

**DETAILED PROGRAMME  
OF  
Thirty Sixth National Convention  
of  
Mechanical Engineers’  
*and*  
National Conference  
*on*  
‘Innovations in Thermal Science  
and Engineering’**

*Organized by*



**The Institution of Engineers (India)  
Tripura State Centre**

**Under the aegis of Mechanical Engineering Division Board, IEI**

*In association with*



**National Institute of Technology Agartala;  
National Institute of Technology Arunachal Pradesh  
and  
Tripura Institute of Technology, Agartala**

**December 05 – 06, 2021**

**MODE: VIRTUAL**

## DETAILED PROGRAMME

DATE: 05.12.2021	
10.00Hrs- 11.30Hrs	<p><b><u>INAUGURALSESSION</u></b>  <b>DIGNITARIES:</b>  <b>Dr. Vijay Kumar Saraswat</b>, Member, NITI Aayog and Chancellor, Jawaharlal Nehru University as Chief Guest.  <b>Prof. (Dr.) H.K. Sharma</b>, FIE, Director, National Institute of Technology Agartala  <b>Prof. Pinakeswar Mahanta</b>, Director, National Institute of Technology Arunachal Pradesh  <b>Er. Narendra Singh</b>, FIE, President, IEI  <b>Dr. H. O. Thakare</b>, FIE, President (Elect), IEI  <b>Er. Jagroop Singh</b>, FIE, Chairman, MCDB, IEI  <b>Prof. (Dr.) Swapan Bhaumik</b>, FIE, Chairman, CATE, IEI  <b>Er. Chinmay Debnath</b>, FIE, Chairman, Tripura State Centre, IEI  <b>Dr. Subhadeep Bhattacharjee</b>, FIE, Honorary Secretary, IEI, Tripura State Centre  <b>Dr. John Deb Barma</b>, MIE, Organizing Secretary, 36<sup>th</sup> National Convention of Mechanical Engineers</p> <p><b>Release of Technical Proceedings and Souvenir.</b>  <b>Felicitation of Eminent Engineers Awardees</b></p> <p style="text-align: center;"><b><u>Eminent Engineer Awardees:</u></b></p> <ol style="list-style-type: none"> <li>a. <b>DR. NAYANI KISHORE NATH</b>, Scientist G and Project Director, VEDA, Advanced Systems Laboratory (ASL) DRDO, Hyderabad, Telangana</li> <li>b. <b>DR. RAJAT GUPTA</b>, Professor, ME Deptt., NIT Silchar, Assam and Former Director, NIT Mizoram, NIT Srinagar, Jammu &amp; Kashmir and NIT Arunachal Pradesh, Arunachal Pradesh.</li> <li>c. <b>ER. TARUN MALIK</b>, Executive Director &amp; Asset Manager, Tripura Asset, ONGC Ltd., Agartala, Tripura</li> <li>d. <b>DR. SEKHAR DATTA</b>, Principal, Tripura Institute of Technology, Narsingarh, Agartala, Tripura</li> </ol>
11.30Hrs- 11.40Hrs	<b><i>BREAK</i></b>
11.40Hrs - 13.00Hrs	<p><b><u>TECHNICAL SESSION – I</u></b>  <b><i>(Keynote &amp; Memorial Lecture Session)</i></b></p> <p><b>Session Chair:</b> Er. Pradeep Chaturvedi, FIE, Member, MCDB, IEI</p> <p><b>Co-Chair:</b> Dr. Pritam Das, Head, Mechanical Engineering Department, NIT Agartala</p> <p><b>S C BHATTACHARJEE Memorial Lecture by: Prof. Suman Chakraborty</b>,  Department of Mechanical Engineering, IIT Kharagpur</p> <p><b>S P LUTHRA Memorial Lecture by: Dr. N. Kishore Nath</b>, Scientist G and Project Director, VEDA, Advanced Systems Laboratory (ASL) DRDO, Hyderabad, Telangana</p> <p><b>Repporteur:</b></p> <p><b>Dr. Abhik Majumder</b>, Assistant Professor, Mechanical Engg Department, NIT Agartala  <b>Dr. Asish Acharjee</b>, Assistant Professor, Mechanical Engg Department, NIT Agartala</p>
13.00Hrs - 14.00Hrs	<b><i>BREAK</i></b>

