<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter</th>
<th>Country or Region</th>
<th>Affiliation</th>
<th>Paper title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 9:00</td>
<td></td>
<td></td>
<td></td>
<td>REGISTRATION</td>
</tr>
<tr>
<td>9:00 - 9:30</td>
<td>Opening Notes</td>
<td></td>
<td></td>
<td>Chair: Toshihiro Uchida</td>
</tr>
<tr>
<td>9:00 - 9:15</td>
<td>Shinsuke Nakao</td>
<td>Japan</td>
<td>GREEN/AIST, Director</td>
<td>Opening Note</td>
</tr>
<tr>
<td>9:15 - 9:30</td>
<td>TBA</td>
<td>Thailand</td>
<td>Department of Groundwater Resources</td>
<td>Opening Note</td>
</tr>
<tr>
<td>9:30 - 10:10</td>
<td>Geochemical Aspects</td>
<td></td>
<td></td>
<td>Chair: Toshihiro Uchida (continue)</td>
</tr>
<tr>
<td>9:30 - 9:50</td>
<td>Huei-Fen Chen</td>
<td>Taiwan, China</td>
<td>National Taiwan Ocean University</td>
<td>Estimation of the preferred geothermometer for Taiwan's predominantly slate geothermal reservoirs of the Chingshui region, Taiwan</td>
</tr>
<tr>
<td>9:50 - 10:10</td>
<td>Kasumi Yasukawa</td>
<td>Japan</td>
<td>AIST</td>
<td>Hydrological and thermal relationship between geothermal reservoir and nearby aquifer identified by geochemical characteristic of the aquifer</td>
</tr>
<tr>
<td>10:10 - 10:40</td>
<td></td>
<td></td>
<td></td>
<td>BREAK</td>
</tr>
<tr>
<td>10:40 - 12:00</td>
<td>Geothermal Structure : Exploration and Evaluation</td>
<td></td>
<td></td>
<td>Chair: Greg Bignall</td>
</tr>
<tr>
<td>10:40 - 11:00</td>
<td>Zihui Chen</td>
<td>China</td>
<td>China Institute of Geo-Environment Monitoring</td>
<td>Discovering blind geothermal resources by exploring buried fault - A case study for geothermal drilling in Mukeng, China</td>
</tr>
<tr>
<td>11:00 - 11:20</td>
<td>Hideaki Hase</td>
<td>Japan</td>
<td>GERD</td>
<td>Utilization of magnetotelluric data for evaluation of geothermal reservoir condition associated with EGS water injection in Japan</td>
</tr>
<tr>
<td>11:20 - 11:40</td>
<td>Nazli Ismail</td>
<td>Indonesia</td>
<td>Syiah Kuala University</td>
<td>Interpretation of gravity and magnetic data to delineate local fault structures in Bur Ni Geureudong geothermal field, Aceh Province, Indonesia</td>
</tr>
<tr>
<td>11:40 - 12:00</td>
<td>Keiichi Sakaguchi</td>
<td>Japan</td>
<td>AIST</td>
<td>Caldera collapse structure, its importance in understanding geothermal systems</td>
</tr>
<tr>
<td>12:00 - 13:20</td>
<td></td>
<td></td>
<td></td>
<td>LUNCH</td>
</tr>
<tr>
<td>13:20 - 15:40</td>
