

18th National and 7th ISHMT-ASME
Heat and Mass Transfer
Conference

<http://www.iitg.ac.in/hmtc>

4- 6 January 2006

Conference Venue: Indian Institute
of Technology Guwahati, INDIA



Conference Program

| Wednesday, January 4, 2006 (DAY 1) | | | |
|---|--|----------------|-------------|
| Event | | Venue | Time |
| Registration | | Indoor Stadium | 0900 – 1000 |
| Inauguration (details at the end) | | Indoor Stadium | 1000 – 1100 |
| High tea | | | 1100 – 1130 |
| Plenary lecture | <i>A thermal engineering approach to low temperature biology and medicine</i> Boris Rubinsky, University of California Berkeley, USA | Indoor Stadium | 1130 – 1215 |
| Plenary cum endowment lecture | <i>Experiments in desalination</i> A E. Muthunayagam, Kerala State Council for Science, Technology and Environment, India | Indoor Stadium | 1215 – 1300 |
| Lunch | | IIT Guesthouse | 1300 – 1415 |
| Keynote lectures | Thermal challenges in the semiconductor industry Ravi Mahajan, Intel Corporation, USA | G-1 (AC) | 1415 – 1500 |
| | <i>Enthalpy-based macro-scale and micro-scale models for solidification</i> Pradip Dutta, Indian Institute of Science Bangalore, INDIA | G-2 (AC) | 1415 – 1500 |
| | <i>New understanding of convective heat transfer enhancement and its engineering applications</i> W.Q. Tao, Xi'an Jiaotong University, CHINA | 008 (AC) | 1415 – 1500 |
| Keynote lectures | Recent advances in transcritical CO₂ cycle technology Eckhard Groll, Purdue University, USA | G-1 (AC) | 1500 – 1545 |
| | <i>Improvement of condensation heat transfer by surface modifications</i> Andreas Paul Fröba, University of Erlangen-Nürnberg, Germany | G-2 (AC) | 1500 – 1545 |
| | <i>Advances in fuel cell research</i> Rowland P. Travis, Imperial College London, UK | 008 (AC) | 1500 – 1545 |
| Tea | | Core 1, AC | 1545 – 1600 |
| Poster Session - I : Presentation of 135 papers in the form of posters | | H-1, H2 (AC) | 1545 – 1745 |
| Free time | | | 1745 – 1800 |
| Cultural Program: <i>Dr. Vidyadhar Prasad Mishra, Allahabad University; Bihu Dance (Assamese Special) by a famous group</i> | | Indoor Stadium | 1800 – 2000 |
| Conference Dinner | | IIT Guesthouse | 2000 – 2100 |

| Thursday, January 5, 2006 (DAY 2) | | | |
|---|--|--------------------|--------------------|
| Event | | Venue | Time |
| Keynote lectures | <i>Spectral remote sensing for furnaces and flames</i> Tae-Ho Song, Korea Advanced Institute of Science and Technology, KOREA | G-1(AC) | 0945 – 1115 |
| | <i>Advances in heat flux and high temperature instrumentation</i> S.V. Subba Rao, VSSC, Trivandrum, INDIA | G-2 (AC) | 0945 – 1115 |
| | <i>Air cooling in electronic systems: Have fundamental limits finally been reached?</i> Alfonso Ortega, University of Arizona, USA | 008 (AC) | 0945 – 1115 |
| Tea | | Core 1, AC | 1115 –1130 |
| Industrial session | Organizations to participate: NTPC, Aditya Birla Group, BHEL, Fluent, Ansys, Subros Ltd. | Core 1 (AC) | 1130 – 1300 |
| Lunch | | IIT Guesthouse | 1300 –1400 |
| Industrial session | Organizations to participate: NTPC, Aditya Birla Group, BHEL, Fluent, Ansys, Subros Ltd. | Core 1 (AC) | 1400 – 1500 |
| ISHMT General Body Meeting | | Senate Hall | 1400 – 1500 |
| Poster Session – II : Presentation of 110 papers in the form of posters | | H-1, H2 (AC) | 1500 – 1700 |
| Free time | | | 1700 – 1730 |
| Cultural Program: by Ranganiketan - Manipuri Cultural Arts Troupe (http://www.ranganiketan.com/)– Would Famous Group which has performed over 200 shows in over 20 countries. <i>It will be a lifetime experience for all. About 2500 people will watch the show.</i> | | Indoor Stadium | 1730 –1930 |
| Conference Gala Dinner | | Indoor Stadium | 1930–2100 |

| Friday, January 6, 2006 (DAY 3) | | | |
|--|--|-------------------|--------------------|
| Events | | Venue | Time |
| Keynote lectures | <i>Radiative heat transfer in nano to mega-scale systems</i> Shigenao Maruyama, Tohoku University, Japan | G-1 (AC) | 0900 – 0945 |
| | <i>Impingement cooling with free-surface liquid jets</i> John H. Lienhard, Massachusetts Institute of Technology, USA | G-2 (AC) | 0900 – 0945 |
| | <i>Heat transfer from rotating systems</i> B.V.S.S.S. Prasad, IIT Madras, India | 008 (AC) | 0900 – 0945 |
| Keynote lectures | <i>Gas-liquid two-phase flow in microchannels: the effects of gas-liquid injection methods</i> Masahiro Kawaji, University of Toronto, CANADA | G-1 (AC) | 0945 – 1030 |
| | <i>Heat transfer and fluid flow issues in the Indian nuclear reactors of the next decade</i> S. K. Gupta, Atomic Energy Regulatory Board, Mumbai | G-2 (AC) | 0945 – 1030 |
| Tea | | | 1030 – 1045 |
| Poster Session – III Presentation of 101 papers in the form of posters | | H1, H2 (AC) | 1030 – 1230 |
| Valedictory Function | | Senate Hall | 1230 – 1330 |
| Lunch | | IIT Guesthouse | 1330 – 1430 |

G-1: Gallery 1, G-2: Gallery 2, 008 – Class room in Core 1 (Ground Floor), AC – Academic Complex

Indoor stadium is behind Girls' Hostel

**18th National and 7th ISHMT-ASME
Heat and Mass Transfer
Conference**

<http://www.iitg.ac.in/hmtc>

4 - 6 January 2006

Conference Venue: Indian Institute
of Technology Guwahati, INDIA



Details of the Inauguration Program on January 4, 2006

Venue: Indoor Stadium

| Event | Time |
|--|--------------|
| Invocation and lighting of the inaugural lamp by the Chief Guest and other members | : 1000 -1005 |
| Welcome address by the Organizing Secretary, Prof. S. C. Mishra | : 1005-1010 |
| Address by the Director of IIT Guwahati, Prof. G. Barua | : 1010-1015 |
| Address by the Chairman Board of Governors of IIT Guwahati, Shri A. K. Saikia | : 1015-1020 |
| Address by the ASME representative, Prof. S. V. Garimella | : 1020-1025 |
| Address by the Chairman of the conference and the President of ISHMT, Prof. M. V. Krishna Murthy | : 1025-1030 |
| Address by the Chief Guest, Prof. R. Natarajan | : 1030-1050 |
| Vote of thanks by the Chairman of the local organizing committee, Prof. P. S. Robi | : 1050-1055 |