



**ENGINEERS CONCLAVE - 2019**  
**BEL Academy for Excellence (Nalanda),**  
**Kuvempu Circle, Jalahalli, Bengaluru-560013**  
**September 19-21, 2019**

**PROGRAMME**

**DAY-1 Thursday, 19**

**0900-1000 Registration**

**1000-1100** First Plenary Talk on “Bringing e-Governance objectives to the doorsteps of rural populace; What Next?” by **Shri Gulshan Rai**, Former National Cyber Security Coordinator of India.

**1100-1130 TEA**

**1130-1330 THEME-I: DEFENCE  
TECHNOLOGY & INNOVATION**

**Technical Session-I: Emerging Technologies &  
Trends for Defence**

**Session Chair:** Dr. A T Kalghatgi, Former Dir  
(R&D), BEL

**1130-1200 Topic 1: Emerging & Disruptive  
Technologies**

**Keynote Speaker 1:** Dr. Rajalakshmi Menon,  
Outstanding Scientist, CABS, DRDO

**1200-1230 Topic 2: Use of block chain technology  
in Defence**

**Keynote Speaker 2:** Shri Satyanarayan Kar, M/s  
Honeywell

**1230-1300 Topic 3: IoT in Command and Control**  
**Keynote Speaker 3:** Prof. Bharadwaj Amrutur,  
IISc, Bangalore

**1300-1330 Topic 4: Cyber Security in Quantum  
Computing Era**

**Keynote Speaker 4:** Dr. Sarat Chandra Babu,  
SETS, Chennai

**1330-1430 LUNCH**

**1500-1600 Inaugural Session**

- Welcome Address by Shri Mahesh V, D(R&D) Chairman, Organizing Committee EC-2019
- Address by Shri M V Gowtama, CMD, BEL, Chair, EC-2019

**THEME-II: TRANSFORMATION OF RURAL  
INDIA USING DIGITAL TECHNOLOGIES**

**Technical Session-I: Rural Digital Connectivity**  
**Session Chair: TBD**

**Topic 1: Digital connectivity plans for rural India**

**Keynote Speaker 1:** Shri R K Singh, Director,  
BBNL

**Topic 2: Rural Digital Connectivity**

**Keynote Speaker 2:** Shri Vipin Tyagi, ED, C-DoT

**Topic 3: Satellite Communication and Reaching the  
Unreachable Areas**

**Keynote Speaker 3:** Smt. TK Anuradha, Director,  
SatCom, ISRO Hq, Bangalore

**Topic 4: Technology Outreach to the Stakeholders–  
Last Mile Service Delivery**

**Keynote Speaker 4:** Shri Sanjay Nayak, CEO  
&MD, Tejas Network Ltd, Bangalore

- Address by Dr. Sanak Mishra, President, INAE & Co-Chair EC-2019
- Address by Dr G Satheesh Reddy, Secretary Department of Defence R&D and Chairman DRDO
- Inaugural Address by Chief Guest Hon'ble Raksha Mantri
- Vote of Thanks by Shri VVR Sastry, FNAE, Former CMD BEL

**1600-1630 HIGH TEA**

**1630-1830 THEME-I: DEFENCE TECHNOLOGY & INNOVATION**

**Technical Session -II: R&D in Defence**

**Session Chair:** Dr. V.K Aatre, Former Chief Controller R&D, DRDO and Former SA to RM

**1630-1700 Topic 1:** Self-reliance in Defence Hardware; Challenges & Opportunities

**Keynote Speaker 1:** Adm Arun Prakash (Retd), Former Chief of Naval Staff and Former Chairman of the Chiefs of Staff Committee

**1700-1730 Topic 2:** Role of Startups in Defence R&D

**Keynote Speaker 2:** Shri Vish Sahasranamam, Co-Founder & CEO Coimbatore Innovation & Business Incubator [FORGE]

**1730-1800 Topic 3:** Fixed Wing Aircraft-Design & Development challenges

**Keynote Speaker 3:** Shri Prashant Bhadoria, DGM(Design- Electrical and Avionics), HAL

**1800-1830 Topic 4:** Design Challenges in Launchers/ Autonomous Vehicle

**Keynote Speaker 4:** Shri R. Muralidharan, CTO, Tata Power SED

**THEME -II: TRANSFORMATION OF RURAL INDIA USING DIGITAL TECHNOLOGIES**

**Technical Session -II:e-Governance and Services**  
**Session Chair: TBD**

**Topic 1:** Geospatial Services Addressing e-Governance Issues

**Keynote Speaker 1:** Dr. PG Diwakar, Director, EDPO, ISRO Hq, Bangalore

**Topic 2:** Tele-Medicine and Tele-Education Services

**Keynote Speaker 2:** Shri Hanumantha Royappa, DD, SatCom, ISRO Hq, Bangalore

**Topic 3:** Innovations in Spatial Analytics and Advanced GIS – Enabling Farmers in Rural Areas with “Ready-To-Use” Information

