Networks of innovation for the transformation of society through science

8th AC21 International Forum 2016
30 April - 03 May 2016
Chemnitz University of Technology
Germany
NETWORKS OF INNOVATION FOR THE TRANSFORMATION OF SOCIETY THROUGH SCIENCE
Looking back at the 2016 International Forum of the Academic Consortium for the 21st Century, we cannot help but wonder about the diversity and richness the participants have brought to its palette of panels, excursions, and workshops. Our sincere thanks go to all who have joined us for the 2016 AC21 International Forum. It was a true honor and pleasure to welcoming you at Chemnitz!

A chain, a common saying goes, is only as strong as its weakest link. Judging from the memorable experiences we were able to share during the days of the 2016 International Forum, AC21 presents a set of diverse, but equally strong parts. Together, they form the powerful AC21 network and provide the basis for so many great initiatives and projects.

This year's International Forum invited us to think through the role, networks of innovation play for the transformation of society through science. As a key driver within these environments, universities are forming networks with partners in academia, commerce, politics, and society.

Bearing in mind this theme, the Forum itself arguably forms a core element in making AC21 a prolific network. Its rich palette of sessions and events thus offered to zoom in on the implementation and use of scientific insights and results for economic and social progress. Thus, it allowed for taking the opportunity to share ideas, experiences, and insights about international cooperation across different sectors. For sure, universities need strong partners to answer the complex tasks modern societies face — and they are strong partners themselves generating much needed expertise for industry, policy-making, and social welfare.

In an increasingly globalized world, it has become impossible for institutions to work in a sustainable way without appropriate partners in different disciplines, sectors, and countries. To further these networks, one task will be to stimulate innovation and a “transfer culture” within trans-disciplinary, cross-sector networks. Connected to that, another task will be to identify key innovation drivers and to create framework conditions and infrastructures.

Overall, universities throughout the globe will have to identify collaborators who correspond to their strategic profile so to create new networks and maintain established ones. These networks should enable its partners to bring in their strengths, their skills, and their resources for multiplying effectiveness and sustainability.

The 2016 International Forum was in many ways a platform for building and strengthening such networks within and around AC21. We thank you very much for your enthusiasm and commitment, which were essential in making our meetings and conversations productive.

As of now, we do not hope to sum up the Forum’s outcomes. Rather, we assume that its effects will only matter when they infuse our day-to-day work of establishing sustainable networks and bring forward the AC21 community. As one step, we have prepared this review report which are, together with some audiovisual impressions and a photo gallery, available from the Forum’s website under www.tu-chemnitz.de/ac21.

AC21 is, after all, a networking endeavor. Hence, it lives through interconnections and communication and we are very much looking forward to hearing from you and to seeing you at one of the upcoming events, which promise to further deepen our networks!

Acting Rector
Prof. Dr. Andreas Schubert

Chancellor and AC21 Forum Coordinator
Eberhard Alles
Chemnitz University of Technology - Addressing the Issues of Tomorrow

Situated in the center of the Chemnitz "Wissenschaftsregion" ("science region"), the Technische Universität (TU) Chemnitz is home to more than 12,000 students from 90 countries – in less than 25 years, the number of students has increased by about 4,000. With approximately 2,300 employees in science, engineering and management, the TU Chemnitz is among the most important employers in the region. Today, the TU Chemnitz stands for outstanding research.

Within the core competencies "Materials and Smart Systems", "Resource-efficient Production and Lightweight Structures" and "Humans and Technology", solutions for the challenges of tomorrow are developed. The main focus in economic and social development is the creation of value, which in turn is influenced by major trends such as globalization, demographic change and the availability of resources. The TU Chemnitz's profile is characterized by a unique constellation of competencies across eight faculties. Thanks to this constellation, Chemnitz is emerging as an internationally visible research hub for future value creation processes and sustainable growth for the future.

Chemnitz - The City of Modernism

The third-largest city in Saxony constitutes one of Germany's foremost industrial and technology centres. New companies, especially in the areas of toolmaking, textiles, automotive engineering and machine building, have been formed here and are exporting goods all over the world. Chemnitz boasts a large number of cultural institutions, including the Opera House with its highly successful productions, the Chemnitz Art Collections, and the Gunzenhauser Museum.

