AC21 International Graduate School 2017 Held at Gadjah Mada University

"Indigenous Root and Modern Approach for Resilient Society"

An epilogue of the 2017 AC21 International Graduate School (IGS 2017)

I Made Andi Arsana
Head of Office of International Affairs
Gadjah Mada University

We, at Gadjah Mada University, were honored to be the host of the 2017 AC21 Steering Committee Meeting (STC) and the International Graduate School (IGS) in July 2017. The programs went well with enthusiastic participants. Not only the participants, but we, the organizing committee, too, obtained a lot of benefits from the organization.

It was clearly noted by the Rector of Gadjah Mada University during the opening of the IGS 2017 that collaborative efforts must be in place to deal with transnational issues facing the society nowadays. It appears that the message was well received by participants, lecturers, professors, officials and the organizing committee of the IGS 2017. The enthusiasm of all parties was well captured in almost every moment during the event, manifesting the message of the rector.

It was a great honor for Gadjah Mada University to have been trusted as the host of the 2017 event. With great support from the AC21 secretariat the organizing committee managed to gather 18 delegation members from eight countries for the STC meeting, 44 participants for IGS and six professors for lectures during the program. Not only...
that, the involvement of a number of academics from UGM was also a positive contribution to the program. The IGS 2017, which facilitated the interaction among people from different discipline, was perfectly in line with UGM’s vision towards promotion of trans-disciplinary research.

Three days of lectures were conducted during the IGS, which covers three different themes: Sustainable Agricultural Project Study, Technology for Sustainable Development and Community Resilience, and Indigenous-based Health Product. The lecturers involved in the delivery of three themes were Prof. Shogo Matsumoto (Graduate School of Bioagricultural Sciences, Nagoya University), Dr. Murtiningrum (Faculty of Agricultural Technology, UGM), Prof. Lothar Kroll (Dean for Research, International Relations and Gender, Chemnitz University of Technology), Prof. Irfan Dwidya Prijambada (Director of Community Service, UGM), Prof. Chen Yu Zhang (Vice-Chancellor, Nanjing University), and Prof. Zullies Ikawati (Faculty of Pharmacy, UGM). In addition, participants were also taken to visit key relevant industries in Yogyakarta, including PIAT, the one managed by Gadjah Mada University. The visits certainly provided participants with a better understanding on the three lecture themes.

It was quite notable that participants enjoyed the program and they had learned a lot from each other. As a member institution of AC21, Gadjah Mada University views that the program has contributed positively to build awareness and understanding among participants regarding the need and importance of collaboration and cooperation beyond borders. Having said that, we are confident that AC21 will remain to play important role in fostering international collaboration in education sector. We look forward to fostering collaboration with all individual members of AC21 and also with AC21 as a consortium.
Participants' Voices in AC21 International Graduate School 2017

Student Report 1
Ibrahim Eissa, Nagoya University

I had a great honor to represent Nagoya University at AC21 International Graduate School 2017. This event was held at Universitas Gadjah Mada from July 10-15, 2017 in Indonesia (the land of harmony and diversity).

Once, I left Nagoya, the questions followed one by one to storm my brain. But, when I arrived at Yogyakarta airport, my feeling became better because of one of the organizers wait for me. On the first day, I met around 46 students who came from different continents of the world. When the organizers gave us a green bag with green t-shirt, I realized the relationship between the green color and summer school theme that entitled "Community and Indigenous-based technology for sustainable development towards resilient society". Three days lectures focused on three pillars the agriculture sustainability, community service and Indigenous-based health product.

The agriculture sustainability pillar was supported by a field tour to understand the agriculture recycling process to produce biogas. In the community service program, we realized the university role to serve the community through visiting a local cacao plantation, where they produced high purity cacao chocolate. The last pillar was seminars for traditional herbal medicine and internship at Merapi Herbal traditional company. We divided us into four groups to make a traditional Indonesian herbal medicine called Jamu that consisted of ginger mixed with water and sugar, prepared by local technique. The competition among groups started to prepare Jamu. In these moments, I remembered my undergraduate chemistry course when the ginger become crystallized! At the end of the event, we participated in group discussion to summarize the benefits and the key words for agriculture, community, and health products for Sustainable Development.