<td>Mid-Low Temperature Systems and Direct use</td>
<td></td>
<td></td>
<td>Chair: Tae Jong Lee</td>
</tr>
<tr>
<td>13:20 - 13:40</td>
<td>Edwin H. Alcober</td>
<td>Philippines</td>
<td>EDC</td>
<td>Development of low enthalpy power generation system for the existing wells (M02/M04R) at the Manito Lowlands, Bacman geothermal business unit</td>
</tr>
<tr>
<td>13:40 - 14:00</td>
<td>Agnes G. Reyes</td>
<td>New Zealand</td>
<td>GNS-Science</td>
<td>Heat sources in low-enthalpy geothermal systems, New Zealand</td>
</tr>
<tr>
<td>14:00 - 14:20</td>
<td>Jiri Muller</td>
<td>Norway</td>
<td>Institute for Energy Technology</td>
<td>Geothermal Energy in Norway</td>
</tr>
<tr>
<td>14:20 - 14:40</td>
<td>Shrestha Gaurav</td>
<td>Japan</td>
<td>AIST</td>
<td>Development of ground-source heat pump system using a flowing well</td>
</tr>
<tr>
<td>14:40 - 14:50</td>
<td>Group photo (picture taking)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:50 - 15:20</td>
<td></td>
<td></td>
<td></td>
<td>BREAK</td>
</tr>
<tr>
<td>15:20 - 16:40</td>
<td>Resources in Thailand</td>
<td></td>
<td></td>
<td>Chair: Kriagnsak Pirarai</td>
</tr>
<tr>
<td>15:20 - 15:40</td>
<td>Bundarik Borisut</td>
<td>Thailand</td>
<td>Department of Groundwater Resources</td>
<td>Geothermal exploration in Pai, Maehongson, Thailand</td>
</tr>
<tr>
<td>15:40 - 16:00</td>
<td>Helmut Duerrast</td>
<td>Thailand</td>
<td>Prince of Songkla University</td>
<td>Potential of the geothermal system in Phang Nga, Southern Thailand</td>
</tr>
<tr>
<td>16:00 - 16:20</td>
<td>Spencer H. Wood</td>
<td>USA</td>
<td>Boise State University</td>
<td>Fang Hot Springs geothermal area, Chiang Mai Province, Northern Thailand - Geological and Geophysical Exploration in 2014-2015</td>
</tr>
<tr>
<td>16:20 - 16:40</td>
<td>Weerachai Siripunvaraporn</td>
<td>Thailand</td>
<td>Mahidol University</td>
<td>Imaging the Fang geothermal system with a 3-D magnetotelluric technique</td>
</tr>
<tr>
<td>16:40 - 17:00</td>
<td>International Activities</td>
<td></td>
<td></td>
<td>Chair: Kriagnsak Pirarai (Continue)</td>
</tr>
<tr>
<td>16:40 - 17:00</td>
<td>Lothar Wissing</td>
<td>Germany</td>
<td>Forschungszentrum Jülich GmbH</td>
<td>IEA Geothermal –Participant of the Technology Collaboration Programmes of the International Energy Agency</td>
</tr>
<tr>
<td>All day</td>
<td>Poster Session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:00 - 20:00</td>
<td>Banquet by KIGAM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Saturday, 19 November