Chemnitz was, and still is, a city with a flourishing economy and inventive talent. The filing clip, thermos flask, laundry detergent and much more were invented here. And Chemnitz today is once again a competitive centre for technological innovation, for which it owes its numerous entrepreneurs and their proximity to the research centres. The fact of the matter is: since 2004, Chemnitz has been counted among the ten strongest growing cities of Germany every year. Source: chemnitz.de
The “Academic Consortium for the 21st Century” (AC21) was established in 2002 during the “International Forum” hosted by Nagoya University, Japan. The overarching theme of this event, “The Role of the Universities in the 21st Century”, became until today the guideline for the activities of this network. The founding members, among them also Chemnitz University of Technology, defined a set of missions of the AC21 network: First, that in an era of continuous change it should take initiative to respond to the rapidly transforming needs of society. Second, that it should make use of its common pool of knowledge, expertise, and experience to promote cooperation in education and research between its members and beyond. Third, that it should bridge different societies around the world and that it should deliver insights to all people so to mutually understand and share values, knowledge, and cultures which are necessary for improving the quality of life and foster co-existence beyond national and regional boundaries in the 21st century.

Since then, the AC21-network has been developing a range of activities in order to implement these objectives. Thus, the “International Forums” became a set tradition bringing together high-ranking delegations from administration and academia of the AC21-member universities and other institutions. They take place every two years at a changing AC21-host university in order to discuss an overarching theme in accord with global megatrends and of special interest for the further development of the network.

Integrated in these events are also meetings of the main bodies of the AC21-network, namely, the AC21 Steering Committee and the AC21 General Assembly. The overall management of the network rests with the AC21 General Secretariat located at Nagoya University, Japan.
The bi-annual AC21 International Forums are the most extensive and most prominent events of the AC21 network. For this reason, Chemnitz University of Technology as one of its founding members was very delighted and honored to be selected for hosting the 8th AC21 International Forum, which took place from 30 April to 3 May 2016. It coincided with the celebrations of the 180-years-jubilee of Chemnitz University of Technology whose roots go back to the year 1836.

Under the overarching theme of the AC21 International Forum 2016 “Networks of innovation for the transformation of society through science”, more than 120 participants shared their ideas and insights. For the major part they came from AC21-member universities but also involved guests from international partner universities of Chemnitz University of Technology, for instance the Czech Technical University at Prague or the University of Akron, Ohio, from extramural research partners like the Fraunhofer-Institute for Machine Tools and Forming Technology and the Fraunhofer-Institute for Electronic Nano Systems, from industrial partners, for example Audi AG or the KraussMaffei Group as well as from politics and professional academic organizations like the German Academic Exchange Service. Last but not least, also many interested professors and faculty members of Chemnitz University of Technology took part in the conference.

Preluded by a Welcome Reception on 29 May 2016 in the Chemnitz Arts Collections, the program of the AC21 International Forum 2016 started on the following day with the meeting of the AC21 Steering Committee – jointly with the AC21 General Assembly the main body in order to take decisions for the further development of the AC21 network. The Forum was then officially opened in the evening of that day within the festive “Spring Gala” at the Archeological Museum of Chemnitz. There, the Forum's opening linked to the 180-years jubilee of Chemnitz University of Technology as hosting university.

On Sunday, 1 May 2016, the participants took the opportunity to take part in the social program including a guided tour through the Industrial Museum of Chemnitz, a barbecue in the inner courtyard of the university and an excursion to the vineyard and winery „Schloss Wackerbarth“ near Dresden.

The following two days were dedicated to speeches and panel discussions dealing with the different aspects of the overarching theme of the Forum “Networks of innovation for the transformation of society through science”. The keynotes in the morning of 2 May 2016 were held by the President of the German Academic Exchange Service, Professor Margret Wintermantel, and the Head of the Department of Technology Development of Audi AG, Dr Michael Korte. The Federal Minister of Education and Research, Professor Johanna Wanka, sent her anniversary congratulations to Chemnitz University of Technology and her recognition for hosting the AC21 International Forum 2016. The entire conference program can be found on the website of Chemnitz University of Technology created for the AC21 International Forum 2016 (https://www.tu-chemnitz.de/ac21).

Some of the more tangible outcomes of the AC21 International Forum 2016 rest with the decision of the AC21 Steering Committee and General Assembly to further develop cooperation between member universities in the areas of studies, research, and staff mobility based on the results of prior surveys. Moreover, Nanjing University and Chemnitz University of Technology signed a student exchange agreement in the presence of the President of the German Academic Exchange Service, Professor Wintermantel.

