



Fostering Japanese– Estonian research cooperation in the field of Bioengineering and Biotechnology



Event Details:

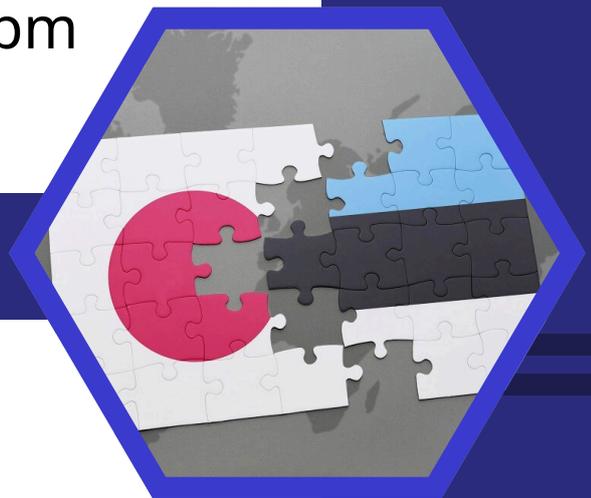
October 10th, 2024

9:30am – 17:00pm



Europa House

4-chōme-6-28 Minamiazabu,
Minato City, Tokyo 106-0047





Agenda



9: 30 Welcome & Registration

10:00 Opening speeches

Dr. Anu Noorma, Director General of the Estonian Research Council

Hon. Mait Martinson, Ambassador of Estonia to Japan

Mr. Jean-Eric Paquet, Ambassador of the European Union to Japan

Prof. Toomas Asser, Rector of the University of Tartu
“Research in Estonian universities”

10: 30 Presentations by researchers from Estonia and Japan
Recent advances in bioengineering and biotechnology
Moderator: Dr. Marko Piirsoo, ETAG

Prof. Mart Loog, University of Tartu
“Estonian Biofoundry and the DigiBio project – accelerating biotech from ideas to applications”

Prof. Timo Kikas, Estonian University of Life Sciences
“Biorefining – future of biomass valorisation”

Prof. Rando Tuvikene, Tallinn University
“Structure and functionality of seaweed-derived polysaccharides”

Dr. Toshinori Kinoshita, Nagoya University
“Analysis of light-induced stomatal opening and enhancement of photosynthesis and plant yield”

12:00 Lunch

13:00 Presentations by researchers from Estonia

Prof. Andres Merits, University of Tartu
“Bioengineering for Health”

Prof. Priit Eek, Tallinn University of Technology
“Success stories in biotech and aspirations in protein engineering at TalTech”





Agenda



13:30 Panel discussion: Collaboration experiences
Moderator: Prof. Tiit Land, Rector of the Tallinn University of Technology

Prof. Kaspar Valgepea, University of Tartu

Prof. Hannes Kollist, University of Tartu

Prof. Ilona Faustova, University of Tartu

13:45 Horizon Europe: Funding opportunities for Estonian-Japanese and EU-Japanese research cooperation
Moderator: Ms. Kristin Kraav, Estonian Research Council

Mr. Gijs Berends, Head of Science, Innovation, Digital, and Other EU Policies Section

“Why should the EU and Japan seek research collaboration?”

Ms. Fumiko Oda, National Contact Point (NCP) for Horizon programme

Dr. Judit Erika Magyar, Country Representative, EURAXESS Japan
“Researcher Mobility in Focus: EURAXESS Services and Horizon Europe”

14:30 Coffee break

15:00 Funding opportunities for bi- and multilateral cooperation between Estonia and Japan
Moderator: Ms. Katrin Saar, Estonian Research Council

Ms. Kumiko Kikuchi, Head of Overseas Fellowship Division, JSPS
“JSPS and its International Programs”

Mr. Oscar A. Rudenstam, Deputy Manager at the Department of International Affairs, JST
“EIG CONCERT–Japan as a stepping stone for European–Japanese research collaboration”

Dr. Anu Noorma, Director General of Estonian Research Council
“The Estonian Research Council and its support for Estonian–Japanese research cooperation”

16:00 Matchmaking session and reception



Speakers



Prof. Anu Noorma is the Director General of the Estonian Research Council since 2021. Before this, she was a professor of applied remote sensing at the University of Tartu and for ten years led the Estonian Space Research and Technology Center Tartu Observatory. She has a doctoral degree in environmental physics. During her academic career, she has led many applied science and international collaboration projects about the use of satellite data for aquatic environments including the Marie Skłodowska Curie Individual Fellowship at Uppsala University. She has been a member of the Estonian delegation in the Science program committee of the European Space Agency.