**Keynote Speaker 3:** Shri Mukund K Rao, Chief Executive, C-SAG, NIAS, Bangalore

**Topic 4:** Taking Frugal Innovations to Operational /Commercial Domains through Digital Technologies

**Keynote Speaker 4:** Shri Vipin kumar, Director& Chief Innovation Officer, NIF, DST, GoI Gandhinagar, Gujarat

**1730-1815 Meeting at Tea on “Creating Ecosystem for Defence R&D in India” (by Invitation)**

**1830-1930 Second Plenary Talk by Art of Living Founder H H Sri Sri Ravishankar**

**1930-2130 Cultural Programme & Dinner**

**DAY-2 Friday, 20 Sep 2019**

**0930-1030 Third Plenary Talk on Engineering Marvel by V.Gopinath, Chief Architect, EDRC/ Mukesh Raval, Project Director (SOU) L&T**

**1030-1100 TEA**

**1100-1300            THEME-I: DEFENCE  
TECHNOLOGY & INNOVATION**

**Technical Session-III: Policies, Growth drivers  
and Skill Development**

**Session Chair: Dr. Mala Dutt**, Additional  
Secretary & Financial Advisor (Acquisition) MoD,  
GoI

**1100-1130 Topic 1:** Policies and growth drivers  
for Defence Exports

**Keynote Speaker 1:** Shri Mohan Nair, Head  
International Defence Business, L&T

**1130-1200 Topic 2:** Financial policies for growth  
of Defence R&D in India

**Keynote Speaker 2:** Shri R.G.Vishwanathan,  
Principal Accountant General, Rajasthan

**1200-1230 Topic 3:** Procurement Policy as a  
Driver in Defence Business

**Keynote Speaker 3:** Ms. Dipti M Chawla, JS  
AMLS, MoD

**1230-1300 Topic 4:** HR strategies for Defence  
R&D

**Keynote Speaker 4:** Shri Alok Verma, GM-HR,  
HAL

**1300-1400            LUNCH**

**THEME -II: TRANSFORMATION OF RURAL  
INDIA USING DIGITAL TECHNOLOGIES**

**Technical Session-III: Enhancing Rural  
Livelihood Opportunities**

**Session Chair: TBD**

**Topic 1:** Creating Livelihood Opportunities –  
Experiences in Geospatial Applications

**Keynote Speaker 1:** Dr. P V Narasimha Rao,  
Deputy Director, NRSC, Hyderabad

**Topic 2:** Technologies for Development

**Keynote Speaker 2:** Dr. Sriram K Rajamani, Head -  
Microsoft Research (MSR), Bangalore

**Topic 3:** Building the ‘Move-Up’ Strategy of  
Livelihoods Among Small Producers-Role of  
Modern Information and Communication  
Technologies

**Keynote Speaker 3:** Dr. Rengalakshmi, Director,  
JRD Tata Ecotechnology Centre, MSSRF, Chennai

**1400-1600 THEME-I: DEFENCE  
TECHNOLOGY & INNOVATION**

**Technical Session-IV: Strategic Partnerships /  
Enabling International Cooperation**

**Session Chair:** Shri I.V. Sarma, Former  
Dir(R&D), BEL

**1400-1430 Topic 1:** Technology Transfer  
advantages and challenges

**Keynote Speaker 1:** Shri Satish Menon, Head of  
Engineering Competence Centre(Bengaluru),Thales

**1430-1500 Topic 2:** Industry R&D Partnerships for  
Future Technologies

**Keynote Speaker 2:** Dr. S Guruprasad, DG  
(PC&SI)DRDO

**1500-1530 Topic 3:** Open Innovation

**Keynote Speaker 3:** Mr. Oded Ben David  
M/s.Elbit

**1530-1600 Topic 4:** Strategies for International  
partnerships

**Keynote Speaker 4:** Cmde Mukesh Bhargava  
(Retd), Business Head for Submarines and  
Underwater Platforms Business, M/s L&T

