

Programme

September 15

11.00-12.00 **Registration and Coffee**

INTRODUCTION – Chaired by *Dr. Mika Vähä-Nissi, VTT*

12.00 – 12.15 **Welcome and FA0904 in short;**
Dr. Mika Vähä-Nissi, VTT, FI

12.15 – 12.45 **Keynote Speech – Novel nanomaterials promise to food packaging;**
Prof. Ali Harlin, VTT, FI

12.45 – 13.15 **Sustainable packaging; role of nanotechnology;**
Dr. Gulden Yilmaz – Jongboom, Wageningen UR, NL

13.15 – 13.30 **Break**

NANOCELLULOSE – Chaired by *Dr. Tekla Tammelin, VTT*

13.30 – 14.00 **Novel polymer nanomaterials for food packaging based on modified cellulose nanofibres;**
Dr. Ruth Schmid & Per Stenstad, SINTEF, NO
Kristin Syverud, PFI, NO
Martin Andresen, Borregaard, NO

14.00 – 14.30 **Health & environmental safety aspects of nanofibrillated cellulose;**
Marja Pitkänen, Jari Vartiainen & Anu Kapanen, VTT, FI

14.30 – 15.00 **New approach to classification of cellulose fibrils and suitable methods for their characterization;**
Asko Sneek, Marja Pitkänen, Heli Kangas, Tekla Tammelin & Erkki Hellén, VTT, FI

15.00 – 15.30 **Coffee Break**

SURFACES I – Chaired by *Dr. Annaleena Kokko, VTT*

15.30 – 16.00 **Solid board as a base material for novel sustainable packaging applications;**
Sanne Tiekstra, Bumaga BV, NL
Arie Hooimeijer & Maja Stanic, Kenniscentrum Papier en Karton, NL

16.00 – 16.30 **Starch-clay paper coatings for sustainable, flexible packaging;**
Dr. Francis Clegg & Prof. Chris Breen, Sheffield Hallam Univ., UK

16.30 – 17.00 **Nanostructured materials based on electrospinning of interest in food biopackaging applications;**
Dr. José-M. Lagaron, IATA-CSIC, ES

17.00 – 17.30 **Changes in water vapor uptake ability of xylan derivatives monitored by QCM-D humidity module;**
Dr. Tekla Tammelin, Kari Kammiovirta, Harri Setälä, VTT, FI

18.00 **Salad Buffet Dinner (Sponsored by VTT) & Posters:**

The technology of antibacterial food packaging materials production; *Paulius P Danilovas, Dr. Ramune Rutkaite, Algirdas Zemaitaitis, Kaunas Univ. of Tech., LT*

On the structure and exploitation properties of biodegradable and synthetic polymers based nanocomposites with layered silicate nanofillers;
Remo Merijs Meri, Janis Zicans, Velta Tupureina, Anita Kaulina, Madara Bartule, Juris Bitenieks, Valentina Musteata, Visvaldis Svinka, Riga Tech. Univ., LV
Cornelia Vasile, "P. Poni" Inst. Macromolecular Chemistry, RO

September 16

SURFACES II – Chaired by Dr. Kalle Nättinen, VTT

- 8.45 – 9.15** **Antimicrobial surface modification of polyethylene;**
Elena Paslaru & Cornelia Vasile, “P. Poni” Inst. Macromolecular Chemistry, RO
Lidija Fraszemljic, Univ. of Maribor, SI
Dona Constantinescu, SC ECEFS-Savinesti, RO
Gina Procope, Food Safety Department, RO
- 9.15 – 9.45** **Atmospheric plasma technology for surface modification of nanoparticles;**
Dirk Vangeneugden, Annick Vanhulsel & Sofie Put, VITO, BE
- 9.45 – 10.15** **Nanoscale surface processing of extrusion coated substrates and plastic films with atmospheric plasma activation and deposition;** Dr. Johanna Lahti & Juho Lavonen, Tampere Univ. of Tech., FI
- 10.15 – 10.45** **Atomic layer deposition in food packaging and barrier coatings;** Dr. Pirjo Heikkilä, VTT, FI
- 10.45 – 11.30** **Lunch break**

COMPOSITES – Chaired by Dr. Pirjo Heikkilä, VTT

- 11.30 – 12.00** **Characterization of nanoparticles in polymers and their impact on the morphology for films for food packing;**
Prof. Geoffrey R Mitchell, Inst. Polytechnic Leiria, PT
Donatella Duraccio, Marilena Pezzuto & Clara Silvestre, CNR ICTP, IT
- 12.00 – 12.30** **Mechanical, thermal and morphological properties of Polylactide/Polyhydroxybutyrate/Nanocomposite blends;**
Trevor W Woods, Werner J Blau, Kevin O’ Connor & Ramesh P Babu, Trinity College, IE
- 12.30 – 13.00** **Properties of PLA based micro- and nanocomposites;**
Dr. Karol Leluk & Marek A. Kozlowski, Wroclaw Univ. of Tech., PL
- 13.00 – 13.30** **Coffee Break**
- 13.30 – 14.00** **Antibacterial composites based on iPP for food packaging application;**
Dr. Sossio Cimmino, Dr. Donatella Duraccio, Marilena Pezzuto, Clara Silvestre, CNR ICTP, IT
Antonella Marra, Veronica Ambrogio, Università degli Studi di Napoli, IT
Ida Romano, CNR ICB, IT
- 14.00 – 14.30** **Effect of processing on natural fibres in starch acetate composites;**
Dr. Kalle Nättinen, Heidi Peltola, VTT, FI
Bo Madsen, Tech. Univ. of Denmark, Risø, DK
Roberts Joffe, Luleå University of Technology, SE