The Last day was amazing by visiting the magnificent Borobudur temple is the world's biggest Buddhist monument. Overall, the summer school was really well organized. I enjoyed with an intercultural exchange. The diversity between students was really an effective point and we exchanged our contacts. After all, I am really surprised because of one of the participated student has been accepted to continue his Ph.D. in Japan. Finally, I would like to thanks the organizers, AC21 staff and all the participants (my friends now) who made successful International Graduate School 2017.

Student Report 2
Anne-Coralie Bonnaire, Chemnitz University of Technology

Climate change, globalisation and migration are three great challenges of this century. The AC21 International Graduate School 2017 held at Universitas Gadjah Mada (UGM) in Indonesia questioned those topics and offered answers to us, centering around the theme "Community and Indigenous-based Technology for Sustainable Development towards Resilient Society". The solutions were Indonesian-made and community-based, as the UGM's leitmotiv "Locally Rooted, Globally Respected" implies the prioritization of working with the local population for their needs and their will, along with the development of a global resiliency in the realms of research and science, as well as in students' life.

Impressive for all participants in IGS was the concept of "Community Services", which each student at UGM should fulfil before graduating. For their two months of service somewhere on one of the over 11,000 Indonesian islands, students work for one community and receive three credit points. Students may be sent to work on existing projects or they may help develop new ones, for example the improvement of family gold mining; however, these projects are always developed and always take place with and for the local community.

During the IGS 2017, two community services projects were visited: the Wanagama Forest, which was created by the University and expanded with the help of the local communities, and the cocoa plantation in Gunung Kidul (East of...
Yogyakarta). This cocoa-plantation grows cocoa beans, processes them and produces chocolate under its own name (Gun-Kid Cokelat). All the processes, from plants' crafting, to the optimisation of the fermentation process for a smaller amount of beans, to marketing, were accompanied by specialists and students from UGM. This cooperative has been successful for 30 years. This visit, together with a visit to the Merapi Farma Herbal, were the highlights of the week; participants had the opportunity to produce traditional Indonesian medicine ("jamu") on their own to bring it back home. This local farm at the foot of the Merapi volcano turned traditional recipes into successful modern pharmaceutical products, again reconciling traditional and modern Indonesian lifestyles. Practical learning was completed on site via lectures in the morning given by international professors. Lectures by UGM professors, including Dr. Murtiningsrum and Dr. Ir. Bambang Suhartanto, gave insights into the urge to develop strategies for better water and land management, as the Indonesian (and world) population keeps growing but (or more likely therefore) the resources and (cultivable) land capacities keep regressing: more people need to build a house, therefore less land can be cultivated; yet more people need to be fed. In order to achieve sustainability and resiliency with new technologies, alternative and integrative farming methods must be developed – and are being tested at the PIAT, the UGM farm research centre. For example, "Vertical Farming" offers multiple possibilities, from space saving to the reasonable management of water supplies. One of the most common outcomes for the students attending at the PIAT was the idea that everything can be recycled and reused – such as turning excrements into biogas or fallen leaves from the UGM campus into fertiliser.

As Olivia Cousins, one of the participants, noted, "Community, Technology, and Sustainability" were the three keywords of the week, where students from around the world learned together from each other, became friends and planted plants to make the world a better place to live. Getting to know the Indonesian culture, along with those of the participants', was also a main learning outcome of the IGS. Excursions to main Indonesian cultural sites were also part of the programme and allowed us to better understand Indonesian history and needs. Those three words are the answer to the above-mentioned challenges such as climate change, globalisation, and migration; but those can be overcome and turned into positive actions thanks to friendship, culture, and exchange, as the AC21 IGS participants learned in Yogyakarta, Indonesia, in July 2017.