For documenting the event a conference diary was published online. In addition, all AC21-participants will receive an extensive information package including an overview of the Forum, audiovisual impressions, and photos.

Chemnitz University of Technology sincerely thanks the AC21 General Secretariat for supporting and co-funding the AC21 International Forum 2016 as well as all speakers, panelists, participants, and organizers for their valuable contributions. Taken together, they made this event – to quote of one attendant – an "outstanding conference in a splendid environment". Looking back at the great experiences during the AC21 International Forum 2016, Chemnitz University of Technology sends best wishes to Jilin University Changchun as the host of the 9th AC21 International Forum in 2018!
FRIDAY

Welcome Reception
Arts Collections
Chemnitz
Day 1: Saturday, April 30, 2016

On Friday evening, participants of the International Forum attended the “Welcome Reception” in the Chemnitz Art Museum. There, they were given the chance to view art from many various art periods in several different exhibits. Afterwards, they had the chance to enjoy relaxed conversations and networking.

The official program of the AC21 International Forum 2016 began with the meeting of the AC21 Steering Committee, which – together with the AC21 General Assembly – is responsible for making strategic decisions for the future development of the network. Along with reports about past AC21 events and from the General Secretariat, several surveys were presented. Among those to present was the TU Chemnitz Vice-Rector for Research and Promotion of Young Scientists, Prof. Dr. Heinrich Lang, who discussed the results of a “Research Profile Mapping”. This was evaluated by the participants as an important basis to further strengthen cooperation in the future. Many additional possibilities for networking were demonstrated by other surveys, for instance regarding student and employee mobility.

On Saturday, guests also had the opportunity to take part in a tour through the city of Chemnitz. The route passed by not only the city’s most famous attraction – the Karl Marx Monument – but also included a tour of the courthouse where visitors could visit the city council hall and climb to the top of the tower.

The 8th AC21 International Forum was officially opened with the Spring Gala in the evening under the patronage of the Saxon State Minister for Higher Education, Research and the Arts, Dr. Eva-Maria Stange. More than 60 guests of the International Forum accepted the invitation to visit the State Museum for Archaeology in Chemnitz, where they enjoyed a program of welcome addresses, cultural entertainment performances and music.
Guided city walk through Chemnitz
(primarily for participants in the AC21 Steering Committee)

AC21 Steering Committee Meeting
Please find further information on the next pages

Guided city walk through Chemnitz
(primarily for non-participants in the AC21 Steering Committee)

Spring-Gala
(Official Opening of the AC21 International Forum 2016)
AC21 Steering Committee Meeting

Greetings from the Chair

Opening Address
Andreas Schubert, Chemnitz University of Technology

AC21 General Secretariat Report
AC21 General Secretariat, Nagoya University

University of Strasbourg
AC21 General Secretariat, Nagoya University

Future AC21 Activities: Hosts of the 2019 and 2020 Events
Announcement of Host Candidates
AC21 General Secretariat, Nagoya University

Progress Report on Future Event #1: 2nd International Graduate School 2017
Gadjah Mada University

Progress Report on Future Event #2: 9th International Forum 2018
Jilin University

STC Membership
1) Rotation and Election: Announcement of Nominees
2) Supplementary Changes to AC21 Articles (requirement of an interval to be eligible for re-election)
AC21 General Secretariat, Nagoya University

Special Project Fund
1) Survey Results
2) Disclosure to Applicants
AC21 General Secretariat, Nagoya University

Research Profile Mapping (Interim Report)
Chemnitz University of Technology

Student Mobility: Survey Results (Interim Report)
The University of Adelaide

Staff Exchange (Interim Report)
University of Minnesota

Free Discussion

Adjournment
Day 2: Sunday, May 1, 2016

Today, the participants of the AC21 International Forum had the possibility to learn more about both the City of Chemnitz and the state of Saxony. In the morning, 34 guests enjoyed a tour of the Industrial Museum Chemnitz, and they were impressed by the architecture of the building. One of the international participants found interesting connections to his own scientific field – industrialization. Others praised the holistic approach of the museum, which presents various technical as well as social aspects of Saxony’s industrialization.

For lunch, the guests came together in the courtyard of the main building of the TU Chemnitz. Here they found the possibility to network while enjoying a barbecue, Saxon beer and good weather.