**1600 – 1630 TEA**

**THEME -II: TRANSFORMATION OF RURAL  
INDIA USING DIGITAL TECHNOLOGIES**

**Technical Session-IV: Capacity building needs of  
Digital Rural India**

**Session Chair:** TBD

**Topic 1:** Employment Opportunities for Graduates  
from Small Towns in India Addressing Global  
Needs

**Keynote Speaker 1:** Dr. Sridhar Mitta, Next Wealth  
Entrepreneurs Pvt Ltd, Bangalore

**Topic 2:** Skill Development for Rural Services

**Keynote Speaker 2:** Dr. Jyotsna Sitling, Joint  
Secretary, Ministry of Skill Development &  
Entrepreneurship (MSDE),GoI, New Delhi

**Topic 3:** Digital technologies that can enable  
inclusive growth

**Keynote Speaker 3:** Shri Hari Menon, India  
Country Director - Bill & Melinda Gates  
Foundation, New Delhi

**Topic 4:** Skill development in Digital Rural Services

**Keynote Speaker 4:** Shri Achyuta Ghosh, Head-  
Research, NASSCOM, Noida

**1630-1830 THEME-I: DEFENCE  
TECHNOLOGY & INNOVATION**

**Technical Session -V: Success Stories & Way  
forward**

**Session Chair:** Shri N. Sitaram, Former CC R&D  
(ECS)

**1630-1700 Topic 1: Partnership for Self-Reliance  
in Defence Communication**

**Keynote Speaker 1:** Dr. Kanwar Jit Singh, Vice  
President Technology, Tejas Networks

**1700-1730 Topic 2: STARS V to SDR**

**Keynote Speaker 2:** Shri V. Nandakumar,  
CTO (Communication), BEL

**1730-1800 Topic 3: Innovations in Naval Systems**

**Keynote Speaker 3:** Dr. O R Nandaguopan, Dir,  
NSTL (DRDO)

**1800-1830 Topic 4: LCA to AMCA**

**Keynote Speaker 4:** Dr. Girish S. Deodhare, Dir,  
ADA

**THEME -II: TRANSFORMATION OF RURAL  
INDIA USING DIGITAL TECHNOLOGIES**

**Technical Session -V: Aspiring Rural India  
Session Chair: TBD**

**Topic 1:** Sparking curiosity, nurturing creativity and  
building confidence among economically  
disadvantaged Rural Populace – Role of Digital  
Technologies

**Keynote Speaker 1:** Shri K Thiagarajan, COO,  
Agastya International Foundation, Bangalore

**Topic 2:** Making Hope a Reality—Digital Initiatives  
for Early Intervention Programme for the Village  
based Disabled Children

**Keynote Speaker 2:** Shri PS Kasturirangan, Amar  
Seva Sangam, Ayikudi, Tirunelveli District, TN

**Topic 3:** Application of Advanced Technology in  
Rural Development: An Experience from Remote  
Area in Bihar.

**Keynote Speaker 3:** Shri Manas B Verma,  
(Fmr Programme Director, ADA), Bihar

**DAY-3 Saturday, 21 Sep 2019**

**0930-1030 Parallel Panel Discussion on the two Themes**

**Panel Discussion on Theme I:**  
Defence Technology & Innovation

**Panelists:** Technical Session Chairs of Theme-I

**Moderator:** Shri Mahesh V, Dir (R&D) BEL,  
Coordinator, Theme-I, EC-2019

**Panel Discussion on Theme II:** Transformation of  
Rural India Using Digital Technologies

**Panelists:** Technical Session Chairs of Theme-II

**Moderator:** Dr. V Jayaraman, Coordinator, Theme-  
II, EC-2019

**1030-1100 TEA**

**1100-1200 Fourth Plenary Talk on Made in India – How to Make It Happen by Capt S Prabhala  
(Retd), Former CMD BEL**

**1200-1300 Valedictory Session**

- Introductory Remarks and Welcome by Dr. Sanak Mishra, President INAE
- Summing up of Theme I: Defence Technology & Innovation by Shri Mahesh V, Dir (R&D) BEL, Coordinator, Theme-I, EC-2019
- Summing up of Theme II: Transformation of Rural India Using Digital Technologies by Dr. V Jayaraman, Coordinator, Theme-II, EC-2019
- Valedictory Address by Chief Guest
- Vote of Thanks by Smt. Padmini Balachandra, GM TP/CO, BEL

**1300 onwards Lunch and dispersal**

**Note:**

1. **Inauguration, Plenary talks, Theme-I Technical Sessions and Valedictory will be held in Sir M Visvesvaraya Auditorium.**

***2. Theme-II Technical Sessions will be held in Dr. APJ Abdul Kalam Hall.***