

(2) Healthy ageing and well-being: From social science aspects

Venue: Conference room 1, Faculty of Education bldg.

Program

Tuesday 30 October

- 8:55~9:00** Prof. Katsuya Iijima, *UTokyo*
Opening Remarks
- 9:00~9:30** Dr. Malgosia Malec Rawinski, *SU*
Researching aging in biographical perspective
- 9:30~9:45** Tomoki Tanaka, *UTokyo*
Longitudinal impact of “Social Frailty” on healthy life expectancy and community-based approach for frailty prevention
- 9:45~10:15** Prof. Hui-Xin Wang, *SU*
Psychosocial conditions in working life and metabolic and cognitive health in later life
- 10:15~10:30** Coffee Break
- 10:30~10:45** Yaka Matsuda, *UTokyo*
Lifelong learning system in Japan and Sweden
- 10:45~11:15** Prof. Håkan Fischer, *SU*
The age-related positivity effect in processing of socio-emotional face information
- 11:15~11:40** Discussion-1
- 11:40~13:00** Lunch
- 13:00~13:15** Sayaka Terazawa, *UTokyo*
Work-life balance in Japan
- 13:15~13:45** Dr. Haodong Qi, *SU*
Live Longer, Work Longer: the Swedish Experience
- 13:45~14:00** Yukitsugu Komazawa, *UTokyo*
Community development practice in suburban Tokyo
- 14:00~14:30** Dr. Serhiy Dekhtyar, *KI*
Capturing physical resilience using multimorbidity speed in old age: the role of life experiences over the life course
- 14:30~14:45** Coffee Break
- 14:45~15:25** Open discussion
How can we do 'Collaborative Research' for social science?
- 15:25~15:30** Assoc. Prof. Yuto Kitamura, *UTokyo*
Closing Remarks

(3) New technologies: Electron microscopy

Venue: Room 423 at 4th floor, Faculty of Engineering bldg. #3

Program

Tuesday 30 October

- 8:55~9:00** Naoya Shibata, *UTokyo*
Opening Remarks
- 9:00~9:25** Xiaodong Zou, *SU*
Automated 3D electron diffraction techniques for high-throughput
ab initio structure determination and phase analysis
- 9:25~9:50** Eiji Abe, *UTokyo*
Structure determination of quasicrystals :STEM imaging
and hyperspace x-ray crystallography
- 9:50~10:25** Jonas Weissenrieder, *KTH*
Ultrafast Electron Microscopy – Pump Probe TEM
- 10:25~10:50** Naoya Shibata, *UTokyo*
Atomic-resolution electromagnetic field imaging by STEM
- 10:50~11:10** Coffee Break
- 11:10~11:35** Radostin Danev, *UTokyo*
Single particle imaging with the Volta phase plate
- 11:35~12:00** Yuzuru Itoh, *SU*
How cryo-EM revolutionizes the field of protein synthesis
- 12:00~13:00** Lunch
- 13:00~13:25** Carsten Mim, *KTH*
Visuallization of inhibitory, postsynaptic scaffolds by electron
microscopy
- 13:25~13:50** Hiroshi Yamaguchi, *UTokyo*
Structural analysis of zebrafish sperm flagella by cryo-electron
tomography
- 13:50~14:00** Marta Carroni, *SU*
A Swedish Facility for Cryo-EM
- 14:00~14:10** Jonas Weissenrieder/Xiaodong Zou, *KTH*
CEM4MAT, Centre of Electron Microscopy for Materials Sciences