During the afternoon and evening, 47 participants took part in an excursion to the vineyard "Schloss Wackerbarth" near Dresden. Here they were given a glimpse into the production of Saxon wine. A dinner in the wine cellar of Schloss Wackerbarth completed the day.
**SUNDAY**

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<tr>
<th>Guided Tour through Industrial Museum Chemnitz</th>
<th>Industrial Museum Chemnitz</th>
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<tr>
<td>Barbecue</td>
<td>„Altes Heizhaus“</td>
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</table>
| Guided tour and dinner at „Schloss Wackerbarth“  
(vineyard, winery and restaurant) | „Schloss Wackerbarth“ |
Day 3: Monday, May 2, 2016

Today’s conference program began with the official opening of the AC21 International Forum, which was integrated into the 180th Anniversary Ceremony of the TU Chemnitz. During this event, the overarching theme of the International Forum – networks – was particularly in focus.

Afterwards, the sessions of the conference began. The first panel discussion addressed the topic “Achieving Excellence in Research and Research Transfer”. Prof. Wim de Villiers, Rector and Vice-Chancellor of Stellenbosch University (South Africa) – who in his opening statement described the International Forum as an "outstanding conference in a splendid environment" – gave an insight into his university’s definition of excellence: a triad of scientific excellence, social relevance and a transfer which makes products out of research on the one hand and communicates knowledge about research results to society on the other hand. Representatives of other universities also presented challenges and solutions of their institutions related to the subject. In the final discussion, participants talked about the role of AC21 in this field and developed ideas: AC21 could, for example, function as an incubator to promote the cooperation between universities and industry. In addition, the network might be helpful to support the application for national funding projects by bringing universities together.

After lunch, a visit to TU Chemnitz’s Federal Cluster of Excellence “Merge Technologies for Multifunctional Lightweight Structures” (MERGE) was on the agenda. Here, among others, the speaker of the cluster, Prof. Lothar Kroll, gave an overview of the research. As a souvenir, the participants were able to take along a frisbee made at MERGE. It illustrates the challenge the cluster is dealing with: the merging of different materials.

The subsequent panel discussion had the title “Stimulating innovation and a transfer culture within trans-disciplinary, cross-sector networks”. The opening statement was held by Prof. Olfa Kanoun of the TU Chemnitz. She defined the concept of innovation as "turning ideas into manufacturable and marketable ideas". According to Kanoun, it is important to overcome the gap between prototype and product through combination of basic and applied research.

The last panel of the day made the next steps in international academic networks a subject of discussion. Participants agreed that cooperation can only be effective if one focuses on priority areas. As such, they defined the themes of mobility, joint research projects, joint applications for third-party funding, and the creation of communication platforms.

At the end of this conference day, a field trip brought the participants to Chemnitz’ company NILES SIMMONS Industrieanlagen GmbH. Here they received a closer look at a functioning cooperation between a university and a company. The guests of the International Forum were especially entertained by the guided tour through the production plant.
MONDAY

Exhibition – Networks of Innovation for the Transformation of Society Through Science

Anniversary Ceremonial Act
Welcome Addresses and Keynotes

Within this session, the AC21 International Forum 2016 at Chemnitz University of Technology will be opened by several welcome addresses and keynotes with regard to global networking in science and economy. The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Prof. Dr. Andreas Schubert
Acting Rector of Chemnitz University of Technology, Germany
Prof. Dr. Johanna Wanka
Federal Minister of Education and Research, Germany
Uwe Gaul
State Secretary of the Saxon State Minister of Science and the Arts, Germany

Barbara Ludwig
Mayor of the City of Chemnitz, Germany
Dr. Peter Seifert
Head of University Council
Yvonne Pajonk
Student and scholarship holder at Chemnitz University of Technology
Prof. Dr. Yoshihito Watanabe
AC21 General Secretariat Director, Trustee and Vice-President of Nagoya University, Japan
Dr. Eberhard Alles
Chancellor of Chemnitz University of Technology,
AC21 International Forum Coordinator, Germany
Prof. Dr. Margret Wintermantel
President of the German Academic Exchange Service, Germany
Dr. Michael Korte
Head of Predevelopment of Car Concepts at AUDI AG Ingolstadt, Germany

Plenary Panel Discussion:
Achieving Excellence in Research and Research Transfer

This plenary will assemble experience and expertise in achieving excellence in research and research transfer within the AC21-network. Presidents and Vice-Presidents respectively from AC21-member institutions will join in the panel with short input talks so to spark a lively debate with the audience. The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Moderation: Prof. Dr. Dietrich R.T. Zahn
Professorship for Semiconductor Physics of Chemnitz University of Technology

