Call for Paper

EJEA International Conference 2022

Innovation and Action for Managing Urgent Future Local and Global Issues and Domains in Japan and Europe

November 24th – 25th, 2022 (ONLINE)

jointly organized by

European Japan Experts Association (EJEA) Linköping University (LiU) RIKEN (理化学研究所)

hosted by

Fraunhofer Institute for Applied Information Technology (FIT)

supported by

Japanese German Center Berlin (JDZB), EU-Japan Centre for Industrial Cooperation, German Research Ambassadors Network for Industrial Technology Endeavors (GRANITE), The Institute for Security and Development Policy (ISDP), Kagawa University, Network for Science

sponsored by

Toshiba International Foundation (TIFO)

The conference is planned to be held online on Nov. 24th (Thu) and 25th (Fri) 2022 (09:00-14:00 CET / 17:00 – 22:00 JST)

Conference is FREE OF CHARGE

Official language of the conference is ENGLISH.

The conference program will be published asap and continuously updated on the conference's websites:

https://www.fit.fraunhofer.de/ejea-conf-2022 https://ejea.eu/conference-2022/

Background

The European Japan Experts Association (EJEA) was established in 1995 and launched an annual conference series in 2018 with the first one convened in Stockholm (Sweden), followed by a conference 2019 in Graz (Austria). Due to the pandemic the commemoration of EJEA's 25th anniversary in 2020 the conference was postponed to 2021, it was hosted by Kagawa University and took place in Japan and online. This conference was mainly sponsored by Toshiba International Foundation.

The 2021 conference's title was "Human-centered Sustainability and Innovation for an AI-assisted Future" and opened the floor for presentations and discussions from a broad range of perspectives and aspects. Once again it was found that Europe and Japan share a lot in common but will also have to face different challenges in the future - on a local as well as on a global level.

Therefore, for the coming conference in 2022 megatrends for 2030 will be the guiding principles and some of their keywords are: "demographics", "rise of the individual", "enabling technology", "economic interconnectedness", "economic power shift", "climate change" and "energy crisis", "urbanization", "global cooperation and peace" etc. These trends will have a significant impact not only on governments, but also on economy, education, research, as well as on societies and citizen's behavior all over the world!

Megatrends are very significant, especially in times of current changes. They affect all levels of society and thus influence companies, institutions, and individuals. They are not only a core element of research and education but also the basis for decisions in business, politics and on a personal level.

Aim of the conference

Against this background, this conference would like to address the current discussion and research on megatrends, which require innovative and necessary solutions and actions as regards local as well as global perspectives on managing urgent future issues and domains. Profound changes are laying ahead of us in Europe as well as in Japan!

More specifically, this conference is focusing on contributions and practical experiences such as:

- new work patterns and company structures, inter-company networks, localization of production, limited moveability, new patterns for local and global supply chains, higher adaptability to dynamic challenges - also regarding political contexts
- universities: new education structures, new students' goals and ambitions, new teaching and learning skills and methods in higher education and research (e.g. mega spaces, action learning, co-creation), new competition in attracting international students, developing needs to serve industry and society
- how to foster and initiate civil initiatives (e.g. citizens' participation) and foster higher and new social skills and competences
- how to harmonize contradictory mind-sets within different generations (young and old) and creating conflict-reducing tools and concepts in consent
- finding new patterns and behavior in energy consumption and production
- identifying and stimulating necessary behavioral changes and actions (SDGs, Green Deal, Society 5.0) at all levels and domains
- cultural, economic, social, and mental resilience when having to live in a digitalized world
- changes in political and social security structures due to e.g. the new digital dimensions
- Al driven computational and mathematical models: complex models mimicking for instance processes in the brain (e.g. deep learning) and ethical models realizing support for people's decision-making

How to integrate and combine the issues mentioned above in a holistic, general, and multi-level dimension? The conference is considering global and cross-cultural contexts, with an explicit focus on human-created harmony and wellbeing, human security, and social peace. Moreover, the conference is providing a platform to promote the international understanding of Japanese culture and society.