Contact: anu.noorma@etag.ee; +372 730 0321



Hon. Mait Martinson, the Ambassador of Estonia to Japan obtained his degree in economics from the State University of Moscow in 1993. In his long diplomatic career, Martinson has worked on economic policy at the Ministry in Tallinn, and also at the Estonian embassy in Washington on relations with the USA, Canada and Mexico. He was a trade negotiator for Estonia during European Union accession and served as Estonian ambassador to the People's Republic of China, Ireland, and Belarus. He has headed the Strategic Goods Commission at the Ministry of Foreign Affairs. Ambassador Martinson is co-accredited as an ambassador to Malaysia and Japan; he resides in Tokyo.



Mr. Jean-Eric Paquet is the Ambassador of the European Union (EU) to Japan since autumn 2022. He held various mandates at the European Commission, where he contributed in shaping EU policy in various fields. As the Director-General for R&I from 2018 and 2022, he set up the European Innovation Council and promoted a whole-of-government approach for R&I. He gained considerable experience at international level as Director for the Western Balkans in the Directorate-General for European Neighbourhood and Enlargement Negotiations and as EU Ambassador to the Islamic Republic of Mauritania from 2004 to 2007. From 2015 to 2018, he was Deputy Secretary-General of the European Commission, in charge of Better Regulation and Policy Coordination.



Prof. Toomas Asser has been the Rector at the University of Tartu since 2018. He defended his candidate of medical sciences degree at Moscow N. Burdenko Institute of Neurosurgery with his dissertation on cerebral blood flow regulation issues and stereotactic operations using the original thermocautery.

He has worked at Tartu University Hospital as a neurosurgeon. From 1988 to 1989, he trained at the Institute of Brain Diseases of Tohoku University in Japan.

His main research areas are cerebrovascular diseases, surgical treatment of cerebral artery aneurysms, surgical treatment of Parkinson's disease, deep brain stimulation, pathomorphology and epidemiology of brain tumours, diagnostic markers of malignant gliomas and determinants of treatment outcomes.

Contact: toomas.asser@ut.ee



Dr. Mart Loog is a Professor of Molecular Systems Biology and Director of the Institute of Bioengineering at University of Tartu. He received a PhD in medicinal biochemistry from Uppsala University, Sweden in 2002, followed by postdoctoral training at the University of California, San Francisco. In 2006 Mart established his laboratory at the University of Tartu. He has received several international fellowships and awards. In 2012 he received Estonian National Science Prize in chemistry and molecular biology. In 2015 he was awarded the European Research Council (ERC) Consolidator Grant and became a principal coordinator of H2020 and Horizon Europe projects. Mart's research directions include regulation of the eukaryotic cell cycle, enzymology of cyclin-dependent kinases, multisite phosphorylation processing, and synthetic biology of signaling circuit design.

Contact: mart.loog@ut.ee; +372 517 5698

Speakers



Prof. Timo Kikas is the Chair of Biosystems Engineering at the Estonian University of Life Sciences. Prof. Timo Kikas received his PhD degree from Georgia Institute of Technology, USA in the field of Analytical Environmental Chemistry. He has worked as a researcher in the USA, Japan, Finland and Estonia. He has also been a director of Türi College of Tartu University and Study Program manager of the Environmental Engineering curriculum at the University of Tartu. His main areas of interest include 2nd and 3rd generation bioenergy research, biosensors for environmental monitoring, flow injection analysis and lab-on-valve systems.

Contact: timo.kikas@emu.ee; +372 53023636



Dr. Rando Tuvikene is a Professor of Biopolymer Chemistry and the leader of Hydrocolloids and Marine Biomasses Analysis Research Group in Tallinn University. His research topics are structure–property relations of polysaccharides from marine algae, bioactive compounds from terrestrial plants and macroalgae and functional components from marine–derived biomasses.

