International GNSS Summer School 2020

- **Period**: 2020/09/07 - 09/12
- **Venue**: Tokyo University of Marine Science and Technology (TUMSAT)
- **Organized by** Faculty of Marine Technology, TUMSAT
- **Co-organized by** Institute of Positioning, Navigation and Timing of Japan (IPNTJ)
- **Sponsored by** Japan Science and Technology Agency (JST)
Outline of International Summer School in Tokyo

• Period: 2020/09/07-09/12
• Venue: Etchujima Campus, Tokyo University of Marine Science and Technology (TUMSAT), Tokyo, Japan
• Organized by TUMSAT
• Co-Organized by The Institute of Positioning, Navigation and Timing of Japan
• Attendees: Students of post graduate, young researchers and instructors.
• Requested to bring their own notebook computer.
• Number of participants: 40
• Language: English
• Fee: 60,000JPY, (20,000JPY for students).
• Supported by: MGA(Multi-GNSS Asia), GESTISS (Geospatial and Space Technology Consortium for Innovative Social Service), QZSS Services
• Sponsored by JST
Call for Application for 2020

- Eligible Candidates
  --Beginners with master level (preferable who specialized in electronics or information & communication technologies)
  --Young researchers and instructors who are engaged in GNSS field activities.

- Call for the scholarship* application by February 17.

- *(Round Trip Ticket + Accommodations + Fee) about 20 participants mainly from the developing countries.

- Acceptance notification for scholarship by the end of April.

- Call for application until 40 participants.

- Contact: Prof. Akio Yasuda at Tokyo University of Marine Science and Technology, yasuda@kaiyodai.ac.jp

- Attendees are requested to bring their own notebook computer.
Application

- Please prepare the following items, even though you don’t apply the scholarship. The scholarship includes round trip ticket, 7-night accommodation, 6-day lunch and the fee. Please submit the following items by February 17, when you apply the scholarship.
  - 1. CV
  - 2. Certification of the graduation. (for your all career)*
  - 3. Transcript with student's records. (for your all career)*
  - 4. Certification for English ability (Score of TOEFL, IELTS or TOEIC)*
  - 5. Recommendations by two responsible persons*
  - 6. Your Institute’s data (Responsible person etc.)
  - #5 & #6 are waived, if you don’t apply the scholarship.
*Please submit the scanned original documents by e-mail to yasuda@kaiyodai.ac.jp for the selection and bring the originals if accepted.
Please do not pay the fee until the application is accepted even if you will attend by your own budget.

Fill the registration form at https://fs221.xbit.jp/a424/form2/
The result will be informed to the applicants by e-mail by the end of April.
Map of the Venue (Central Tokyo)

Tokyo Station

Etchujima Campus
Faculty of Marine Technology, TUMSAT
Etchujima Campus (School of Marine Technology)
# Time Table in 2019

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830-1000</td>
<td>Introduction</td>
<td>Class B-1</td>
<td>Class C-1</td>
<td>Class B-5</td>
<td>Practice for System Design, followed by SD-workshop</td>
</tr>
<tr>
<td>1000-1010</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>GNSS Signal Security****</td>
</tr>
<tr>
<td>1010-1140</td>
<td>Class A-1</td>
<td>Class B-2</td>
<td>Class C-2</td>
<td>Class B-6</td>
<td>Break</td>
</tr>
<tr>
<td>1140-1230</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>GNSS Authentication****</td>
</tr>
<tr>
<td>1230-1400</td>
<td>Class A-2</td>
<td>Class B-3</td>
<td>Class C-3</td>
<td>RTK-LIB Practice</td>
<td>Lunch</td>
</tr>
<tr>
<td>1400-1410</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Port Cruise G-I</td>
</tr>
<tr>
<td>1410-1540</td>
<td>Class A-3</td>
<td>Class B-4</td>
<td>Special Lec. **</td>
<td>Class C-4 SDR I</td>
<td>Marime Museum G-I</td>
</tr>
<tr>
<td>1540-1550</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Port Cruise G-II</td>
</tr>
<tr>
<td>1550-1720</td>
<td>Class A-4</td>
<td>QZSS-Intro &amp; Demo*</td>
<td>Septentrio Seminar***</td>
<td>Class C-5 SDR II</td>
<td>Marime Museum G-I</td>
</tr>
<tr>
<td>1730-</td>
<td>Welcome Party</td>
<td>1 class=90 minutes</td>
<td></td>
<td>ALLYSTAR Seminar*****</td>
<td>Paricipants Workshop</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

**Instructors**

- **Class-A Fundamentals**
  - Dr. Akio Yasuda
  - Dr. N. Kubo & Dr. Feng-Yu Chu A-1,2
  - Dr. Ivan G. Petrovski A-3,4

- **Class-B Software**
  - Dr. Takeyasu Sakai, B-1,2,3,4
  - Mr. Tomoji Takasu B-5,6,Practice

- **Class-C Receiver**
  - Dr. Toshiaki Tsujii, C1,2,3
  - Dr. Taro Suzuki, C4, SDR-Practice

**System Design by**

- Dr. Naohiko Kohtake
- ****by Dr. Dinesh Manandhar

**QZSS Services**

- **Status of GIONET, CORS in Japan by H. Matsumura**
- **GNSS Receiver Practice by Jan De Turck**
- ****by Justin Yang

Laboratory of Satellite Navigation Engineering
## Tentative Time Table in 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830-1000</td>
<td>Introduction</td>
<td>Class B-1</td>
<td>Class C-1</td>
<td>Class B-5</td>
<td>Practice for System Design, followed by SD-workshop</td>
<td>GNSS Signal Security****</td>
</tr>
<tr>
<td>1000-1040</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>1010-1140</td>
<td>Class A-1</td>
<td>Class B-2</td>
<td>Class C-2</td>
<td>Class B-5</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1140-1230</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1230-1400</td>
<td>Class A-2</td>
<td>Class B-3</td>
<td>Class C-3</td>
<td>RTK-LIB Practice</td>
<td>Port Cruise G-I</td>
<td>GNSS Raw Measurements from Android Device****</td>
</tr>
<tr>
<td>1400-1410</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>1410-1540</td>
<td>Class A-3</td>
<td>Class B-4</td>
<td>Special Lec. **</td>
<td>Class C-4 SDR I</td>
<td>Port Cruise G-II</td>
<td>Paricipants Workshop</td>
</tr>
<tr>
<td>1540-1550</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>1550-1720</td>
<td>QZSS-Intro &amp; Demo*</td>
<td>Septentrio Seminar***</td>
<td>Class C-5 SDR II</td>
<td>ALLYSTAR Seminar****</td>
<td>Paricipants Workshop Closing</td>
<td></td>
</tr>
<tr>
<td>1730-</td>
<td>Welcome Party</td>
<td>1 class=90 minutes</td>
<td></td>
<td></td>
<td>Farewell party</td>
<td></td>
</tr>
</tbody>
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- **Status of GIONET, CORS in Japan by**: H. Matsumura
- **GNSS Receiver Practice by**: Jan De Turck
- **by QZSS Group**: *by QZSS Group
- **by Dinesh Manandhar**: ****by Dinesh Manandhar
- **by Justin Yang**: ****by Justin Yang