To achieve these goals, and to update the Japanese-European relationship to strengthen exchange and collaboration between the two regions the priorities of the conference focus on:

- 1. to provide a forum for research purposes
- 2. to provide a forum for educational purposes
- 3. to provide a forum for economic purposes
- 4. to provide a forum for innovative purposes

- 5. to provide a forum for technological purposes
- 6. to involve especially young contributors for implementing the above-mentioned scientific and educational measures in Japan as well as in Europe.

Thus, the conference includes

- speakers who are generalists and those who are specialists from Japan and Europe
- topics with an interdisciplinary focus such as Green Sustainable Societies and Sustainable Development Goals (SDGs) as well as behavioural changes in neighbourhoods
- intercultural as well as local and global content
- experts and novices from different generations with the emphasis of innovation, education, and networking
- especially prioritizing the key aspects of human wellbeing, human security, and social peace in combination with innovative and actionable solutions.

The final goals of the conference are

- 1. to develop integrated views and common European-Japanese recommendations which have the potential to avoid digital risks like division of society, socially incompatible developments, disintegration, leaving behind the elderly, social conflicts etc. and
- 2. to support digital chances to reach aims like equality and fairness of participation, balance of chances and opportunities, cooperation as well as
- 3. competition, human wellbeing, social peace and to develop the societal and digital transformation in a peaceful spirit based on high technology.

We invite you for active contributions with lectures, workshops, posters, and discussions in developing new actionable and inclusive solutions for fostering

- new areas of research, education and innovation for the benefits of all generations
- new contents and topics taking into account intercultural, local, and global perspectives and aspects
- new concrete interdisciplinary methods and models to achieve sustainable and resilient societies
 new opportunities for and forms of cooperation and partnerships on a local and global level

Thus, this call intends to attract experts and experiences in current research as well as in green deals, economy systems, energy efficiency, healthcare systems, security issues and intercultural communications interested in shaping a sustainable, stable, and safe future in Japan, Europe and the world!

Target Groups

Experts and citizens, decision makers and opinion leaders from related organizations, companies, universities, research institutes as well as public administration and governments from Japan and Europe are target groups. By this, the conference offers platforms for knowledge and expertise to all respective target groups.

Keynote Lectures

- <u>Prof. Dr. Andreas Dengel</u>
 <u>Executive Director DFKI Kaiserslautern</u> (German Research Center for AI) & Head of Research
 Department Smart Data & Knowledge Services; Professor at Department of Computer Science and
 Intelligent Systems at Osaka Metropolitan University (Germany)
- <u>Dr. Irene Ek</u> Director-General at Swedish Agency for Growth Policy Analysis; Manager Government Affairs & Public Policy, Google Cloud Nordics - (Sweden) (tbc)

- <u>Dr. Britta Essing</u> Head of Human-Centered Engineering & Design, Fraunhofer Institute for Applied Information Technology FIT – (Germany)
- <u>Prof. Dr. Simin Nadjm-Tehrani</u> Director of Real-time Systems Laboratory, Department of Computer and Information Science, Linköping University - (Sweden)
- <u>Dr. Hiroshi Nakagawa</u> RIKEN AIP, Center for Advanced Intelligence Project AI Utilization in Society and Legal System – (Japan)
- <u>Prof. Dr. Masaaki Tokuda</u>
 Former Vice-President for International Affairs; Professor of Department of Pharmaco-Informatics, Faculty of Medicine, Kagawa University - (Japan)
- <u>Prof. Dr. Harriet Wallberg</u>
 Former President of Karolinska Institutet; Professor of Physiology; Member of the Science and Technology in Society Forum Kyoto (STS) (Sweden)

Call for Contributions

We welcome **abstract** submissions for the following categories:

1. Oral Contributions

We ask for oral contributions, that should be no longer than 10 minutes and presented during parallel workshops (see 2. below).