He defended his PhD in 2009 at Tallinn University and was awarded a JSPS postdoctoral fellowship (2010–2012) for research at the Tokyo University of Marine Science and Technology.

Contact: rando.tuvikene@tlu.ee; +372 555 88 222



Dr. Toshinori Kinoshita is a Professor of Institute of Transformative Bio–Molecules (ITbM) and Graduate School of Science at Nagoya University. He specializes in plant molecular physiology, with a focus on the mechanisms of stomatal regulation under various environmental conditions and regulation of plant growth.

Dr. Kinoshita has published over 140 peer–reviewed articles and was selected as a Clarivate Highly Cited Researches 2023 in the field of Plant and Animal Science.



Dr. Andres Merits is a Professor of Applied Virology and he works at the University of Tartu, Institute of Bioengineering. His laboratory researches RNA replication processes/enzymes/complexes of positive–strand RNA viruses. As genome replication and gene expression represent the central event for the infection cycle of a virus it affects directly or indirectly all other aspects of the biology of viruses. Prof. Merits defended his PhD at Moscow State University on the topic of: „Chemical–enzymatic synthesis, cloning and functional analysis of DNA genome of plant nanovirus“. He did his postdoctoral fellowship at the University of Helsinki.

Contact: andres.merits@ut.ee; +372 737 5007



Dr. Priit Eek works as a Senior Researcher at Tallinn University of Technology. He was awarded a PhD in 2018 on the topic of structural and mechanistic studies of lipid metabolizing enzymes. During his postdoctoral fellowship at The Pennsylvania State University, USA Dr. Eek focused on the structural biology of gene regulation by chromatin enzymes and pioneer transcription factors. His current work at TalTech aims to steer protein properties to design novel sustainable food additives.

Contact: priit.eek@taltech.ee; +372 55543412



Dr. Marko Piirsoo is the Head of the Department of Strategic Analysis at the Estonian Research Council. He has previous experience as a research administrator at the Tallinn University of Technology.

Dr. Piirsoo received his PhD from Tallinn University of Technology. He is trained as a molecular biologist and has worked in Estonia, Netherlands, Sweden and Finland. His areas of research are molecular neurobiology, virology and cancer research.

Contact: marko.piirsoo@etag.ee; +372 555 35770

Speakers



Prof. Kaspar Valgepea heads a gas fermentation laboratory at the University of Tartu, Institute of Bioengineering. He has a strong background in gas fermentation technologies and systems biology. His lab is focusing on the development of gas fermentation technologies and systems and synthetic biology tools for the sustainable production of fuels and chemicals from waste feedstocks. He was awarded a PhD at Tallinn University of Technology, did a postdoc at the University of Queensland, and has performed research in Japan, USA, and Denmark.
Contact: kaspar.valgepea@ut.ee; +372 5691 9831



Dr. Hannes Kollist is a Professor of Plant Physiology, Hannes Kollist leads a laboratory at the University of Tartu. The laboratory aims to study mechanisms by which plants sense changes in the environment. The research carried out in the lab can be divided into three interconnected topics: Guard cell signalling, Stomatal regulation of crops, and Biochemistry of organelles.
He defended his PhD at the University of Tartu on the topic „Leaf apoplastic ascorbate as ozone scavenger and its transport across the plasma membrane“.
Contact: hannes.kollist@ut.ee; +372 737 4814



Dr. Ilona Faustova is an Associate Professor of Molecular Biology at the University of Tartu (UT) and Vice Director of Institute of Bioengineering. Additionally, she is a program director of Science&Technology bachelor and Bioengineering masters programs. She defended her PhD in bio-organic chemistry in 2013 at UT.
Dr Faustova has a strong background in enzyme catalysis, kinetic analysis, and cell cycle research. She is the initiator and the leader of the iGEM Estonia team, taking part in the largest student competition in synthetic biology in world, initially founded by MIT. The team won the Grand Prize for their project in 2023. Since Foundation in 2017, the team received several medals, won the awards in several categories and was nominated for the best project website, education, best project presentation.
Contact: ilona.faustova@ut.ee; +372 5391 1270