Student Report 3

Muneki Adachi, Nagoya University

I participated in the AC21 International Graduate School hosted by Gadjah Mada University, Indonesia in July, 2017. About 45 graduate students from AC21 universities attended the IGS. Gadjah Mada University is a leading university of Indonesia and located at Yogyakarta on Java Island. This area has many famous tourist spots, including Borobudur (world heritage). The IGS was held with the theme "Community and Indigenous-based Technology for Sustainable Development towards Resilient Society". There were five leading components in this program: Lectures, Workshop, Community Service, Short internship and Excursion. Each component focused on agriculture, technology and health care. Through them, I could acquire academic and state-of-the-art knowledge from notable researcher all over the world directly. In addition, I could deepen my understanding by visiting many sites. Particularly I was impressed by the lectures of Prof. Kroll on industry-university collaboration for sustainable technology, and of Prof. Irfan Dwidya Prijamabada on the technology transfer to and empowerment of local community by producing chocolate in cacao fields. My area of study is energy and climate policy, and I think it is critical to collaborate with many stakeholders and transfer solutions to local communities in order to achieve sustainability. I learned the importance of having a vision of "Global and Local" whereby I could have a confidence to pursue a way of contributing to society through research. Furthermore, I could spend good and exciting time without trouble in spite that this was my first visit to Indonesia.

I appreciate AC21 and all students to have given me great and unforgettable opportunities.
APAIE 2017 at Kaohsiung, Taiwan

From March 20 to March 23, 2017 in Kaohsiung, Taiwan, the Asia-Pacific Association for International Education (APAIE) Annual Conference and Exhibition was hosted by National Sun Yat-Sen University, together with National Cheng Kung University, National Chung Hsing University and National Chung Cheng University. This year’s APAIE saw the most participants ever in its history; more than 1,600 participants gathered at the Kaohsiung Exhibition Center from all over the world, including two members from the AC21 General Secretariat.

AC21’s booth jointly with Nagoya University was full of visitors and partners all day during the Conference period, many of which were from Nagoya’s exchange partner universities from different corners of the world. For the past several years, the APAIE has been living up to its name as it turns out to be a key annual networking event for international educators between Asia-Pacific universities and other regions’ higher education organizations.

I, as someone who was responsible for the AC21 General Secretariat, visited our members’ stands to meet, have a talk and exchange ideas with them in person on AC21 activities. Such visits included the one to the booth of Gadjah Mada University, Indonesia. This meeting with our Indonesian colleagues was especially beneficial and effective for both of us. As featured in this issue's top page, Gadjah Mada University was scheduled to organize the AC21 International Graduate School (IGS) 2017 in July, and we had important questions to discuss and clarify to make the IGS a success and we made the most of our participations in the Conference in Kaohsiung.

As the APAIE grows and expands steadily each year in every way, its roles will become more important and expanded. Continuing to serve as a good platform for those who are engaged in international education and partnerships to exchange information, the APAIE 2018 to be held in Singapore will draw more educators and stakeholders.