- 14:10~14:20 Hirofumi Matsuhata, UTokyo**
Introduction of Advanced Characterization Platform in the University of Tokyo
- 14:20~14:30 Radostin Danev, UTokyo**
Introduction to the University of Tokyo cryo-EM facility
- 14:30~14:50** Coffee Break
- 14:50~15:00 Tomoya Kujirai, UTokyo**
Structural study of chromatin transcription
- 15:00~15:10 Ioanna Smyrlaki, KI**
DNA origami as a tool to study function and structure of human antibodies
- 15:10~15:20 Shun Kondo, UTokyo**
Direct observations of dynamic dislocation interaction processes with grain boundaries by in situ TEM nanoindentation
- 15:20~15:30 Zhehao Huang, SU**
Revealing the Structure-Property Relations of Beam Sensitive Materials by Continuous Rotation Electron Diffraction
- 15:30~15:40 Shaozheng Ji, KTH**
3D super structure dynamics in the commensurate – incommensurate charge density wave phase transition of 1T-TaSe₂
- 15:40~15:45 Xiaodong Zou, SU**
Closing Remarks

(4) Sustainable materials

Venue: Yayoi Auditorium Annex, UTokyo

Program

Tuesday 30 October

- 9:00~9:05 Akira Isogai, UTokyo**
Opening Remarks
- 9:05~9:40 Lars Wågberg, KTH**
Ion-ion correlations and specific ion effects in CNF-systems
- 9:40~9:55 Shuji Fujisawa, UTokyo**
CNF/polymer composite microparticles by emulsion templating
- 9:55~10:25 Daniel Söderberg, KTH**
Control of anisotropic nanoparticle alignment utilizing loose networks
- 10:25~10:40** Coffee Break
- 10:40~11:10 Joseph Samec, SU**
Lignin-first approach
- 11:10~11:40 Per Larsson, KTH**
On the influence of chemical functionality on the properties of cellulose nanofibrils and thereof made materials
- 11:40~12:10 Aji Mathew, SU**
Nanocellulose hybrids as functional materials
- 12:10~13:10** Lunch
- 13:10~13:40 Lennart Bergström, SU**
Nanocellulose assembly
- 13:40~13:55 Yaxin Zhou, UTokyo**
Preparation and characterization of TEMPO-CNC
- 13:55~14:15 Calvin Brett, KTH**
Initial investigations of cellulose thin films using GISANS
- 14:15~14:45 Tadashi Iwata, UTokyo**
High-functionability of biodegradable biomass-based plastics
- 14:45~15:00** Coffee Break
- 15:00~15:20 Hugo Françon, KTH**
A novel method for producing formable low-density materials from cellulose nanofibrils

15:20~15:35 Hiroto Soeta, *UTokyo*

Grafting density design of surface-modified nanocellulose for polymer composites

15:35~15:40 Akira Isogai

Closing Remarks

(5) Ageing Societies: Sustainability and Resilience Challenges in the Urban Century

Venue: Seminar Room 3 at 2nd floor, Med. Experimental Research build.

Program

October 30

9:00~9:15 Prof. Ken Fukushi, *UTokyo*

Opening Remarks

Prof. Thomas Elmqvist, *SU*

Goals and Concepts

9:15~10:15 Sub-session I. Ageing and urbanization – the larger picture (Moderator:M. Jarzebski)

Prof. Thomas Elmqvist, *SU*

Ageing societies in the urban century– the larger picture

Ryugo Watanabe, *Sado City*(with translation)

The Japanese reality - loss of local vitality due to ageing and population decline in Sado Island

10:15~10:35 Coffee Break

10:35~11:45 Sub-session II . Aging, governance and urban planning (Moderator:M. Jarzebski)

Prof. Makoto Yokohari, *UTokyo*

Can we make shrinking cities sustainable?

Prof. Kazuhiko Takeuchi, *UTokyo*

Creating sustainable cities making the most of the environment for the ageing society SDGs –Examples of Future Cities

11:45~ Lunch

12:45~14:45 Sub-session III . Aging, health and green space (Moderator:M. Jarzebski)

Prof. Tores Theorell, *SU and KI*

Examples of health promoting art experiences for elderly

Assoc. Prof. Alex Gasparatos, *UTokyo*

Marcin Jarzebski, *UTokyo*

Heat stress impact on ageing population in Asian countries

Sara Khoskar and Sofia Eckersten, *KTH*

Mobility to Green Spaces in the Stockholm region- Challenges and strategies

Julie Goodness, *SU*

Gardening preferences of older residents in Stockholm, Sweden

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14:45~15:40 Discussion (Moderators: T. Elmqvist and K. Fukushi)
**Ageing population challenges across different areas and structuring
outcome paper**