2. Workshops

We welcome your offers to organize and co-chair a workshop in the scope of the conference. Each workshop organizer and co-chair is also involved in reviewing submissions of oral contributions in his/her field. Please note that organizing a workshop must be performed by the workshop-chairs. The workshop organizers are supposed to also take individual submissions for oral contributions (see 1) into consideration.

If you want to organize a workshop please let us know as soon as possible!

Following workshops are currently under discussion:

- Prediction of Unexpected, Seldom Positive and Negative Events / Impacts
- Methods to Stimulate Behavioral Change in Different Cultures / Cultural Contexts
- Support / Assistance for Elderly People by Robots / Al in Japan and Europe (RIKEN)
- Human Resource Development Initiatives in Large European and/or Japanese Companies
- How can Networking Activities Intensify Current and Future European-Japanese Initiatives and Innovations?
- DeepMind Research; Relation between Brain, AI, and Consciousness

Sending your proposal for a workshop asap is very welcome!

3. Posters

Posters from different perspectives are very welcome. Submissions are not limited to established academics; we also encourage university students and representatives from the industry to submit their posters!

4. Demonstrations

Online demonstrations from industry, research institutions, and smart organizations dealing with innovative systems (e.g. robots, AI-software, social services etc.) are very welcome from Europe and Japan.

5. Self-Presentation of Smart Cities

Online presentations of smart cities are very welcome.

6. Self-Presentation of Smart Companies

Online presentations of smart companies are very welcome.

Submission Guidelines

Submissions are welcome by email at the earliest on September 12, 2022

Activities still in progress can be presented and discussed.

Please send your **submission (in English) by email to** <u>ejea-conf-2022-submission@fit.fraunhofer.de</u> and **use** the **template** offered on September 12, 2022 at: <u>https://www.fit.fraunhofer.de/ejea-conf-2022</u> and **include** the **following information**:

- Given name, family name, title, affiliation, URL, email address, phone number
- Abstract: 1 page is suitable
- Optional: CV
- Please indicate whether you want to organize a workshop by informing the organizers asap sending the workshop title by email. The abstract for the workshop may be submitted at a later date.
- Please indicate whether you want to contribute by an oral contribution, a workshop, a poster, a demonstration, or a presentation of smart city or of a smart company
- By sending your submission you declare consent, that your submitted information may be published on the conference's website.

The deadline for submissions is October 1st, 2022

Results will be notified within two weeks after submission deadline.

No Conference Fee

The conference is FREE of charge.

Publication of Contributions

Publication of the contributions is under consideration. All the contributors will be contacted in advance and asked for consent regarding any publication (e.g. only abstract, extended abstract, full paper etc.).

Program Committee

- Prof. Dr. Dietrich Albert, University of Graz (Austria) and Chairperson of EJEA
- Prof. Dr. Arisa Ema, The University of Tokyo (Japan) and Visiting Researcher, RIKEN Center for Advanced Intelligence Project TBC

- Dr. Lorenz **Granrath**, Japan Representative, IXP Institute for Experimental Psychophysiology (Germany) and Visiting Lecturer, Waseda University (Japan)
- Dr. Anne **Haglund-Morrissey**, Deputy Head of Unit Horizon Europe Association Directorate General Research and Innovation at the European Commission TBC
- Dr. Yuko **Harayama**, Prof. em. of Tohoku University and Former Executive Director of RIKEN (Japan)
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- Prof. Dr. Tomoko Kojiri, Kansai University (Japan)
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- Dr. Anja Linnemann, Fraunhofer Institute for Applied Information Technology FIT (Germany)
- Prof. Dr. Anders Törnvall, Linköping University (Sweden) and Member of the Board of EJEA
- Prof. Em. Dr. Hiroshi **Tsuji**, the former President of Osaka Prefecture University (Japan)
- Dr. Lars **Vargö**, Institute for Security and Development Policy and Former Swedish Ambassador to Japan (Sweden)
- Prof. Dr. Kenji Wada, Kagawa University (Japan)

Host

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Please send your general inquiries to ejea-conf-2022-info@fit.fraunhofer.de

