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Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)



# **International Conference on NANO IN ENGINEERING, SCIENCE AND TECHNOLOGY (i-NEST)**



**October 11-13, 2019**

**Organised by**  
**Vellore Institute of Technology, Vellore**  
Vellore – 632 014, Tamil Nadu, India.  
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# VENUE DETAILS

- Anna Auditorium** - **Behind Main Building**
- Gallery – I** - **Technology Tower (TT)-Ground Floor (028 &029)**
- TBI Smart Class Room** - **Technology Tower (TT)-Ground Floor**
- TT 311 & TT 312** - **Technology Tower (TT)-Third Floor**
- Greenos & Foodys** - **Adjacent to Hexagon Building**

## **Conference Themes**

***Track- I: Advanced Nanomaterials (ANM)***

***Track- II: Nano-Agriculture (AGR)***

***Track-III: Nano-Biotechnology (BIO)***

***Track-IV: Nano-Medicine (MED)***

***Track-V: Nano-Energy and Environment (ENR)***

***Track-VI: Nano-Electronics (ELE)***

***Track-VII: Nano-Manufacturing (MAN)***

***Track-VIII: Nano-Defense and Security (DEF)***

**International Conference on**  
**Nano in Engineering, Science and Technology (iNEST)**  
**11 -13, October 2019**  
**iNEST – PROGRAMME SCHEDULE**

Timing			Venue
DAY – I (11.10.2019)			
0800 – 0930	Registration		Main Building Reception
1000 – 1130	Inaugural Function		Anna Auditorium
1145 – 1200	Conference Introduction		TT Gallery-1 (028-029)
1200 – 1300	Plenary Talk- I	Plenary speaker: Dr. Seeram Ramakrishna, NUS, Singapore <i>Title: Nanotechnology and Smart Wearables</i>  Chair: Prof. Nageswar Rao, VIT, Vellore	TT Gallery-1 (028-029)
1300 - 1400		Lunch	
1400 – 1445	Keynote Talk – I	Chair: Prof. R. Vijayaraghavan, VIT, Vellore Keynote Speaker: Dr. John Kennedy, GNS Science, New Zealand <i>Title: Indirect Surface Nano-Patterning of Thermoelectric Films by ION Beam Sputtering</i>	TT Gallery-1 (028-029)
1445 - 1515	Invited Talk - I	Invited Speaker: Prof. Sitaram Dash, (Ex-Scientist, IGCAR, Kalpakkam), VIT, Vellore <i>Title: Nanomaterials for Sensor Applications</i>	TT Gallery-1 (028-029)

1515– 1545	Invited Talk – II	Invited speaker: Dr. T.P. Sastry, Ex-Principal Scientist, CLRI, Chennai, Bioregen Technologies, Chennai. <i>Title: Biomaterials and Nano Biomaterials-Invention to Application</i>	TT Gallery-1 (028-029)
1545 – 1600		Tea Break	
1600 – 1645	Invited Talk – III	Invited Speaker: Dr. Seena V, Dept of Avionics, IIST, Trivandrum <i>Title: Polymer MEMS with Integrated Ceramic Thin Films: An Ultra-sensitive Platform for Environmental Sensing</i>	TT Gallery-1 (028-029)
1645 – 1730	Technical Talk ANM– I	Advanced Nanomaterials: Abstract No – TP19ANM004, 006, 009	TT Gallery-1 (028-029)
1645 – 1730	Technical Talk BIO– I	Nano BioTechnology: Abstract No – TP19BIO001, 003, 004	TBI
1645 – 1730	Technical Talk ELE– I	Nano Electronics: Abstract No – TP19ELE002, 003, 004	TT-311
1645 – 1730	Technical Talk ENR-I	Nano Energy & Environment: Abstract No – TP19ENR001, 002, 004	TT-312
1930: Conference Dinner at Greenos			
<b>DAY – II (12.10.2019)</b>			
0900 – 1000	Plenary Talk- II	Chair: Prof. Geetha Manivasagam, VIT, Vellore  Plenary speaker: Dr. Meyya Meyyappan, NASA, USA <i>Title: Nanomaterials and Printed Electronics</i>	TT Gallery-1 (028-029)
1000– 1045	Keynote Talk – II	Keynote Speaker: Prof. Hae Won Kim, Dankook University, South Korea <i>Title: Multiple control of Cellular Micro Environment with Nano/Micro Particles for Tissue Regeneration</i>	TT Gallery-1 (028-029)
Tea break (1045 - 1100)			

1100 – 1130	Invited Talk -IV	<b>Chair: Prof. Amitava Mukherjee, VIT, Vellore</b> <b>Invited Speaker: Dr. Kaushik Chatterjee, IISc, Bangalore</b> <i>Title: In Vitro Disease Models for Breast Cancer and Cardiac Hypertrophy</i>	TT Gallery-1 (028-029)
1130 – 1200	Invited Talk – V	<b>Invited speaker: Dr. M Kannan, Tamil Nadu Agricultural University, Coimbatore</b> <i>Title: Nanotechnology in Agricultural Production and Protection</i>	TT Gallery-1 (028-029)
1200-1230	Invited Talk – VI	<b>Invited Speaker: Dr. Easwaramoorthy, ARCI, Hyderabad</b> <i>Title: Perovskite Solar Cells-Scale-up and Performance Evaluation</i>	TT Gallery-1 (028-029)
1230- 1300	Invited Talk – VII	<b>Invited speaker: Dr. Neetu Singh, Associate Professor, Indian Institute of Technology Delhi</b> <i>Title: Red Blood Cells Derived Vesicles for Theranostic Applications</i>	TT Gallery-1 (028-029)
1300-1400	Lunch		Foodys
1400 – 1430	Invited Talk-VIII	<b>Chair: Prof. R. Vasudevan, VIT, Vellore</b> <b>Invited speaker: Dr. Beata Kaczmarek, Nicolaus Copernicus University, Poland.</b> <i>Title: Nanotechnology in Cosmetics-Opportunities or Challenges?</i>	TT Gallery-1 (028-029)
1430-1500	Invited Talk – IX	<b>Invited Speaker: Dr. Tom Mathews, IGCAR, Kalpakkam, Chennai</b> <i>Title: Multiphase TiO<sub>2</sub> nanotubes for Enhanced H<sub>2</sub> Generation by Solar Water Splitting</i>	TT Gallery-1 (028-029)