AC21 Special Project Fund 2017: Three Proposals selected

The year 2017 saw the largest number of applications for the AC21 Special Project Fund (SPF) with a total of 15 proposals submitted from our member institutions. In its short history of eight years, the SPF has steadily gained greater recognition among researchers in the AC21 network. The grant program is now seen as one of the major activities of the Consortium. Based on review by the Steering Committee (STC), it was announced in March 2017 that this year’s Special Project Fund (SPF) was awarded to the three proposals shown in the following table. Each of the awardees was granted an amount of USD 10,000.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Participating Universities</th>
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<tr>
<td>Workshop on Smart Biomaterials for Tissue Engineering and Regenerative Medicines</td>
<td>The University of Adelaide (Australia)*, North Carolina State University (USA), Shanghai Jiao Tong University (China), Jilin University (China), Non-AC21 Participants: Chinese Academy of Sciences (China), Sichuan University (China)</td>
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<tr>
<td>Fostering Collaboration in Future Particle Physics Detectors</td>
<td>The University of Adelaide (Australia)*, Nagoya University (Japan), University of Freiburg (Germany), Shanghai Jiao Tong University (China), Nanjing University (China), Non-AC21 Participants: CERN (Switzerland)</td>
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<td>Preparation of a Trinational Joint Master Program in Applied Computer Science</td>
<td>University of Freiburg (Germany)*, The University of Adelaide (Australia), University of Strasbourg (France), Non-AC21 Participants: French-German Research Institute of Saint-Louis (France)</td>
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(*) denotes a project representative
NAFSA 2017

Best Practice for high-level networking

AC21 Networking Meeting organized by Chemnitz University of Technology on the occasion of the NAFSA held for the 9th time on May 30, 2017

Eberhard Alles
Chancellor, Chemnitz University of Technology

The roots go back until the year 2009: At this year, the 1st AC21 Network Meeting was organized by Chemnitz University of Technology on the occasion of the NAFSA Conference & Expo as an event for bringing together representatives from AC21-member universities in order to present best practices and discuss opportunities for the further development of the AC21-network in between the main AC21-events. As this format was very much appreciated and successful, it became a well-practiced tradition and was since then held every year. This year, the AC21 Network Meeting happened already for the 9th time. On May 30, 2017, representatives from Chemnitz University of Technology, Nagoya University, North Carolina State University, Chulalongkorn University, the University of Strasbourg and the University of Canterbury met at Los Angeles. The meeting was opened by the Chancellor and AC21-Communicator of Chemnitz University of Technology, Eberhard Alles, who welcomed the participants and gave an outlook on the upcoming AC21 International Graduate School 2019 hosted by Chemnitz University of Technology. The chancellor underlined the fact that the overall theme of this event, "Technologies for Resource-efficiency", perfectly meets the research key areas and strengths of the university. A central role within this event will be dedicated to the Federal Cluster of Excellence "Merge Technologies for Multifunctional Lightweight Structures (MERGE)" as the one and only cluster in Germany on the future-oriented field of lightweight engineering with a strong focus on internationalization. The MERGE-cluster was also in the center of the presentation of Prof. Cornelia Zanger, Chemnitz University of Technology, who talked about ways on "how a university establishes successful industrial collaborations – insights and best practices for research and teaching at Chemnitz University of Technology". The "secret of success", Prof. Zanger emphasized, consists on the creation of "win-win-partnerships" where both, the university and the company, take advantages of the collaboration. Additionally, the participants of the meeting were introduced to the research strategy of the Chulalongkorn University by its Vice-President for Academic Affairs, Dr. Pomthong Malakul Na Ayudhaya. With the vision of becoming a "world-class university that generates knowledge and innovation necessary for the creative and sustainable transformation of Thai society", Chulalongkorn University developed a strategy bringing together a top-down positioning on four research key areas (aging society, sustainable development, inclusive community and smart city, digital economy and robotics) with a bottom-up-forming of cross-discipline research groups and projects within these key areas. Subsequently, Prof. Jiro Takai from Nagoya University was discussing the question if the national strategy "Japan's Top Global University" is really working. He explained that with the objective of placing 10 Japanese universities within the top 100 in global rankings, the Japanese government developed a program of reinforcing internationalization at selected universities with high potential and came to the result that the universities could progress even faster on their way to world-class if they would be dedicated additional resources for reaching this goal. Finally, the University of Strasbourg was presenting "five centuries of excellence" going back until the founding year 1538. The audience learned that the special strengths of the University of Strasbourg consist on an exceptional diversity of degree programs, on outstanding research performances with alone four nobel prize winners within the last six years as well as strong international networking activities. In resume, the AC21 Network Meeting 2017 proved once again that one of the main success factors of a vivid network is to bring together representatives of the members in order to exchange information about national strategies and programs, to get an insight into individual profiles and recent activities of the member universities as well as to explore ways on how to make use of them for the benefit of the the network and its member universities. Also this year, the AC21 Network Meeting has provided these results so that without exaggeration it can be concluded that it was once again a great success.
The 9th AC21 International Forum to be organized by Jilin University, Changchun, China

Jilin to welcome you to IF 2018!