Contact

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Registration of Participants

To register for the conference, you are kindly asked to use the registration form on the conference's website:

https://www.fit.fraunhofer.de/ejea-conf-2022

In your registration please include the following information for each person to be registered:

- 1) First Name
- 2) Family Name
- 3) E-mail address
- 4) Affiliation
- 5) Affiliation postal address



EUROPEAN JAPAN EXPERTS ASSOCIATION

Jointly organized by

The European Japan Experts Association (EJEA)

On November 4, 1995, Japan experts from 11 European countries and from the European Commission established an alumni organization for the participants of a Japan-fellowship program funded by Japanese companies – the European Japan Experts Association e.V. (EJEA).

Conceived as an interdisciplinary association with a European profile and open to experts from academia, government, and industry EJEA is a sustainable interdisciplinary network and develops initiatives on a European level for promoting cooperation, exchange, synergy and transfer of knowledge between Europe and Japan.

EJEA aims:

- to be an "umbrella" for serving existing organizations
- to bundle European "voices" from a broad range of disciplines
- to be a "platform" for discussions about Japan-Europe related topics

In the process of strengthening and expanding EJEA's network between Japan and Europe, the Association started 2018 an annual conference series.



In close collaboration with the business world and society, Linköping University (LiU) conducts world-leading, boundary-crossing research in fields including materials science, IT and hearing. In the same spirit, the university offers many innovative educational programs, many of them with a clear vocational focus, leading to qualification as, for example, doctors, teachers, economists, and engineers.

Linköping University is an AI research excellence center with strong and broad research and education in AI both from a technical and interdisciplinary perspective. Coordinator of one of the four EU-funded networks of Al research excellence centers (TAILOR). Host of the largest basic research program in Sweden (WASP, Wallenberg AI, Autonomous Systems and Software Program) as well as the Wallenberg AI and Transformative Technologies Education Development Program (WASP-ED). Host of the National Supercomputer Center including a NVidia SuperPOD (Berzelius).

The university has 32,400 students and 4,100 employees on four campuses. Together we seek answers to the complex questions facing us today. Our students are among the most desirable in the labour market and international rankings consistently place LiU as a leading global university.

LiU achieved university status in 1975 and innovation is our only tradition.

Website: https://liu.se/en





RIKEN 理化学研究所

RIKEN is Japan's largest and most comprehensive research organization for basic and applied science and a world leader in a diverse array of scientific disciplines.

Since its foundation in 1917, RIKEN has fostered pioneering, innovative research in fields spanning the entire range of the natural sciences, from traditional yet still developing fields like physics and chemistry to new frontiers including regenerative medicine and artificial intelligence.

Today, RIKEN encompasses a network of world-class research centers across Japan, with main campuses in Wako, Tsukuba, Yokohama, Kobe and Harima. RIKEN also develops and operates state-of-the-art facilities that rank among the best in the world. This high-guality, high-performance research environment, combined with a uniquely bottom-up approach to scientific innovation, has enabled RIKEN to foster an environment in which researchers are able to thrive.

RIKEN is also an international institute, with approximately 800 out of 3500 non-Japanese research personnel from around the world.

Central to RIKEN's success as a top-class research hub is the collaboration and support between its many centers, laboratories and state-of-the-art research facilities, distributed over many different locations within and outside of Japan.

RIKEN's activities can be divided into four main categories: Strategic Research Centers, Research Infrastructure Centers, the Cluster for Pioneering Research and the Cluster for Science, Technology and Innovation Hub. These four groupings interact within an integrated research system, bringing together pioneering science and top-class research facilities to meet national and social needs, and are further enhanced by active collaborations both within and outside RIKEN, and Japan.

Website: https://www.riken.jp/en/

_____ Hosted by



Fraunhofer Institute for Applied Information Technology (FIT)

For about 30 years now Fraunhofer FIT has been conducting R&D on user-friendly smart solutions that blend seamlessly in business processes. Our clients benefit from more efficient processes and increased quality, internal connectivity and staff satisfaction. Fraunhofer FIT is your partner of choice for digitization, Industry 4.0 projects and IoT solutions.