<p>14.00Hrs - 16.15Hrs</p>	<p><b><u>TECHNICAL SESSION – II</u></b></p> <p><b>STATE OF ART LECTURES (Part – A)</b></p> <p><b>Session Chair: Prof. (Dr.) Rajat Gupta</b>, FIE, Member, MCDB, IEI</p> <p><b>Co-Chair: Dr. Prasun Chakraborty</b>, FIE, Professor, Mechanical Engineering Department, NIT Agartala</p> <p><b>SPEAKERS:</b></p> <p><b>Professor Xiaolin Wang</b>, Associate Head of School (Research), School of Engineering, College of Sciences and Engineering, University of Tasmania, Australia</p> <p><b>Dr. Bidyut Baran Saha</b>, International Institute for Carbon-Neutral Energy Research (WPI-I2CNER), Kyushu University, Japan</p> <p><b>Dr. Anutosh Chakraborty</b>, Associate Professor, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore</p> <p><b>Prof. Sameer Khandekar</b>, Professor, Mechanical Engineering Department, IIT Kanpur</p> <p><b>Repporteur:</b></p> <p><b>Dr. Sagnik Paul</b>, Assistant Professor, Mechanical Engg. Department, NIT Agartala  <b>Dr. PinkuDebnath</b>, Assistant Professor, Mechanical Engg. Department, NIT Agartala</p>
<p>16.15Hrs - 17.15Hrs</p>	<p><b><u>TECHNICAL SESSION – III</u></b></p> <p><b>Session Chair: Dr. G Ranganath</b>, FIE, Member, MCDB, IEI  <b>Co-Chair: Dr. Ajay Kumar Das</b>, Professor, Mechanical Engineering Department, NIT Agartala</p> <p><b><u>Paper presentation</u></b></p> <ol style="list-style-type: none"> <li><b>Performance comparison of Closed Loop Heat Pump Dryer with Bed, Tray and Bed-Tray Dryer for Curry Leaves</b> by Ashok Kumar M<sup>1</sup>, Kumaresan G<sup>2</sup>, Rajakarunakaran S<sup>3</sup> and Sivakumar V<sup>4</sup></li> <li><b>Experimental analysis of modified refrigeration air dryer for Performance Improvement</b> by Dipakkumar C. Gosai<sup>1</sup>, Anil Kumar Gillawat<sup>2</sup> and Siddhrajsinh M. Raj</li> <li><b>Experimental Investigation of Pool BHT Performance of R-141b onMicro / Nano-Porous Copper Coating Prepared by a Two-stage Electrode position Method</b> by Anil S. Katarkar<sup>a,*</sup>, Ajay D. Pingale<sup>b</sup>, Sachin U. Belgamwar<sup>b</sup> and Swapan Bhaumik<sup>a</sup></li> <li><b>Innovative low-cost vibration monitoring system to unleash the power of condition monitoring</b> by Brahmadeo Kamble, Manish Patil, Kunal Joshi</li> </ol> <p><b>Repporteur:</b></p> <p><b>Dr. Abhik Majumder</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala  <b>Er. Sudip Bhowmik</b>, Assistant Professor, Mechanical Engineering Department, TIT Agartala</p>

<p>17.30Hrs - 18.30Hrs</p>	<p><b><u>TECHNICAL SESSION – IV</u></b></p> <p><b>PANEL DISCUSSION ON THE THEME-INNOVATIONS IN THERMAL SCIENCE AND ENGINEERING</b></p> <p><b>Moderator: Prof. Pinakeswar Mahanta</b>, Director, National Institute of Technology Arunachal Pradesh</p> <p><b>Associate Moderator: Dr. Dipak Sen</b>, Head &amp;Assistant Professor, Mechanical Engineering Department, NIT Arunachal Pradesh</p> <p><b>A. Prof.(Dr.) K Palani Kumar</b>, Professor &amp; Principal, SSR Institute of Technology, West Tambaram, Chennai &amp;Member, MCDB,IEI</p> <p><b>B. Er. Enti Ranga Reddy</b>, FIE, Member, MCDB,IEI</p> <p><b>C. Er. Madhusudhan Ray</b>, Managing Director, TCB Cert. Worldwide LLC, Kuwait</p> <p><b>D. Prof.(Dr.) Kisor Ray</b>, Director General, Techno-India Group, Kolkata</p> <p><b>E. Er. Sanjay Sen</b>, Sr. General Manager, MECON Ltd.</p> <p><b>Reporteur:</b> <b>Dr. Anupam Paul</b>, Former Head &amp;Assistant Professor, Mechanical Engineering Department, NIT Arunachal Pradesh <b>Prof. Biswajit Majumder</b>, Assistant Professor, Mechanical Engineering Department, TIT Agartala</p>
<p><b>DATE: 06.12.2021</b></p>	
<p>09.00Hrs - 11.00 Hrs</p>	<p><b><u>TECHNICAL SESSION - V</u></b></p> <p><b>Session Chair: Prof. Rakesh L Srivastava</b>, Member, MCDB,IEI</p> <p><b>Co-Chair: Dr. Vipin Kumar Tripathi</b>, Professor, Mechanical Engineering Department, NIT Agartala</p> <p><b>Speaker:</b> <b>Dr. Subrata Bhattacharjee</b>, Professor of Mechanical Engineering, San Diego State University, USA, <b>Prof. Avinash Kumar Agarwal</b>, Professor, Mechanical Engineering Department, IIT Kanpur <b>Prof. Sarit Kumar Das</b>, Professor, Mechanical Engineering Department, IIT Madras <b>Er. Pradeep Chaturvedi</b>, FIE, Member, MCDB, IEI</p> <p><b>Reporteur:</b> <b>Dr. Rahul Banerjee</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala <b>Dr. Madhujit Deb</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala</p>
<p>11.00Hrs - 11.30Hrs</p>	<p><b><u>BREAK</u></b></p>
<p>11.30Hrs - 13.30Hrs</p>	<p><b><u>TECHNICAL SESSION - VI</u></b></p> <p><b>Session Chair: Prof. S K Kakoty</b>, FIE, Professor &amp; Deputy Director, IIT Guwahati &amp; Member, MCDB, IEI</p> <p><b>Co-Chair: Dr. Raja Chakraborty</b>, Head and Associate Professor, Mechanical Engineering Department, TIT Agartala</p> <p><b>KEYNOTE ADDRESS by: Prof. Goutam Biswas</b>, Professor, Mechanical Engineering Division, IIT Kanpur</p>

