

Announcement of ‘Satellite Testing Tutorial’

November 15 & 16, 2014 in Kitakyushu, Japan

Small/micro/nano/pico satellite development and utilization is increasing drastically worldwide. Yet one drawback thus far of these “small-scale” satellites has been limited reliability. Since 2011, an international initiative to standardize test requirements and test methods to qualify the design and manufacturing method of small-scale satellites and their units has been underway in an effort to improve reliability while maintaining the advantages of low-cost and fast-delivery. However, to realize this improvement it is necessary to properly conduct and interpret the environmental testing prescribed by any given standard. Therefore, practical testing knowledge and experience is an extremely crucial capability for any small-scale satellite project.

The Center for Nanosatellite Testing (CeNT) at Kyushu Institute of Technology (Kyutech) provides the infrastructure for all environmental test services except radiation for nano-satellites up to 50cmx50cmx50cm and 50kg in mass. CeNT is staffed by Kyutech professors, researchers, and professionals who have extensive practical and theoretical testing experience, and since its inauguration in 2010 CeNT has provided or is providing environmental tests to over 20 Japanese nano-satellites. In parallel, Kyutech/CeNT are also actively involved in the NETS (Nanosatellite Environment Test Standardization) project.

To encourage environmental testing within the small-scale satellite community, Kyutech and UNISEC are organizing a “Satellite Testing Tutorial” on November 15 and 16, 2014. The purpose of the two-day tutorial is to introduce “test engineers” or other qualified representatives to numerous testing aspects and to provide basic training in thermal and mechanical testing. The tutorial will generally consist of the following activities

- Classroom-style lectures
- Mechanical testing training (vibration, shock)
- Thermal testing training (thermal cycle, thermal vacuum)

All laboratory instruction will be held in CeNT (http://cent.ele.kyutech.ac.jp/index_e.html). The cost to attend the Satellite Testing Tutorial is \$800 USD total (\$400 USD/day and both days are required). This price covers the operational and instruction expenses, materials provided to participants, and lunch both days. The number of available seats is limited due to space constraints, and will be held based on the order of registration and payment.

Venue

CeNT (Center for Nanosatellite Testing), Kyushu Institute of Technology, Kitakyushu, Japan
No.35 of the campus map (<http://www.kyutech.ac.jp/english/about/map/tobata.html>)

Tentative schedule

November 15, Saturday, classroom-style lectures + mechanical testing training

November 16, Sunday, classroom-style lectures + thermal testing training

The following associated events are held at the same venue.

November 17 & 18, International Workshop on Small-Scale Satellite Standardization
(http://cent.ele.kyutech.ac.jp/nets_web/nets_ws_annouce_2014.html)

November 18, 19 & 20, 2nd UNISEC-Global Meeting (<http://www.unisec-global.org>)

Important points

- Those who wish to participate should register and make payment by **October 31st, 2014**. Please note that seats may fill prior to this date. For more details and to register please contact Dr. John Polansky

at the email address below to ensure qualification.

- Please contact Dr. Polansky or Kyutech before making payment, as you must contact Dr. Polansky for registration and to ensure qualification. Once registered you may make payment through the UNISEC website.
- A “Satellite Testing Tutorial” completion certificate will be issued to all participants who participate in and complete the tutorial.
- Refund/cancellation policy: Refunds will be made to those participants who must cancel, less a \$75 USD processing fee. A cancellation request must be sent to polansky.john260@mail.kyutech.jp no later than October 31, 2014. No refunds will be made after this date. If you are registered for the tutorial but are unable to attend, you may substitute another employee from your organization once at no additional charge. Substitutions may be made via request to Dr. Polansky.
- In the event that the tutorial is canceled a full refund will be given and no processing fees will be charged.

Contact: polansky.john260@mail.kyutech.jp

Organizer:

Rei Kawashima, Secretary-General, UNISEC-Global

Mengu Cho, Ph.D., Professor and Director, Center for Nanosatellite Testing, Kyushu Institute of Technology