The Asia-Pacific Interdisciplinary Research Conference 2011
Organized by Toyohashi University of Technology

Invited Speakers
• M. Buss (Technische Universität München, Germany) “Towards cognition-enabled technical systems”
• M. Esashi (WPI-AIMR, Tohoku University, Japan) “Firsthand experience of the Tohoku earthquake on 11 March 2011”
• H. J. Gross (Würzburg University, Germany) “The magical number four: A neurological, historical and mythical enigma”
• J.-S. Jang (LED-IT Fusion Technology Research Center, Youngnam University, Korea) “High-performance GaN-based light-emitting diodes and lighting applications using convergence technologies”
• Q. Pankhurst (The Royal Institution of Great Britain, UK) “Mobilizing academic R&D in a rapidly changing marketplace: Experiences gained and lessons learned in the medical technology sector”
• M. Sagawa (Intermetallics Co., Ltd., Japan) “NdFeB magnet, from invention to the necessity of the sustainable society”
• V. M. Shalaev (Purdue University, USA) “Transforming light with metamaterials”
• Y. Tozawa (Ehime University, Japan) “Cell-free translation system: a tool for functional proteomics of solute transporters and ion channels”

Deadline for abstract submission: Aug 31st 2011

http://www.apirc.jp
The world is at a major turning point. Recent changes in global economics and industrial priorities, environmental and energy policies, food production and population movements have produced formidable challenges that must be addressed for sustaining life on earth.

This conference provides an ‘interdisciplinary-platform’ to enhance mutual understanding between scientists, engineers, policy makers, and experts from a wide spectrum of pure and applied sciences in order to resolve the daunting global issues facing mankind. In particular, the organizers would like to encourage graduate school students to participate and talk directly with internationally renowned academics, industrialists, and opinion leaders for a firsthand insight into the major issues facing scientists and engineers of the 21st century.

The conference will cover the following three areas of research.

- **Green Science and Technology**
  - Plant science
  - Waste management
  - Agriculture
  - Pollution
  - Environment
  - Oceanography
  - Climate change
  - Natural disaster management

- **Innovative Mechano-Magneto-Electronic Systems**
  - Electronic materials
  - Optoelectronics
  - Robotic
  - Devices
  - Magnetic materials and related devices
  - Piezoelectric actuators
  - Spintrons
  - Integrated circuits
  - MEMS and NEMS
  - Mar-machine interface

- **Life Sciences**
  - Neurosience
  - Drug delivery
  - Biometric materials and protocols
  - Genetics
  - RNA Technology
  - Nanosurgery
  - Health care
  - Microorganisms

The conference will mainly consist of poster presentations, with oral presentations by invited speakers and a selection of contributed papers.

**Publication**

Manuscripts submitted for publication in the proceedings of the AP-IRC 2011 will be refereed and those accepted will be published in the Institute of Physics Journal of Physics Conference Series (JPCS).

**Schedule and important deadlines**

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<tr>
<th>Conference</th>
<th>Thursday 17th and Friday 18th November 2011</th>
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<tr>
<td>Place</td>
<td>Toyohashi University of Technology (Toyohashi Tech), Aichi, Japan</td>
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**Deadline for abstract submission**

Wednesday 31st August 2011

**Manuscript of paper for publication in JPCS**

10th October 2011

**Registration fee**

1000 JPY (students) / 5000 JPY (others)

**Further information and AP-IRC 2011 website**

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URL: http://www.apirc.jp