



**Nanoparticles and Health**  
**The 3<sup>rd</sup> CHEMPACK and BITEFA workshop**  
**Organized by the University of Oulu and University of Eastern Finland, Kuopio**  
**Location: Ravintola Nallikari, Oulu**  
**Date: 24<sup>th</sup> -25<sup>th</sup> June 2015**

**24<sup>th</sup> June 2015**

- 08:00 – 10:00    Registration and breakfast buffet  
 10:00 – 10:15    Opening of the seminar  
*Prof. Pertti Pasanen, University of Eastern Finland (Kuopio)*  
*Prof. Anita Lloyd Spetz, University of Oulu/ Linköping University*  
*Dr. Niina Halonen, University of Oulu*

**Session 1:**

**Health and diagnostics**

**Chairman: Pertti Pasanen**

- 10:15 – 10:45    Health effect of nanoparticles  
*Prof. Anders Bucht, Umeå University/ Swedish Defence Research*
- 10:45 – 11:15    Health effect of combustion particles  
*Dr. Pasi Jalava, University of Eastern Finland (Kuopio)*
- 11:15 – 11:30    Irritation and respiratory effects caused by nanoparticles  
*Ph.Lic. Maija Leppänen, University of Eastern Finland (Kuopio)*
- 11:30 – 11:45    Microbial fragments in nanoparticle size range  
*M.Sc. Jacob Mensah-Attipoe, University of Eastern Finland (Kuopio)*

12:00 – 13:00    Lunch

**Chairman: Niina Halonen**

- 13:00 – 13:30    Nanoparticles and inflammation  
*Dr. Caroline Brommesson, Linköping University*
- 13:30 – 14:00    Quickly dissolving nanoparticles in drug delivery  
*Dr. Timo Laaksonen, University of Helsinki*
- 14:00 – 14:15    The Plant Cell - properties and potential applications  
*Prof. Hely Häggman, University of Oulu*
- 14:15 – 14:30    Office comfort and indoor air quality improvement with plants  
*Petri Pajunen, Naturvention Oy*
- 14:30 – 14:45    Coffee break

**Chairman: Pertti Pasanen**

- 14:45 – 15:00 The cell clinic; measurement technology  
*Dr. Niina Halonen, University of Oulu*
- 15:00 – 15:15 LTCC packaging for the cell clinic  
*B.Sc. Joni Kilpijärvi, University of Oulu*
- 15:15 – 15:30 The human cell cultivations in cell clinic  
*Dr. Antti Hassinen, University of Oulu*
- 15:30 – 15:45 Lab-on-chip  
*Dr. Jussi Hiltunen, VTT Oulu*

**Session 2:****Detection of nanoparticles****Chairman: Anita Lloyd Spetz**

- 15:45 – 16:15 PM sensors for control of particulate filter in diesel engine exhaust system  
*Dr. Jaco Visser, Ford Motor Company, USA*
- 16:15 – 16:30 LTCC based nanoparticle detector; principles  
*Assoc. Prof. Mike Andersson, Linköping University/ University of Oulu*
- 16:30 – 16:45 LTCC packaging for portable nanoparticle detector; present status & future ideas  
*Dr. Maciej Sobocinski, University of Oulu*
- 17:00 – 19:00 Poster session
- 19:00 – Dinner at Restaurant Nallikari

**25<sup>th</sup> June 2015**

- 08:30 – 09:15 Registration and breakfast buffet

**Session 3:****Production and controlling nanoparticles****Chairman: Niina Halonen**

- 09:15 – 09:45 Need for small particle detection in terms of work hygiene  
*M.Sc. Heikki Hellman, Ruukki Metals SSAB*
- 09:45 – 10:15 Modern technologies to remove harmful particles from engine emissions  
*Dr. Toni Kinnunen, Dinex Ecocat Oy*
- 10:15 – 10:30 Coffee break

**Session 4:****Applications of nanoparticles****Chairman: Anita Lloyd Spetz**

- 10:30 – 11:00 Cellulose nanofibers  
*FiDiPro Kristiina Oksman, University of Oulu/Luleå University*
- 11:00 – 11:15 Low temperature growth of carbon nanotubes with bi- and trimetallic catalysts  
*M.Sc. Olli Pitkänen, University of Oulu*
- 11:15 – 11:30 Screen printing of nanoparticle inks  
*M.Sc. Mikko Nelo, University of Oulu*
- 11:30 – 12:00 Concluding remarks  
*FiDiPro Anita Lloyd Spetz, University of Oulu/ Linköping University*
- 12:00 – 13:00 Lunch