	<p><b>Speaker:</b>  <b>Prof. Pinakeswar Mahanta</b>, Director, National Institute of Technology Arunachal Pradesh  <b>Dr. Rajat Gupta</b>, Professor, Mechanical Engineering Department, NIT Silchar, Assam and Former Director, NIT Mizoram, NIT Srinagar, Jammu &amp; Kashmir and NIT Arunachal Pradesh, Arunachal Pradesh.</p> <p><b>Reporteur:</b>  <b>Dr. Sagnik Pal</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala  <b>Dr. Dipak Chandra Das</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala</p>
13.30Hrs 14.15Hrs	- <b>BREAK</b>
14.15Hrs 15.30Hrs	- <p><b><u>TECHNICAL SESSION – VI (PRESENTATION ON INNOVATIVE PROJECTS)</u></b>  <b>Session Chair: Prof. (Dr.) K Venkatasubbaiah</b>, FIE, Vice President &amp; Member, MCDB, IEI  <b>Co-Chair: Dr. Rajsekhar Panua</b>, Dean(SW), NIT Agartala and Associate Professor, Mechanical Engineering Department, NIT Agartala</p> <p><b>Speaker:</b>  <b>Prof.(Dr.) Bharat Raj Singh</b>, FIE, Past Chairman, IEI, UP State Centre, Lucknow &amp; Director General (Technical), School of Management Sciences, Lucknow on Novel Air Engine for Transport Sector Towards Sustainable Development  <b>Er. Kirti Hiralal Shethna</b>, Technical Consultant and Chairman, SGLC,IEI  <b>Er. Padmanava Dasgupta</b>, Senior Team Leader, Tata Auto Components Ltd., Pune  <b>Dr. Shantanu Bhowmik</b>, Professor, Department of Aerospace Engineering &amp; Head, Research and Projects, Amrita Vishwa Vidyapeetham Coimbatore, TN</p> <p><b>Reporteur:</b>  <b>Dr. Madhujit Deb</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala  <b>Dr. Asish Acharjee</b>, Assistant Professor, Mechanical Engineering Department, NIT Agartala</p>
15.30Hrs 16.00Hrs	- <b>BREAK</b>
16.00Hrs 17.00 Hrs	- <p><b><u>VALEDICTORY SESSION</u></b>  <b>DIGNITARIES:</b>  <b>Prof. S C Sharma</b>, Director, NAAC, Bangalore as Chief Guest.  <b>Shri N.C. Sharma</b>, Director, Higher Education, Govt. of Tripura  <b>Prof. (Dr.) Sekhar Datta</b>, FIE, Principal, Tripura Institute of Technology, Narsingarh  <b>Er. Jagroop Singh</b>, FIE, Chairman, MCDB, IEI  <b>Prof. (Dr.) Swapan Bhaumik</b>, FIE, Chairman, CATE, IEI  <b>Er. Chinmay Debnath</b>, FIE, Chairman, Tripura State Centre, IEI  <b>Dr. Subhadeep Bhattacharjee</b>, FIE, Honorary Secretary, IEI, Tripura State Centre  <b>Dr. John Deb Barma</b>, MIE, Organizing Secretary, 36<sup>th</sup> National Convention of Mechanical Engineers</p>