**Bus trip to Fang geothermal power plant (time schedule TBA)**

---

### Sunday, 20 November

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter</th>
<th>Country or Region</th>
<th>Affiliation</th>
<th>Paper title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 9:00</td>
<td></td>
<td></td>
<td></td>
<td>Registation</td>
</tr>
<tr>
<td>9:00 - 10:20</td>
<td><strong>Resources Assessments</strong></td>
<td></td>
<td></td>
<td>Chair: Norio Yanagisawa</td>
</tr>
<tr>
<td>9:00 - 9:20</td>
<td>Sheng-Rong Song</td>
<td>Taiwan, China</td>
<td>National Taiwan University</td>
<td>The Geothermal Potential, Current and Opportunity in Taiwan</td>
</tr>
<tr>
<td>9:20 - 9:40</td>
<td>Shou-Cheng Wang</td>
<td>Taiwan, China</td>
<td>National Taiwan Ocean Univ.</td>
<td>Current geothermal development projects in Taiwan</td>
</tr>
<tr>
<td>9:40 - 10:00</td>
<td>Nasution Asnawir</td>
<td>Indonesia</td>
<td>Faculty of Earth Science and Technology, ITB</td>
<td>The Ulumbu Geothermal Development, West Flores, Eastern Indonesia</td>
</tr>
<tr>
<td>10:00 - 10:20</td>
<td>Bor-Shouh Huang</td>
<td>Taiwan, China</td>
<td>Institute of Earth Sciences, Academia Sinica</td>
<td>Seismic evaluations for the deep heat source and earthquake risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>of geothermal power plant construction at Ilan, Taiwan</td>
</tr>
<tr>
<td>10:20 - 10:50</td>
<td><strong>BREAK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:50 - 11:50</td>
<td><strong>New concepts and method</strong></td>
<td></td>
<td></td>
<td>Chair: Vicente Clemente</td>
</tr>
<tr>
<td>10:50 - 11:10</td>
<td>Takuya Ishibashi</td>
<td>Japan</td>
<td>AIST</td>
<td>Permeability change of rock fractures estimated from the scale of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>microearthquakes in geothermal reservoirs</td>
</tr>
<tr>
<td>11:10 - 11:30</td>
<td>Roland Horne</td>
<td>USA</td>
<td>Stanford University</td>
<td>Uniquely identifiable DNA-embedded silica nanotracer for fractured</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>reservoir characterization</td>
</tr>
<tr>
<td>11:30 - 11:50</td>
<td>Greg Bignall</td>
<td>New Zealand</td>
<td>GNS</td>
<td>Proposed methodology for assessment and ranking of geothermal systems</td>
</tr>
<tr>
<td>11:50 - 13:10</td>
<td><strong>LUNCH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:10 - 14:20</td>
<td><strong>Special session: Opportunities and Barriers 1</strong></td>
<td></td>
<td></td>
<td>Chair: Kasumi Yasukawa</td>
</tr>
<tr>
<td>13:10 - 13:20</td>
<td>Toshihiro Uchida</td>
<td>Japan</td>
<td>AIST</td>
<td>Introduction of ERIA project and purpose of this session</td>
</tr>
<tr>
<td>13:20 - 13:40</td>
<td>Vicente Clemente</td>
<td>Philippines</td>
<td>EDC</td>
<td>Country update on geothermal utilization and barriers affecting its</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>growth -Philippines</td>
</tr>
<tr>
<td>13:40 - 14:00</td>
<td>Arif Munandar</td>
<td>Indonesia</td>
<td>GA</td>
<td>Indonesia's geothermal energy: recent conditions and development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>challenges</td>
</tr>
<tr>
<td>14:00 - 14:20</td>
<td>Norio Yanagisawa</td>
<td>Japan</td>
<td>AIST</td>
<td>Country update and barriers of geothermal power generation in Japan</td>
</tr>
<tr>
<td>14:40 - 15:10</td>
<td><strong>BREAK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:10 - 16:20</td>
<td><strong>Special session: Opportunities and Barriers 2</strong></td>
<td></td>
<td></td>
<td>Chair: Yoonho Song</td>
</tr>
<tr>
<td>15:10 - 15:30</td>
<td>Tae Jong Lee</td>
<td>Korea</td>
<td>KIGAM</td>
<td>Barriers of geothermal power generation in Korea and possible</td>
</tr>
<tr>
<td>15:30 - 15:55</td>
<td>Tran Trong Thang</td>
<td>Vietnam</td>
<td>VIGMR</td>
<td>solutions</td>
</tr>
<tr>
<td>15:55 - 16:20</td>
<td>Kriangsak Pirarai</td>
<td>Thailand</td>
<td>DGR</td>
<td>Current geothermal development situation in Thailand</td>
</tr>
<tr>
<td>16:20 - 16:45</td>
<td>Fredolin Javino</td>
<td>Malaysia</td>
<td>Minerals &amp; Geoscience Department Malaysia</td>
<td>Geothermal explorations in young volcanic rocks in Tawau, Sabah, Malaysia</td>
</tr>
<tr>
<td>16:45 - 16:50</td>
<td></td>
<td></td>
<td></td>
<td>Short break to collect questionnaire</td>
</tr>
<tr>
<td>16:50 - 17:00</td>
<td><strong>Closing Note</strong></td>
<td></td>
<td></td>
<td>Chair: Yoonho Song (continue)</td>
</tr>
<tr>
<td>16:50 - 17:00</td>
<td>Shigeru Niki</td>
<td>Japan</td>
<td>RENRC/AIST Director</td>
<td>Closing note</td>
</tr>
<tr>
<td>17:00</td>
<td></td>
<td></td>
<td></td>
<td>Adjournment</td>
</tr>
</tbody>
</table>

---

**IGA-AWPRB General Annual Meeting 2016**

**IGA members in the region only (chair: K. Yasukawa)**