15:40~ **Prof. Thomas Elmqvist, *SU***
Closing Remarks

(6) New technologies: Multiscale computation

Venue: Room31A at 3rd floor, Faculty of Engineering build. #2

Program

Tuesday 30 October

- 8:50~9:00** Prof. Junichiro Shiomi, *UTokyo*
Opening Remarks
- 9:00~9:20** Prof. Shu Takagi, *UTokyo*
On the multiscale simulations in fluid mechanics
- 9:20~9:40** Prof. Luca Brandt, *KTH*
Dynamics of particles and droplets in turbulence
- 9:40~10:00** Prof. Junichiro Shiomi, *UTokyo*
Simulations and experiments of wetting at various scales
- 10:00~10:20** Petter Johansson, *KTH*
Molecular origin of contact line friction in dynamic wetting
- 10:20~10:40** Coffee Break
- 10:40~11:00** Prof. Erik Lindahl, *SU/KTH*
GROMACS - From Petascale to Exascale Molecular Simulation
- 11:00~11:20** Prof. Hideaki Fujitani, *UTokyo*
Membrane simulations by Lennard-Jones PME with new lipid force fields
- 11:20~11:40** Cathrine Bergh, *KTH*
Understanding the Conformational Dynamics of Ion Channels Through Markov State Modeling
- 11:40~12:00** Asst. Prof. Yuta Yoshimoto, *UTokyo*
Construction of non-Markovian coarse-grained models employing the Mori–Zwanzig formalism and iterative Boltzmann inversion
- 12:00~13:30** Lunch
- 13:30~13:50** Prof. Naoki Shikazono, *UTokyo*
Lifetime Simulation of Solid Oxide Fuel Cell electrodes
- 13:50~14:10** Lucie Delemotte, *KTH*
Structural dynamics of voltage-gated ion channels and implications
- 14:10~14:30** Rebecca Howard, *KTH*
Understanding the molecular basis for general anesthesia through structure, function, and modeling
- 14:30~14:50** Assoc. Prof. Ikuya Kinefuchi, *UTokyo*
Application of the low-variance Monte Carlo method to the analysis of highly non-equilibrium evaporating gas flows

14:50~15:10

Coffee Break

15:10~15:50 All participants

Discussion for future collaboration and next event

15:50~16:00 Prof. Erik Lindahl, *SU/KTH*

Closing Remarks

18:00~20:00

Dinner

(7) Nano-biomaterials

Venue: Conference room at ground floor, Life innovation center

Program

Tuesday 30 October

- 9:00~9:10** **Assoc. Prof. Yuji Teramura, UTokyo & Uppsala Univ.**
Opening Remarks
- 9:10~9:30** **Assist. Prof. Max Hamedi, KTH**
Paper and Textile as a platform for advanced DNA diagnostics
- 9:30~9:50** **Assoc. Prof. Takamasa Sakai, UTokyo**
Instantly formative hydrogels for artificial vitreous body
- 9:50~10:10** **Assist. Prof. Susanne Löffler, KI**
Synthetic oligomers and polymers for bacterial sensing
- 10:10~10:30** **Assis. Prof. Yuuki Inoue, UTokyo**
Design for biomaterials based on nano force analysis between proteins and well-characterized polymer brush surfaces
- 10:30~11:00** Coffee break
- 11:00~11:20** **Assoc. Prof. Horacio Cabral, UTokyo**
Development of mRNA-loaded Nanocarriers based on Flexible Block Ionomers
- 11:20~11:40** **Assist. Prof. Keira Melican, KI**
Mammalian Tissue - the Ultimate Biomaterial
- 11:40~12:00** **Assoc. Prof. Yuji Teramura, UTokyo & Uppsala Univ.**
Cell surface engineering for attenuating thromboinflammation in cell and organ transplantation
- 12:00~13:30** Lunch
- 13:30~14:00** **Prof. Agneta Richter-Dahlfors, KI**
Nanomedicine for infection research and diagnostics
- 14:00~14:30** **Prof. Kazuhiko Ishihara, UTokyo**
Water-soluble and amphiphilic phospholipid polymers as solubilizing and permeation enhancer of poorly-water soluble drugs
- 14:30~14:45** **PhD student Karen Butina, KI**
Electrochemical sensing of bacteria using conducting polymers
- 14:45~15:15** **Prof. Jöns Hilborn, UTokyo & Uppsala Univ.**
Designing and controlling bioactive molecules for regeneration in orthopedics
- 15:15~15:20** **Prof. Agneta Richter-Dahlfors, KI**
Closing Remarks

