Online Workshop 2020 on Sustainable Development

Professors and researchers from UTokyo and Karolinska Institutet – KTH – Stockholm University will share the state of the art and discuss possibilities for joint research in the third interdisciplinary Workshop within the strategic partnership between the University of Tokyo and the Stockholm Trio. The programme is preliminary and may be subject to change.

When: September 16th-18th at 15.00-18.00 JST and 08.00-11.00 CET
How: Zoom video meeting

Joint theme: Universities during covid-19
How has covid-19 affected education and research and what can we learn from this?

Day 1, Sept. 16, involving all participants will mainly deal with how the current COVID-19 epidemic is affecting society, international activities and relationships.

How do we do education, research collaborations and student exchanges under the current circumstances and what are the lessons learned and the new possibilities that we see for the future. We need to redefine this new ecosystem for research, education and collaboration from a mid- to long-term point of view.

Day 2 and Day 3 are devoted to three identified Themes for research and education for Sustainable Development:

**Research theme 1: The Brain and Society**
The session will address the information handling processing of the brain, from molecular mechanisms to how the brains functions in interactions with other humans or even robots. We will bring together neuroscientist, psychologist, engineers and medical doctors to discuss how the brain handles and stores information of it’s surrounding, how this processing can go wrong and how new techniques can enhance brain capabilities.

**Research theme 2: Biomaterials**
This theme will be separated into a track for Nanocellulose and for Nanobiomaterials respectively.

Nanobiomaterials: This session brings together intrinsically interdisciplinary scientists working in the fields of biomaterials, renewable biomaterials, and biosensing technologies, as well as experts in microbiology, infection, and neuroscience. Collectively, presenters in this session will demonstrate the relevance of cutting-edge, interdisciplinary sciences from a basic research perspective, while also putting the spotlight on the societal use of research results. Nanocellulose: Nano-cellulose is an abundant renewable

and green resource with an abundance of application; ultra-strong filaments, thickener of coatings and low sugar nutrients, nano-filters, light-weight insulators, or substrate for tissue growth. A versatility that roots in the nano-cellulose base structure and its many ways of organisation in material manufacturing. A complexity with still many unknowns that are tackled by the University of Tokyo, Stockholm University and KTH Royal Institute of Technology in a joint commitment to prepare the use of nano-cellulose for a biobased society. In this seminar senior Professor give a research activities overview and early stage researcher will present their recent answers to Material Performance and Application (September 17th) and Characterisation and Repeatability (September 18th) problems.

**Research theme 3: Education for Sustainable Development**
The sessions will address education for sustainable development. During the first day it will be discussed what we understand with education for sustainable development and how education for sustainable development may be organized in different contexts. During the second day the focus will move to education and healthy aging from a sustainable perspective. The purpose of the two sessions is to come up with ideas for further cooperation.

Register for the workshop