Prof. Wim de Villiers
Rector and Vice-Chancellor of Stellenbosch University, South Africa
Prof. Seiichi Matsuo
President of Nagoya University, Japan
Meredith McQuaid
Associate Vice-President and Dean of International Programs of the University of Minnesota Minneapolis, USA
Prof. Julie Owens
Pro Vice-Chancellor for Research Strategy of the University of Adelaide, Australia
Prof. Zhiquang Wu
Vice-President of Tongji University Shanghai, China
Guided tour around the Technology Center of the Federal Cluster of Excellence „Merge Technologies for Resource Efficiency“ (MERGE) of Chemnitz University of Technology

In the MERGE-Technology Center, the delegates and guests will have the opportunity to visit the facilities and to get to know the equipment for cutting-edge R&D within the only Federal Cluster of Excellence in the future-oriented field of lightweight engineering in Germany located at Chemnitz University of Technology. Furthermore, they will be provided an insight in the profile and work of this cluster by the CEO, Prof. Dr. Lothar Kroll.

Prof. Dr. Lothar Kroll
CEO of the Federal Cluster of Excellence „Merge Technologies for Multifunctional Lightweight Structures“ – MERGE of Chemnitz University of Technology

Panel Discussion: Stimulating innovation and a „transfer culture“ within trans-disciplinary, cross-sector networks

This plenary panel sheds light on the topic of stimulating innovation and a „transfer culture“ within trans-disciplinary, cross-sector networks. For this purpose, it brings together vistas from academia, commerce and politics. It starts with ignite talks and then opens up to public debate. The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Moderation: Prof. Dr. Welf-Guntram Drossel (Professorship for Adaptronics and Lightweight Design of Chemnitz University of Technology; Director of the Fraunhofer-Institute for Machine Tools and Forming Technology Chemnitz, Germany)

Prof. Dr. Olfa Kanoun
Professorship of Electrical Measurements and Sensor Technology at Chemnitz University of Technology

Dennis Kekas
Associate Vice-Chancellor for Partnership, Industry Alliances and Economic Development of North Carolina State University Raleigh, USA

Dr. Stephan Meyer
Member of the Committee on Science and Higher Education, Cultural and Media Affairs of the Saxon State Parliament, Germany

Dr. Micaela Schönherr
CFO of KRAUSSMAFFEI GROUP GmbH Munich, Germany

Prof. Shigeaki Zaima
Vice-President for Academia-Industry Collaboration of Nagoya University, Japan

Plenary Panel and Workshop: Taking next steps in international academic networking

Following up on AC21’s plans to intensify and further enhance cooperation and exchange within the network, the panel and workshop aim at gauging the range of potential paths for international academic networking. The session will be based on the delegate’s positions mapping the current state of academic networking following a survey made by AC21 among its member institutions. It will start with a set of incentive talks opening up a comprehensive discussion on how to take the next steps in academic networking. The abstracts and biographical information can be accessed here:

Moderation: Prof. Dr. Heinrich Lang
Vice-Rector for Research and Promotion of Young Scientists of Chemnitz University of Technology

Plenary Panel

Katharina Aly
Director of the International Office of the University of Freiburg, Germany
Prof. Dr. Francis Kern  
Vice-President for International Relations of the University of Strasbourg, France  
Robert Kotzé  
Senior Director of the Postgraduate & International Office of Stellenbosch University, South Africa  
Prof. Bailian Li  
Vice-Provost for International Affairs of North Carolina State University  
Prof. Julie Owens  
Pro Vice-Chancellor for Research Strategy of the University of Adelaide, Australia  
Prof. Jianhua Wang  
Vice-President of Northeastern University Shenyang, China  
Prof. Yoshihito Watanabe  
AC21 General Secretariat Director, Trustee and Vice-President of Nagoya University, Japan

Workshop

Prof. Dr. Buncha Chinnasri  
Acting Assistant to President of Kasetsart University Bangkok, Thailand  
Dr. Hamish Cochrane  
Deputy Vice-Chancellor of the University of Canterbury Christchurch, New Zealand  
Dr. Paripurna C. Poerwoko  
Vice-Rector for Cooperation & Alumni of Gadjah Mada University Jogyakarta, Indonesia  
Molly Portz  
Chief of Staff of GPS Alliance of the University of Minnesota, USA  
Jun Xu  
Regional Director of Shanghai Jiao Tong University Global Affairs, China  
Guangcui Zhang  
Director of the Division of International Relations of Jilin University Changchun, China

