



Preliminary program New Energetics Workshop, May 29, 2018

Location: FOI Kista

Room: Jupiter

- 09.00 Registration and Coffee
- 09.20 Welcome and Introduction. Malin Kölhed, FOI and Helen Stenmark, Eurenco Bofors AB
- 09.30 **1.** Aspects of Energetics in Sweden; History and Present. Patrick Goede, FMV, Sweden
- 09.50 **2.** Energetic Materials Research across MSIAC Nations. Matthew Andrews, MSIAC, Belgium
- 10.10 **3.** Impacts of REACH, ITAR and other regulations on Energetic Materials Sustainability. Geneviève Eck, Eurenco, France
- 10.30 **Coffee**
- 11.00 **4.** Atomistic Modelling of Amorphous Energetic Materials. Pontus Melin, Uppsala universitet, Sweden.
- 11.20 **5.** Complex Analysis of Explosive Characteristics for Existence Region of Explosives. Aleksandr Smirnov, Joint stock company «State Scientific Research Institute of Mechanical Engineering after V.V. Bakhirev», Russia.
- 11.40 **6.** Computer Aided Design and Synthesis of High-Energy-Density Materials. Martin Rahm, Chalmers tekniska högskola, Sweden.
- 12.00 **Lunch**
- 13.30 **7.** The effect of deagglomeration and coating of nanoparticles on the characteristics of aluminum nanopowder oxidation. Alexander Vorozhtsov, Tomsk State University, Russia.
- 13.50 **8.** Activated and Nano-sized Aluminum in Energetic Materials: Competitors or Complementary materials? Stefano Dossi, Politecnico di Milano, Italy.
- 14.10 **9.** Nanoenergetic materials. Hanna Ellis, FOI, Sweden.
- 14.30 **Coffee**
- 15.00 **10.** Recent Developments on the Research of Energetic Materials: Nitrates, Nitrocarbmates and Polynitro Compounds. Thomas Reith, LMU Munich, Germany
- 15.20 **11.** Synthesis, upscaling and first results of PBX based on TKX-50. Peter Gerber, Fraunhofer ICT, Germany
- 15.40 **12.** Synthesis of Energetic Materials using Flow Chemistry. Jonas Johansson, FOI, Sweden
- 16.00 **End**
- 18.00 **Dinner at Nobel museum**



Preliminary program New Energetics Workshop, May 30, 2018

Location: FOI Kista

Room: Jupiter

- 09.00 **13.** On the Sensitivity of Nitrate Esters. Stefan Ek, FOI, Sweden.
- 09.20 **14.** Low-sensitivity PETN crystallized in the presence of stearic acid. Radovan Skácel, Explosia a.s., Czech Republic
- 09.40 **15.** Structure-property relationships in energetic co-crystals and salts. Colin Pulham, University of Edinburgh, Great Britain.
- 10.00 **16** Comminution of Energetic Materials in Binder Components with High Solid Loadings for Direct Application in Formulations. Thomas Heintz, Fraunhofer-ICT, Germany
- 10.20 **Coffee**
- 10.50 **17.** Premixed green propellants: DLR research and test activities on nitrous oxide/ hydrocarbon mixtures. Lukas Werling, German Aerospace Center (DLR), Germany
- 11.10 **18.** Study on High Energetic Ionic Liquids for Propellant. Hiroki Matsunaga, Fukuoka University, Japan
- 11.30 **19.** MEMS Thruster for a Cube Satellite with ADN as a Monopropellant. Sejin Kwon, KAIST, Republic of Korea.
- 11.50 **Lunch**
- 13.20 **20.** Main Results of the EU H2020 Project Rheform. Michele Negri, DLR, Germany.
- 13.40 **21.** Growing Constellation of Earth Observation Satellites with Ammonium Dinitramide (ADN) Based Propulsion. Peter Thormählen, ECAPS AB, Sweden
- 14.00 **22.** Insensitive Minimum Smoke Propellants for Tactical Missiles. Thomas Deschner, Nammo Raufoss AS.
- 14.20 **Coffee**
- 14.50 **23.** Precipitated small size FOX-7 tested in solventless extruded double base rocket propellant. Erik Tunestål, Eurenco Bofors, Sweden.
- 15.10 **24.** New innovative solid rocket propellants based on ADN. Marcel Holler, Bayern-Chemie, Germany.
- 15.30 **25.** Green solid propellants for launchers. Niklas Wingborg, FOI, Sweden
- 16.00 **End**

Program: Visit to FOI Grindsjön May 31, 2018

- 08.00 Departure by Bus from Scandic Victoria Tower
- 16.30 Arrival by Bus to Central Station, Stockholm