Our researchers work in interdisciplinary teams and combine insights from computer science with questions from other fields. Thus, the institute invents and develops applications custom-tailored to support people in their jobs and to enrich their leisure time. Our specific strength is a comprehensive system design process, from test and validation of concepts to the handover of well-implemented systems.

About 200 researchers with backgrounds in Computer Science, the Social Sciences, Business Administration, Economics, Psychology and Engineering are organized in FIT's five departments and cooperate closely with the Information Systems group at RWTH Aachen University. In addition to our headquarters in Sankt Augustin and Aachen, Fraunhofer FIT has two branch offices: the project group Business and Information Systems Engineering at Augsburg University and Bayreuth University, and the Fraunhofer application center Symila in Hamm.

Website: www.fit.fraunhofer.de

______ Supported by Japanese-German Center Berlin (JDZB) anisch-Deutsches Zentrum Berlin ベルリン日独センター Japanese-German Center Berlin

At the instigation of the then heads of government of the Federal Republic of Germany and Japan, Helmut KOHL (†) and NAKASONE Yasuhiro (†), the non-profit foundation Japanese-German Center Berlin (Japanisch-Deutsches Zentrum Berlin, JDZB) was established in 1985. It was a time when the interests of the two states began to grow strongly for each other, and the JDZB was entrusted with the task, "to promote and deepen Japanese-German and international cooperation in the fields of science and culture.in particular by supporting German-Japanese mutual understanding at all levels of economic life to improve cooperation in science, research and culture." (Extract from the Foundation Deed)

Politics, the economy and society have changed since the founding period, both in the individual countries as well as in Europe and Asia as a whole. Bilateral exchange was prioritized at the beginning, whereas multilateral exchange has increasingly gained in importance over time. Global networks have grown and the JDZB is incorporating these changes in its activities by bringing together experts and committed individuals from all different fields, and working strategically with cooperative partners within an international network.

In addition to the two foreign ministries of Japan and Germany, the City State of Berlin has also been a strong supporter of the JDZB from the start, and today the JDZB occupies a firm place in German-Japanese relations - with academic and scientific conferences, cultural events, Japanese language courses, exchange programs, a library and regular publications.

Website: <u>www.jdzb.de</u>



EU-Japan Centre for Industrial Cooperation

Following the EU-Japan ministerial meeting in 1986, the European Commission & the Japanese METI (Ministry of Economy, Trade and Industry) agreed on the importance of deepening the industrial cooperation in order to achieve a closer relationship of the EU-Japan economic area.

Based on this agreement, the EU-Japan Centre for Industrial Cooperation was established in 1987 as a core organization to implement industrial cooperation between the EU and Japan as an affiliate of the Institute for International Studies and Training (renamed later Center for International Economic Collaboration). The European Commission & METI of Japan strongly expect the Centre to contribute to the further

development for the EU-Japan economic relationship from the entering into force of the EU-Japan Economic Partnership Agreement (EPA) & Strategic Partnership Agreement (SPA) in February 2019.

At the opening a new era of the EU-Japan relationship, the Centre has started its operations as a new independent General Incorporated Foundation in Japan. It aims at promoting all forms of industrial, trade and investment cooperation between the EU and Japan and at improving EU and Japanese companies' competitiveness and cooperation by facilitating exchanges of experience and know-how between EU and Japanese businesses.

Website: https://www.eu-japan.eu



GRANITE Network (German Research Ambassadors Network for Industrial Technology Endeavors)

The GRANITE project is an effort to expand international collaborations and build a strong and long-lasting relationship between Germany and Japan. The goal is to establish a sustainable network between partners in applied research and technology that share information, transfer knowledge, and put innovation into practice.