Excursion and Dinner

Welcome address and guided tour through the plant by the Chairman & CEO of NILES SIMMONS Industrieanlagen GmbH Zwickauer Str. 355, Chemnitz, Dr. Gero Martel  
NILES SIMMONS Industrieanlagen GmbH, Zwickauer Str. 355, Chemnitz
Day 4: Tuesday, May 3, 2016

At the beginning of the conference day, the Fraunhofer-Gesellschaft’s research and technology transfer initiatives were presented to the guests. The Chemnitz-based Fraunhofer Institute for Machine Tools and Forming Technology also presented a cooperation with the Royal Institute of Technology in Stockholm. Here, they take on the challenge of transferring research on heavy vehicles into products in cooperation with companies and other scientific partners. From the Fraunhofer Institute for Electronic Nano Systems ENAS, guests gained an inside view of the work that is conducted with Tohoku University in Sendai, Japan, with whom they have established an active scientist and student exchange program since 2012. Additionally, the Fraunhofer-Gesellschaft model was presented, which represents the close linkage between fundamental and applied research – especially through a strong partnership with universities – as well as global networking.

Afterwards, three parallel sessions took place. Here, presentations were given by representatives of institutions including the University of Minnesota, the German Federal Environment Agency and the city of Saerbeck on the topic of developing a network of communities, universities and administrative agencies regarding the future-oriented topic of renewable energy. Further emphasis was on the Morgenstadt-Project of the Fraunhofer-Gesellschaft, which is carried out in Chemnitz within the framework of a close alliance between the city and university.

Guests spent the lunch break on the university campus and were able to attend the Campus and Sport Fest held by the TU. Afterwards, the AC21 General Assembly Meeting took place. At this session, the hosts of AC21 events in the years 2019 and 2020 were announced. The TU Chemnitz’s bid to organize the 2019 AC21 International Graduate School was accepted. TU Chancellor Eberhard Alles presented the initial plans for this event to the General Assembly and announced the focus to be on technologies for resource-efficiency. Likewise, Kasetsart University Bangkok presented their initial ideas for the International Forum 2020.

Participants of the AC21 International Forum 2016 who did not take part in the General Assembly had the opportunity to take a look at the Department of Electrical Engineering and Information Technology’s laboratories located in the Weinhold-Bau on the TU Campus. From the roof of the building, they enjoyed a view over the Chemnitz Smart Systems Campus which is located in an area directly adjacent to campus and represents successful technology transfer, particularly in the field of intelligent systems.

After a walk through the Fraunhofer Institute for Machine Tools and Forming Technology, this year’s AC21 International forum was brought to a close with the formal handover of the symbol of the AC21 Presidency from the TU Chemnitz to the Jilin University Changchun. The Chinese university will host the next AC21 International Forum in the year 2018. TU Chancellor Eberhard Alles and TU Acting Rector Prof. Dr. Andreas Schubert thanked all international guests during the closing reception for the constructive work that had been done and for the many ideas that were generated during the conference, particularly with regard to the overarching topic: “Networks of Innovation for the Transformation of Society through Science”. These ideas can now be pursued and developed all over the world with the support of the Academic Consortium for the 21st Century (AC21) networks.
The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 67 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of 24,000, who work with an annual research budget totaling more than 2.1 billion euros. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.

In this workshop, a particular German model of innovation networks across basic and applied research is presented. Leading experts from Fraunhofer will bring in their experiences in creating and fostering networks with scientific, economic, political or societal partners in a global context. The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

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**Parallel Session 1:**
**Workshop: Identifying key innovation drivers and creating appropriate framework conditions and infrastructures**

**Moderation:** Prof. Dr. Silke Hüsing (Professorship for Business Taxation and Auditing of Chemnitz University of Technology).

