

## 2013 SATU Summer Intensive Program Announcement

Workshop on Nanotechnology Trend  
and Industrial Development  
**Application Deadline: June 10<sup>th</sup>, 2013**

### Overview

“2013 Southeast and South Asia Regional Workshop on Nanotechnology Trend and Industrial Development” is organized by Center for Micro/Nano Science & Technology (CMNST) and SATU International Secretariat in National Cheng Kung University (NCKU). This workshop is aiming to emphasize current nanotechnology trend from basic research to real applications. Hopefully, this will bring novel scientific ideas to our participants from southeast and south Asia regions.

In the workshop, the experts in this field from CMNST, Industry Technology Research Institute (ITRI) of Taiwan, National Nano Device Laboratories, and Taiwan Bluestone Technology etc. will give lectures on the latest innovations in Nanotechnology. In addition, three intensive hands-on courses will be provided to implement nano/micro facilities for nanotechnology research. We would like to invite the most qualified researchers from member universities in the Southeast and South Asia regions to participate in this event. In order to promote and catalyze dialogues, the workshop will also encourage the sharing of research experiences and outlooks on Nanotechnology, and eventually lead to the real collaboration. Through this workshop, we are confident to increase, strengthen, support and coordinate the research network and craft the potentially feasible and applicable adaptations or strategies for future policies in respective countries.

### Tuition Waiver

To encourage participation, SATU International Secretariat offers tuition waiver to the first 30 qualified applicants. Airfare and transportation or accommodation in Taiwan is at participants' own cost.

### Eligibility

The workshop is open for university faculty members, post-doctor researchers, graduate students, and senior technicians from SATU member universities. English will be used as the

# SATU Presidents' Forum

of Southeast and South Asia and Taiwan Universities  
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official workshop language and a Ph.D. or Master degree in related field is preferred, but not required. Interested persons should send in their application form by June 10<sup>th</sup>, 2013. Final decision for workshop acceptance will be sent to all applicants by June 20<sup>th</sup>, 2013.

## Application Requirements

Please complete the Application Form as attached in the email or download from SATU website <http://conf.ncku.edu.tw/satu/>. All applications must be recommended and submitted by SATU member universities to email: [satu@conf.ncku.edu.tw](mailto:satu@conf.ncku.edu.tw). Applications sent by individuals will not be accepted.

## Contact Information

SATU Presidents' Forum International Secretariat

National Cheng Kung University

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## Workshop Details

### 2013 SATU Summer Intensive Program

#### “Workshop on Nanotechnology Trend and Industrial Development”

Nanotechnology has attracted people in various fields worldwide, including materials science, biomedical engineering ... et al. Industrial, governmental, and academic organizations have spent huge resource in this field to discover and initiate its applications for years.

This workshop focuses on current nanotechnology trend from basic research to practical applications all over the world. Three intensive topics will be covered in the three-days courses, including electron beam lithography, dual beam focus ion beam, and HR TEM/STEM.

We wish to bring novel scientific and engineering ideas to whom joining this forum through speeches and discussion. Besides, the host of this workshop, Center for Micro/Nano Science and Technology, NCKU, will serve as a platform for further interactions among participants in the future.

Please refer to the file "2013 SIP Speaker CV and Lecture Abstract" for lecture abstracts and speakers' CV.

