

Session Program for Education in Energy and Environment

Date: March 18th, 2014

Place: Meeting room (6F), Kambaikan, Muromachi Campus, Doshisha University

Chair: Prof. Saki ITONORI, Shiga University and Prof. Vojislav NOVAKOVIC, NTNU

Education for Sustainable Development

1. ESD (Education for Sustainable Development) and Disaster Prevention in Japan: after the 2011 off the Pacific coast of Tohoku Earthquake (Japan)
2. Project for outgoing information of environment studies at the Junior High School attached to Shiga University (Japan)
3. Water monitoring. Report from local school projects in Norway (Norway)
4. Japanese - Norwegian School Network for environmental monitoring (Norway)

School Science Curricula

1. The science curriculum in Japan and in Norway. A presentation of key findings in study performed by Norwegian Master's students in 2012 (Norway)
2. Practical projects for technological understanding and sustainability: Examples from lower secondary school (Norway)
3. Classroom experiments visualizing the greenhouse effect (Norway)

Radiation Education

1. Radiation education for elementary/secondary school teachers (Japan)
2. Radiation education for university students in teacher education courses (Japan)
3. Radiation education for university students in faculty of engineering (Japan)
4. Simple cloud chamber using refreezable gel pack (Japan)

University and Teacher Education

1. Science education in teacher training program (Japan)
2. School-based professional development for science teachers: the SUN-project (Norway)
3. International Master Degree Program in Sustainable Energy at NTNU and possibility cooperation on Double Degrees (Norway)
4. "Teknostart" – An introduction short course for new master students of applied chemistry and biotechnology at NTNU (Norway)

09:00 - 17:30 Parallel sessions

Education in Energy and Environment

Chair: Prof. Saki Itonori, Shiga University and Prof. Vojislav Novakovic, NTNU

09:00-09:15 **Welcome with presentation of participants**

- Short overview of previous KIFEE cooperation on Education in E&E

Education for Sustainable Development

09:15-09:35 ESD (Education for Sustainable Development) and Disaster Prevention in Japan: after the 2011 off the Pacific coast of Tohoku Earthquake

- Tatsuya Fujioka, Shiga Univ.

09:35-09:55 Project for Outgoing Information of Environment Studies at the Junior High School Attached to Shiga University

Web-site for Environmental Monitoring of BIWAKO TIME (Integrated Study)

- Satoru Ohta and Syohei Tada, Shiga Univ. attached junior high school

09:55-10:15 Water Monitoring . Report from Local School Projects in Norway

- Ellen Marie Andersson, NTNU

10:15-10:35 Japanese - Norwegian School Network for Environmental Monitoring

- Peter van Marion, NTNU

10:35-10:50 *Break*

School Science Curricula

10:50-11:20 The Science Curriculum in Japan and in Norway. A Presentation of Key Findings in a Study Performed by Norwegian Master's Students in 2012

- Peter van Marion, NTNU

11:20-11:50 Practical Projects for Technological Understanding and Sustainability: Examples from Lower Secondary School

- Berit Bungum, NTNU

11:50-12:20 Classroom Demonstrations Visualizing the Greenhouse Effect

- Per-Odd Eggen, NTNU

12:20-13:20 *Lunch*

Radiation Education

13:20-13:40 Radiation Education for Elementary/Secondary School Teachers
In Case of ASCeST, Tokyo Gakugei University
- Nobutoshi Yoshihara, Tokyo Gakugei Univ.

13:40-14:00 Radiation Education for University Students in Teacher Education Courses:
In Case of Tokyo Gakugei University
- Akio Hirata, Tokyo Gakugei Univ.

14:00-14:20 Radiation Education for University Students in Faculty of Engineering:
In Case of Tottori University
- Masahiro Kamata, Tokyo Gakugei Univ.

14:20-14:40 Simple Cloud Chamber using Re-freezable Gel Pack
For Junior/Senior High School Science
- Miki Kubota and Masahiro Kamata, Tokyo Gakugei Univ.

14:40-15:00 Break

University E & E and Teacher Education

15:00-15:20 Science Education in Teacher Training Program
- Masamitsu Ohyama and Saki Itonori, Shiga Univ.

15:20-15:50 School-based Professional Development for Science Teachers: the SUN Project
- Peter van Marion, NTNU

15:50-16:10 International Master Degree Program in Sustainable Energy at NTNU and Possibility for
Cooperation on Double Degrees
- Vojislav Novakovic, NTNU

16:10-16:30 “Teknostart” – An Introduction Short Course for New Master Students of Applied Chemistry
and Biotechnology at NTNU
- Geir Martin Haarberg, NTNU

16:30-16:45 Break

16:45-17:00 Final Discussions and Summing Up
- Saki Itonori, Shiga University and Vojislav Novakovic, NTNU