- **Anita Nel**
  Stellenbosch University, South-Africa
  *University-industry networks as hubs of “knowledge regions”*

- **Prof. Dr. Douglas Reeves**
  North Carolina State University Raleigh, USA
  *Integrating international work and study experiences*

- **Prof. John E. Taplin**
  University of Adelaide, Australia & Shandong University, China
  *Towards an innovation driven economy – Australia and China as case studies*

- **Dr. Nils Kroemer**
  Plant manager Chemnitz of Siemens AG
  *Industrial production in a digital environment*

The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21
Parallel Session 2: Workshop: Developing a network for policy exchange on renewable energy among policy leaders in Germany and Minnesota

Dr. Sabine Engel
University of Minnesota, USA
Stephen Kelley
University of Minnesota, USA
Dr. Harry Lehmann
Federal Environment Agency, Germany
Guido Wallraven
City of Saerbeck, Germany

The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Chemnitz University of Technology, Main Lecture Hall Building

Parallel Session 3: Workshop: Creating comprehensive networks across academia, culture and society

Bernd Bienzeisler
Researcher for transitions at the Fraunhofer Institute for Industrial Engineering and Organization Stuttgart, Germany
André Dettmann
Researcher at the Professorship of Ergonomics and Innovation Management of Chemnitz University of Technology, Germany
Eva-Maria Gräfer
Project Manager of the City of Chemnitz, Germany
Dr. Urs Luczak
Coordinator of the „Morgenstadt“-project of the City of Chemnitz, Germany

The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Chemnitz University of Technology, Main Lecture Hall Building

AC21 General Assembly (General Assembly Representatives only)
Please find further information on the next page

Guided tour through the „Weinhold-Building“ of Chemnitz University of Technology
(for guests not participating in the AC21 General Assembly)

Guided tour through Fraunhofer Institute for Machine Tools and Forming Technology

AC21 International Forum Closing Session

This session will include the transition of the AC21 presidency from Chemnitz University of Technology to the host of the next AC21 International Forum in 2018, Jilin University Changchun, by the handover of a cup within a short ceremonial act.

Prof. Dr. Dirk Landgrebe
Managing Director of the Fraunhofer-Institute for Machine Tools and Forming Technology Chemnitz, Germany
Dr. Eberhard Alles
Chancellor of Chemnitz University of Technology, AC21 International Forum Coordinator
Prof. Dr. Andreas Schubert
Acting Rector of Chemnitz University of Technology, Germany
Prof. Li Du
Vice-President of Jilin University Changchun

Guided tour through Fraunhofer Institute for Machine Tools and Forming Technology

AC21 International Forum Closing Session

Fraunhofer Institute for Machine Tools and Forming Technology

Closing Reception

Fraunhofer Institute for Machine Tools and Forming Technology

Please find further information on the next page

Chemnitz University of Technology, Weinhold-Building

Guided tour through the „Weinhold-Building“ of Chemnitz University of Technology

Fraunhofer Institute for Machine Tools and Forming Technology

Parallel Session 3: Workshop: Creating comprehensive networks across academia, culture and society

Bernd Bienzeisler
Researcher for transitions at the Fraunhofer Institute for Industrial Engineering and Organization Stuttgart, Germany
André Dettmann
Researcher at the Professorship of Ergonomics and Innovation Management of Chemnitz University of Technology, Germany
Eva-Maria Gräfer
Project Manager of the City of Chemnitz, Germany
Dr. Urs Luczak
Coordinator of the „Morgenstadt“-project of the City of Chemnitz, Germany

The abstracts and biographical information can be accessed here: www.tu-chemnitz.de/ac21

Chemnitz University of Technology, Main Lecture Hall Building
AC21 General Assembly

Welcome Address
Andreas Schubert, Chemnitz University of Technology

AC21 General Secretariat Report
AC21 General Secretariat, Nagoya University

University of Strasbourg
AC21 General Secretariat, Nagoya University

Progress Report on Future Event #1:
2nd International Graduate School 2017
Paripurna Poerwoko, Gadjah Mada University

Progress Report on Future Event #2:
9th International Forum 2018
Li Du, Jilin University

Future AC21 Activities: Hosts of the 2019 and 2020 events
1) Announcement of Host Candidates
   2) Presentations by Host Candidates
AC21 General Secretariat, Nagoya University

Rotation and Election of STC Membership
1) Announcement of Nominees

2) Supplementary Changes to AC21 Articles
AC21 General Secretariat, Nagoya University

Special Project Fund
1) Survey Results
2) Disclosure to Applicants
AC21 General Secretariat, Nagoya University

Research Profile Mapping (Interim Report)
Chemnitz University of Technology

Student Mobility Survey (Interim Report)
The University of Adelaide

Staff Exchange (Interim Report)
University of Minnesota

Free Discussion

Closing Address
Seiichi Matsuo, Nagoya University

Adjournment
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