| <b>2013 SATU Summer Intensive Program</b><br><b>“Workshop on Nanotechnology Trend and Industrial Development”</b><br><b>August 12-15, 2013</b><br><b>National Cheng Kung University</b><br><b>Venue: Science &amp; Technology Building</b> |             |  |  |
|--|-------------|--|--|
| DATE   | TIME        | OUTLINE  | VENUE  |
| <b>AUGUST 12th</b><br><br><b>MONDAY</b>  | 09:00-10:20 | <b>SESSION I: Nanotechnology Trend &amp; Industrial Development</b><br><br><b>SPEAKER: Dr. Shean-Jen Chen</b><br><i>Research Trend of Nanotechnology</i><br>Center for Micro/Nano Science & Technology | 4F Meeting Room, Science & Technology Building |
|  | 10:30-11:50 | <b>SPEAKER: Dr. Hong-Ren Chen</b><br><i>Industrial Trend of Nanotechnology</i><br>Micro Systems Technology Center, ITRI South  |  |
|  | 12:00-13:20 | <b>LUNCH BREAK</b>   |  |
|  | 13:30-14:50 | <b>SPEAKER: Dr. Chung-Jen Chung</b><br><i>Electron Beam Lithography</i><br>Center for Micro/Nano Science & Technology  |  |
|  | 15:00-17:30 | <b>Facility Operation: A+B+C</b>   | Laboratories of CMNST                          |
| <b>AUGUST 13th</b><br><br><b>TUESDAY</b>   | 09:00-10:20 | <b>SESSION II: Nanoelectronics</b><br><br><b>SPEAKER: Dr. Fu-Liang Yang</b><br><i>Outlook for 10nm CMOS: Business Market and Technology Options</i><br>National Nano Device Laboratories               | 4F Meeting Room, Science & Technology Building |

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|--|-------------|---|--|
| DATE   | TIME        | OUTLINE   | VENUE  |
| <b>AUGUST 13th</b><br><br><b>TUESDAY</b>   | 10:30-11:50 | <b>SPEAKER: Dr. Shoou-Jinn Chang</b><br><i>Nano Electronic Devices</i><br>Department of Electrical Engineering                            | 4F Meeting Room, Science & Technology Building |
|  | 12:00-13:20 | <b>LUNCH BREAK</b>  |  |
|  | 13:30-14:50 | <b>SPEAKER: Dr. Bo-Hsiung Wu</b><br><i>Mechanical Properties of Nano Indenter</i><br>Center for Micro/Nano Science & Technology           |  |
|  | 15:00-17:30 | <b>Facility Operation: B+A+C</b>  | Laboratories of CMNST                          |
| <b>AUGUST 14th</b><br><br><b>WEDNESDAY</b>   | 9:30-11:30  | <b>Visit:</b> Southern Taiwan Science Park and The Small & Medium Enterprise Administration Incubator at Tainan Science Park              |  |
|  | 11:50-13:00 | <b>LUNCH BREAK</b>  |  |
|  | 13:50-14:50 | <b>Visit:</b> Additive Manufacturing and Laser Application Technology Center of ITRI South  |  |
|  | 16:00-17:00 | <b>Visit:</b> Micro Systems Technology Center of ITRI South   |  |
| <b>AUGUST 15th</b><br><br><b>TUHRSDAY</b>  | 09:00-09:50 | <b>SESSION III: Graphene</b><br><br><b>SPEAKER: Dr. Hsisheng Teng</b><br><i>Graphene Oxide as Media for Electrical-Energy Storage and</i> | 4F Meeting Room, Science & Technology Building |

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| DATE   | TIME        | OUTLINE   | VENUE  |
| <b>AUGUST</b><br><b>15th</b><br><b>TUHRSDAY</b>  |             | <i>Photon-Energy Conversion</i><br>Center for Micro/Nano Science & Technology   | 4F Meeting Room, Science & Technology Building |
|  | 10:00-10:50 | <b>SPEAKER: Dr. Mario Hofmann</b><br><i>From Nanoscience to Nanoengineering—Putting Graphene to Work</i><br>Department of Materials Science and Engineering, NCKU |  |
|  | 11:00-11:50 | <b>SPEAKER: Dr. Yu-Ming Lin</b><br><i>Graphene - Production and Applications in Electronics</i><br>Taiwan Bluestone Technology                                    |  |
|  | 12:00-13:00 | <b>LUNCH BREAK</b>  |  |
|  | 13:30-14:50 | <b>SPEAKER: Dr. Jong-Shing Bow</b><br><i>Applications of Electron Microscopes in Nano-materials</i><br>Center for Micro/Nano Science & Technology                 |  |
|  | 15:00-17:30 | <b>Facility Operation: C+A+B</b>  | Laboratories of CMNST                          |

**Facility Operation:**

A : Electron-Beam Lithography and Inductively Coupled Plasma

B : Dual-Beam Focused Iron Beam and Omni Probe

C : High-Resolution Field-Emission Transmission Electron Microscopy with In-Situ, EDS, and EEL functions