1500-1530	Invited Talk - X	<b>Invited Speaker: Dr. V. Murugan, CECRI, Karaikudi</b> <i>Title: Environment-Friendly Multifunctional Nanosystem: A Need of The Day?</i>	<b>TT Gallery-1 (028-029)</b>
<b>Tea Break (1530 - 1545)</b>			
1545-1600	Invited Talk - XI	<b>Keynote speaker: Prof. Dimitrios Stamatiadis, University of Twente, The Netherlands</b> <i>Title: Bioartificial Organs- Can we mimic or replace patient failing Organs</i>	<b>TT Gallery-1 (028-029)</b>
1600-1615	Invited Talk - XII	<b>Keynote Speaker: Dr. Thomas Webster, Northeastern University, USA</b> <i>Title: Goodbye Hospitals: Hello Implantable Nanosensors</i>	<b>TT Gallery-1 (028-029)</b>
1615 - 1730	Technical Talk DEF-I	<b>Nano-Defense: Abstract No – TP19DEF001, 002, 006, 008, 009</b>	<b>TT Gallery-1 (028-029)</b>
1615 - 1730	Technical Talk ELE– II	<b>Nano Electronics: Abstract No – TP19ELE005, 006, 007, 009, 010, 012</b>	<b>TT311</b>
1615 - 1730	Technical Talk ENR-II	<b>Nano Energy &amp; Environment: Abstract No – TP19ENR006, 007, 008, 016, 017</b>	<b>TT312</b>
1615-1730	Technical Talk MED-I	<b>Nano-Medicine: Abstract No TP19MED008, 011, 012, 013, 014</b>	<b>TBI</b>
<b>DAY – III (13.10.2019)</b>			

0900 – 0945	Keynote Talk – III	<b>Chair: Prof. Prakasam, SBST, VIT, Vellore</b>  <b>Invited speaker: Prof. S. Balakumar, National Centre for Nanoscience and Nanotechnology, Univ of Madras, Chennai</b> <i>Title: Nanostructured Bioactive Glass based composites for Ortho, Dental and Ophthalmology</i>	TT Gallery-1 (028-029)
0945 – 1015	Invited Talk – XIII	<b>Invited speaker: Dr. I. Srinivas, Principal Scientist, ICAR, Hyderabad</b> <i>Title: Nano in Agriculture-Fertilizers to Pesticides</i>	TT Gallery-1 (028-029)
1015 – 1045	Invited Talk – XIV	<b>Invited speaker: Dr. Sivakumar, ARIVIYA Labs. Thanjavur</b> <i>Title: Nanotechnology/Nanomaterials: Industrial Perspectives</i>	TT Gallery-1 (028-029)
<b>Tea Break (10:45 – 11:00)</b>			
1100 - 1130	Invited Talk – XV	<b>Invited Speaker: Dr. T. S. Sampat Kumar, Indian Institute of Technology Madras</b> <i>Title: Multifunctional Calcium Phosphate Nano Particles for Theragnosis</i>	TT Gallery-1 (028-029)
1130 - 1200	Invited Talk - XVI	<b>Invited speaker: Prof. Ashis Kumar Sen, Indian Institute of Technology Madras, Chennai</b> <i>Title: Interfacial Phenomena in Microfluidics</i>	TT Gallery-1 (028-029)
1200 – 1315	Technical Talk ANM-II	<b>Advanced Nanomaterials: Abstract No –TP19ANM011, 012, 013, 014, 016,018</b>	TT Gallery-1 (028-029)
1200 – 1315	Technical Talk BIO- II Technical Talk ANM_III	<b>Nano Biotechnology: Abstract No -TP19BIO008, 012, 013</b> <b>Advanced Nanomaterials: Abstract No-TP19ANM019,020</b>	TBI



<b>1200-1315</b>	<b>Technical Talk ENR-III, MED-II</b>	<b>Nano Energy &amp; Environment: Abstract No – TP19ENR 019, 020 Nano-Medicine: Abstract No TP19MED017, 021, 022</b>	<b>TT311</b>
<b>1200-1315</b>	<b>Technical Talk: AGR-I MAN- I BIO- III</b>	<b>Nano-Agriculture:TP19AGR006; Nano-Manufacturing: TP19MAN002 Nano Biotechnology-Abstract No -TP19BIO005, 006</b>	<b>TT312</b>
<b>1315-13:30</b>	<b>Concluding remarks</b>	<b>Dr. Swarnalatha</b>	<b>TT Gallery-1 (028-029)</b>
<b>1330 – 1415</b>	<b>Lunch</b>		<b>Foodys</b>
<b>1430 – 1600</b>	<b>Valedictory Function</b>		<b>Dr M Channa Reddy Auditorium</b>