Prof. Tiit Land has been the Rector at Tallinn University of Technology since 2020. He was awarded a PhD in 1994 in the speciality of neurochemistry and neurotoxicology from Stockholm University and the years 1994–1999 he worked at the National Institutes of Health, USA, as a post-doctoral fellow and researcher.
Prof. Land has also been the Rector of Tallinn University since 2011. In the years 2000–2006. He has worked as a Researcher and Professor at Stockholm University and Tallinn University. In the years of 2008–2011 he was the Director of the Institute of Mathematics and Natural Sciences of Tallinn University.
Contact: tiit.land@taltech.ee



Mr. Gijs Berends is First Counsellor and Head of the Science, Innovation, and Digital Policies Section at the Delegation of the European Union to Japan. Prior to his current appointment, he was Deputy Head of Unit for interinstitutional relations in the department responsible for trade policy in the European Commission. This is his second posting in the country. During his first assignment in Japan, he was responsible for EU-Japan relations in the field of climate, energy, transport and agricultural policies. He started his career at the Scientific Council for Government Policy in the Netherlands. He has published widely on Japan, trade policy and EU decision-making and is co-editor of the book, “After the Great East Japan Earthquake: political and policy change in post-Fukushima Japan”. He holds degrees from the University of Rotterdam and the University of Cambridge.



Ms. Fumiko Oda is the National Contact Point for Horizon Europe in the EU-Japan Centre for Industrial Cooperation, Tokyo Japan. With 8 years of experience in the field of international research collaboration, she has been instrumental in promoting participation of Japanese institutions to European research programs. Fumiko previously contributed to the JEUISTE project under the FP7 programme and served as the helpdesk coordinator for the Horizon 2020 NCP team.

Speakers



Mrs. Judit Erika Magyar has been the Country Representative of EURAXESS Japan for 5 years, promoting the European Union as an excellent destination for early, mid- and advanced career researchers of any discipline. Prior to her current post, she worked in project management and lectured extensively at universities in Europe and Japan. She completed her MA studies in Pecs, Budapest, Milan and Fukuoka before pursuing PhD studies in Tokyo with a focus on Law, International Relations and History, respectively. Having spent 19 years in Japan, she has extensive knowledge about the academic, research and innovation scenes.
Contact: judit.erika.magyar@euraxess.net



Ms. Kristin Kraav is the Deputy Head of International Research Cooperation Department at the Estonian Research Council. She is the national contact point and the national delegate to the Programme Committee for 3 areas of Horizon Europe: European Research Council (ERC), Marie Skłodowska–Curie Actions, and Widening participation and spreading excellence. As NCP, she consults clients on proposal preparation and project implementation, pre-screens applications, and organises communication and training events. As Programme Committee delegate she is in charge of consolidating national positions on draft Work Programmes. Kristin Kraav has a background in IT and adult education.
Contact: kristin.kraav@etag.ee; +372 730 0337



Ms. Kumiko Kikuchi is currently Head, Overseas Fellowship Division, International Program Department, JSPS. She joined Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2009. Her working experience includes Unit Chief for Graduate School, Office for University Reform, University Promotion Division, Higher Education Bureau, MEXT, Deputy Director for Integrated Strategy, Bureau of Science, Technology and Innovation, Cabinet Office, and Medical Radioisotopes Advisor of the OECD Nuclear Energy Agency. She holds a BA in Engineering from Tohoku University.



Mr. Oscar A. Rudenstam is Deputy Manager at the Department of International Affairs at the Japan Science and Technology Agency (JST) responsible for implementation of strategic bilateral and multilateral international research cooperation programs in science and technology. He was previously a Junior Fellow at the United Nations University global headquarters in Tokyo and holds an M.Phil. from the University of Oxford, a BA from Sophia University and has also studied at the University of Pennsylvania.



Ms. Katrin Saar is a Senior Adviser at the Estonian Research Council working as a Coordinator of bilateral research cooperation programmes and a national contact point in the Horizon Europe programme. Before this, she worked as a Junior Researcher at the Estonian University of Life Sciences focusing on limnology and lake restoration. She holds a MSc in Applied Hydrobiology from the Estonian University of Life Sciences.
Contact: katrin.saar@etag.ee; +372 5333 5625