DAICENTER-SHIMADZU Analytics Workshop
September 17-21, 2018
Venue - Shimadzu Analytical India Pvt. Ltd., Rushabh Chambers, Makwana Road, Marol, Andheri (East), Mumbai 400059, India

DAICENTER (DBT-AIST International CENter for Translational and Environmental Research), AIST, Japan will conduct a residential one week workshop jointly with Shimadzu Analytical (India) Pvt. Ltd (Wholly owned by Shimadzu Corporation, Japan) offering full description and hands-on-training course on pioneering and advanced analytic technologies. Introduction to a variety of analytic techniques including Gas Chromatography, Liquid Chromatography, Mass Spectrometry, Atomic Spectroscopy, GC-MS, LC-MS, FTIR, ICP, Data analyses, Data management etc.

Who can join?
The workshop is suitable for both beginners and experienced users wanting to gain a greater understanding of the analytic technologies applicable in the field of pharmaceuticals, food, environment and material sciences. Offering preference to the doctoral students, applicants will be selected through compelling reason to join the workshop, its usefulness to their current research and recommendation letter. The course will have a maximum of 10 delegates.

Language?
The course, including the course materials, will be conducted in English.

Support?
The workshop will be jointly supported by DAICENTER and SHIMADZU. No fees apply to the selected candidates. Training and workshop materials, refreshments including working lunch/tea coffee & light snacks will be provided. Travel to Shimadzu (Mumbai) must be borne by either the selected candidate or his/her institution/university. Accommodation in Mumbai may be provided to some candidates.

Program and Courses (Highlight)
Sept. 17 - Arrival, Reception & Introduction to analytic instruments, Molecular Spectroscopy, UV, FTIR
Sept. 18 - Atomic Spectroscopy, Atomic Absorption Spectroscopy, ICP
Sept. 19 - Range of Chromatography techniques
Sept. 20 - HPLC
Sept. 21 - GC-MS, LC-MS

Instructors: The highly skilled and experienced Application Chemists from Shimadzu
Organizers: Y. Ohmiya, R. Wadhwa, Y. Onishi, S. Kaul and A. Datar

Deadline for application - August 5, 2018 (5 PM JST)
For sending application and further information: s-kaul@aist.go.jp
<table>
<thead>
<tr>
<th>Date</th>
<th>Sept. 17.</th>
<th>Sept. 18</th>
<th>Sept. 19</th>
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<tbody>
<tr>
<td>Time</td>
<td>(Monday)</td>
<td>(Tuesday)</td>
<td>(Wednesday)</td>
<td>(Thursday)</td>
<td>(Friday)</td>
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<tr>
<td>9:00 to 9:30</td>
<td>Registration &amp; Welcome</td>
<td>Feedback of previous day</td>
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<td>9:30 to 10:30</td>
<td>Introduction to Analytical Instruments</td>
<td>Atomic Spectroscopy</td>
<td>Introduction to Chromatography</td>
<td>HPLC</td>
<td>Hyphenated techniques</td>
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<td>10:30 to 10:45</td>
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<td>10:45 to 12:00</td>
<td>Molecular Spectroscopy, UV</td>
<td>Atomic Absorption Spectroscopy</td>
<td>Gas Chromatography</td>
<td>HPLC</td>
<td>GC-MS</td>
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<td>12:00 to 13:15</td>
<td>FTIR</td>
<td>ICP</td>
<td>GC continue</td>
<td>HPLC</td>
<td>LC-MS</td>
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<td>13:15 to 14:00</td>
<td>Lunch</td>
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<td>14:00 to 17:30</td>
<td>Practical on UV and IR</td>
<td>Practical on AAS and ICP</td>
<td>Practical on GC</td>
<td>Practical on HPLC</td>
<td>Practical on MS up to 17:00. 17:00 to 17:30 Concluding remarks and feedback.</td>
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Technical Lectures

Light absorption and color:

When light hits a sample, reflection and absorption occur. If a portion of the light is absorbed, the color of the sample is determined by the reflected light.
Hands-on Training
Hands-on Training

Pleasant Memories