The EU-Japan Economic Partnership Agreement has enabled projects like GRANITE to take place, by removing restricting trade barriers and making it easier for countries to connect with one another. GRANITE offers companies a science-based engineering method, whereby we first systematically analyze and evaluate

the specific challenges for the individual company in terms of digitalization and then present them with a tailor-made strategy for their own digital transformation.

As one of 10 top research networks from Germany to showcase their promising technologies and new work concepts to leading scientists, researchers, innovators and decision-makers around the globe, GRANITE is sponsored by Germany's Federal Ministry of Education and Research (BMBF) for its latest campaign "The Future of Work".

GRANITE is coordinated by the Fraunhofer Institute for Applied Information Technology FIT, located near the former German capital Bonn. Alongside with the project partner Lyogroup International, the GRANITE network was successfully established in 2019.

Website: https://granite-ambassadors.com



The Institute for Security and Development Policy (ISDP)

The Institute for Security and Development Policy is a Stockholm-based non-profit and non-partisan research and policy organization, supported by the Swedish Ministry of Foreign Affairs. ISDP is dedicated to expanding understanding of international affairs, focusing on the inter-relationship between security, conflict, and development. The Institute strongly believes in ethnic diversity, gender equality, and religious and political freedom and firmly stands for it in all aspects of its work.

ISDP's work aims at providing strategic analysis and practical solutions to assist decision-makers in both public and private sectors to achieve their goals.

The Stockholm Japan Center of ISDP aims at becoming a leading forum for research and discussions on the political, social and cultural aspects of Japan and its global role.

Website: www.isdp.eu



Kagawa University

Kagawa University is one of the national universities in Japan established in 1949 and has six undergraduate faculties and eight graduate schools. Undergraduate level courses are conducted in the Japanese language. Both visiting international students at the graduate level along with visiting researchers may carry out their studies or conduct their research through the medium of English. Three of the graduate schools are in the natural sciences (Medicine, Engineering, and Agriculture), and four are in the social sciences (Education, Law, Economics, and Management). In 2022, Kagawa University started another graduate school named "Graduate School of Science for Creative Emergence". This graduate school is featured by multi-disciplinary curriculum such as art, design and technology, policy of the sustainable development with diversity and inclusiveness, innovation through Industry-Government-Academia collaboration and recurrent and re-skilling education.

Kagawa University houses a student population of approximately 5,700 undergraduate and 700 graduate students. Kagawa University has about 200 international students studying in our university, and also have about 150 short-term students coming from many countries every year. Kagawa University continuously

strives to provide an environment that is both comfortable and conducive to learning, making dormitories, scholarships and student-tutors/buddies easily available.

While situated outside of the main metropolis area of Japan, Kagawa University is no doubt one of the leading national universities with a strong focus on pioneering research and international collaboration.

Website: www.kagawa-u.ac.jp



Network for Science

NETWORK FOR SCIENCE is an independent agency providing customized consulting and tailored information services to scientific and research communities in universities and research institutions, as well as to companies, administrative/governmental organizations and NGOs with the aim of establishing and expanding joint ventures and networks with Japanese partners. Our performance and competences are based on mutual understanding and trust combined with many years of experience in initiating contacts as well as in building and expanding networks and partnerships.

Website: https://www.network-for-science.net

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Toshiba International Foundation

Toshiba International Foundation (TIFO) strives to contribute to enhanced international understanding of Japan by promoting cultural exchanges, including the organization and sponsorship of symposia and seminars.

Our Guiding Values:

TIFO will advance its mission of promoting understanding of Japan by reinforcing the **three Cs**, the pillars that support all we do!

<u>Connect</u> – Build a Global Network

Establish robust relations of trust with reseracheres into Japan at institutions around the world; create greater value by connecting individual dots.

<u>Cultivate</u> – Nurture coming generations

Contribute to the cultivation of future generations awed and fascinated by Japan; encourage understanding and promotion of Japan and its culture.

Communicate – Tell Japan's story

Reveal the deep attractiveness of a country where an ancient culture and modern capabilities co-exist; contribute to enhancing Japan's global presence.

Website: https://www.toshibafoundation.com