Moving to main building (Yayoi Auditorium) for the sum-up (16:00~)

Wednesday 31 October

Lab tour in University of Tokyo

(8) ASIAQ2

Venue: Room424 at 4th floor, Faculty of Engineering build. #3

Program

Monday 29 October

11:00~11:10 Hideaki Murayama, *UTokyo*, Magnus Burman, *KTH*

Welcome/What we did in Stockholm and What we do in Tokyo,

11:10~11:50 Hajime Yamaguchi, *UTokyo*

Arctic research in Japan

Ocean mapping 1

11:50~12:10 Toshihiro Maki, *UTokyo*

Development plan of a high-mobility lightweight AUV for under ice survey

12:10~12:30 Sriharsha Bhat/Magnus Burman, *KTH*

Hydrobotics-trends, challenges and opportunities for efficient and agile underactuated AUVs

12:30~13:30

Lunch

Science communication and other arctic social science initiatives

13:30~14:00 Peter Sköld, *Umeå Univ.*

Communication and implementing the sustainable development goals

14:00~14:20 Gabriella Nordin, *Umeå Univ.*

Communication strategies and international conferences

14:20~14:50 Jelmer Jeuring, *Umeå*

Co-producing arctic metocean information: negotiating publics & expertise in user-producer interactions

14:50~15:10 Elena Golubeva, *NArFU*

Healthy and active ageing in Russia

15:10~15:40

Coffee Break

Arctic ecosystems

15:40~16:00 Jessica Ernakovich, *UNH*

Changing terrestrial biogeochemistry in a warming Arctic: implications for C and N transformations and human welfare

16:00~16:20 Daisuke Kitazawa, *UTokyo*

Numerical simulation of marine environment using a hydrodynamic and ecosystem coupled model

Ocean mapping 2

16:20~17:00 Martin Jakobsson, *SU*

Geophysical mapping in ice covered waters

18:00~20:00

Dinner

Tuesday 30 October

Logistics/travel

9:00~9:30 **Motohisa Abe, Hokkaido Univ.**
Arctic shipping from logistics viewpoint: status and research

9:30~9:50 **Ryuichi Shibasaki, UTokyo**
How do the new shipping routes affect Asian LNG markets and economy? - Case of the Northern Sea Route and Panama Canal Expansion-

9:50~10:20 Coffee Break

Modelling and sensing

10:20~10:50 **Takuji Waseda, UTokyo**

10:50~11:10 **Elizabeth Burakowski, UNH**
Remote sensing and modeling of snow and vegetation,

11:10~11:30 **Ryota Wada, UTokyo**
Extremes in the Arctic

11:30~11:50 **Tsubasa Kodaira, UTokyo**
Develop total water level prediction systems for global storm surge

11:50~12:10 **Hideaki Murayama, UTokyo**
Fiber-optic sensors and application to arctic

12:10~13:00 Lunch

13:00~16:00 Discussion(one coffee break)
(16:00~17:00 Gather and summarize in the 2nd Stockholm-Tokyo Workshop, Only Hideaki and Magnus)

16:00~19:00 Free Time

19:00~ Dinner