funding to a group of Academic Institutions led by PESIT and supported by VTU with the launch support and design-monitored by ISRO. The academic institutions have also jointly funded this initiative . The satellite developed by students once approved will be launched by ISRO.

D) LAB ON CHIP for Ammonia Detector: Of all gases Ammonia is the toughest gas to detect. As ammonia is one of the primary ingredient of the explosives , Its application is more challenging to Detect the gas. NDRF[C] members took this challenge of designing the sensor for Air Borne Application which will be integrated with MICAV. This project is sanctioned by AR&DB under NP-MICAV . This sensor has been realized and ready for integration with MICAV. Once it is Airborne this MICAV will have capability to detect the Ammonia Vapours in the Air & Transmits information about gas concentration in real time to ground control stations.

Indian Technology Congress also had exhibitors from large Public Sectors to MSME's, displaying home grown Technologies and Products which are home grown and globally competitive. Both English and Vernacular Media covered the whole event and captured every aspects of the event including the participants. Media coverage included both TV and Print media.

## PAPER PRESENTATION

Both the days, 62 people presented Technical Papers.



### KEY TAKEAWAYS

**For Participants:** Knowledge, Information, Collaboration, Funding opportunities and Networking

**For Exhibitors:** Exposure, Information, Feedback, Visibility, Branding and Networking

**For Speakers:** Branding and Networking

**Book:** Discipline and Culture of Innovation, A Socratic Journey

**Magazine:** TIP: Technology Innovation & Productization