Zheng Weitao
Vice President, Jilin University

The 9th AC21 International Forum will be hosted by Jilin University (JLU) in Changchun, China from July 4-7, 2018. We are very pleased to welcome you to attend the forum, which is hosted at JLU in such a beautiful season!

Jilin University is a key comprehensive university under the direct jurisdiction of China Ministry of Education, and strongly supported by China's "Project 211" and "Project 985". In recent years, we have set up cooperation and exchange relations with 279 universities, research institutions or international academic organizations in 39 countries and regions, and have set up 32 joint research centers and labs with foreign institutions. Our university offers a wide range of disciplines, including 44 colleges or schools, covering 13 academic categories. There are 126 undergraduate programs, 291 accredited postgraduate programs, 244 accredited doctoral programs and 42 centers for post-doctoral studies, 47 first-class university and discipline construction projects. According to ESI data, 11 disciplines at JLU are among the top 1% of world ranking, namely Chemistry, material science, physics, engineering, earth science, clinical medicine, biology and biochemistry, toxicology, agriculture, animal science and plant science, immunology, among which chemistry and material science and engineering are among top 1%

In an era of continuous change, we believe that institutions of higher education must take the initiative in responding to the rapidly transforming needs of society, so the theme chosen for this forum is University Innovation and Social Development.

We would like the presidents and high-ranking delegations from the world's leading education and research institutions to share your knowledge and experience, in terms of Innovation and Entrepreneurship, Interdisciplinary Research and International Collaboration, MOOCs and Reform in Higher Education, Innovative Networks for Higher Institutions, these four topics more specifically.

We will try our best to provide you with the best service and we hope that, with our efforts, you could not only enjoy the comprehensive viewpoints on University Innovation and Social Development from other participants, but also keep a beautiful memory in your mind. Looking forward to meeting you all in Changchun.
Upcoming AC21 Activities and Events

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<td>September 20</td>
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<td>July 4 - 7</td>
<td>16th AC21 Steering Committee Meeting</td>
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<td>9th AC21 General Assembly</td>
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<td>2019</td>
<td>TBA</td>
<td>3rd AC21 International Graduate School</td>
<td>Chemnitz University of Technology, Germany</td>
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<td>17th AC21 Steering Committee Meeting</td>
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<td>2020</td>
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<td>10th AC21 International Forum</td>
<td>Kasetsart University, Thailand</td>
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AC21 General Secretariat Activities (May 2017 – Sep 2017)

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AC21 Members

Australia  The University of Adelaide
China     Jilin University
          Nanjing University
          Northeastern University
          Shanghai Jiao Tong University
          Tongji University
France    University of Strasbourg
Germany   Chemnitz University of Technology
          University of Freiburg
Indonesia Gadjah Mada University
Japan     Nagoya University
Laos      National University of Laos
New Zealand University of Canterbury
South Africa Stellenbosch University
Thailand  Chulalongkorn University
USA       North Carolina State University
          University of Minnesota

What is AC21?

AC21 is an international academic consortium comprised of higher education institutions from around the world. It was established in 2002 at the initiative of Nagoya University, with the aim of creating an academic network that transcends borders to address global issues by sharing knowledge and expertise. The network is managed by the AC21 General Secretariat located at Nagoya University.

AC21 Website: http://www.ac21.org/english/index

Visit our website for the latest information! www.ac21.org