



Program New Energetics Workshop, May 17, 2016

Location: FOI Kista

Room: Jupiter

- 09.00 Registration and Coffee
- 09.20 Welcome and Introduction. Patrick Goede, FOI, and Helen Stenmark, Eurenco Bofors AB
- 09.30 **1.** An overview of the EDA project EMTEEC. Patrick Goede, FOI, Sweden
- 10.00 **2.** Recent Developments on Polynitro Containing Energetic Materials Based on Carbon and Silicon. Burkhard Krumm, LMU Munich, Germany
- 10.20 **3.** 5-Amino-3,4-Dinitropyrazole: Thermal Stability and Combustion. Nikita Muravyev, Semenov Institute of Chemical physics, Russian academy of sciences. Russia
- 10.40 **Coffee**
- 11.10 **4.** Influence of Polyacrylamide and Stearic Acid on Crystal Growth of RDX and Bicyclo-HMX. Kamil Dudek, Explosia, Check Republic
- 11.30 **5.** EILs – suitable substances for future energetic applications? Uwe Schaller, Fraunhofer ICT, Germany
- 11.50 **6.** Theoretical studies on the thermodynamic and detonation properties of RDX with Al and B. Nilgün ŞEN, Institute of Forensic Science, Turkey
- 12.10 **Lunch**
- 13.30 **7.** New NC Stabilizers Evaluated in Rocket Propellants. Erik Thunestål, Eurenco Bofors, Sweden
- 13.50 **8.** Approaches Toward the Replacement of Lead Containing Primary Explosives – A Challenge. Norbert Szimhardt, LMU Munich, Germany
- 14.10 **9.** Lead-Free Replacements for Initiation and Ignition Systems. Javid Hamid, QinetiQ, UK
- 14.30 **10.** REACH implementation at Eurenco Bofors. Veronica Andersson, Eurenco Bofors, Sweden
- 15.00 **Refreshments**
- 15.20 **Plenary discussion**
- 16.00 **End**
- 18.00 **Dinner**

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- 09.00 **11.** Production and characterization of Al-Cu and Al-Ni nanoparticles. Alexander Vorozhtsov, Tomsk state University, Russia
- 09.20 **12.** Mechanical milling of new energetic compounds: possibilities and perspectives. Stefano Dossi, Politecnico di Milano Milan, Italy
- 09.40 **13.** Continuous Synthesis. Martin Skarstind, FOI, Sweden
- 10.10 **14.** Particle Properties and Crystal Structure of Ammonium Dinitramide (ADN) Prills. Thomas Heintz, Fraunhofer-ICT, Germany
- 10.30 **Coffee**
- 10.50 **15.** Influence of Energetic Binders on ADN/Nitramin/GAP-Solid Rocket Propellants with Special Focus to the Burning Behavior. Volker Weiser, Fraunhofer-ICT, Germany
- 11.10 **16.** ADN Propellant Research at Roxel (UK). Sue Evans, Roxelgroup, UK
- 11.30 **17.** ADN Propellant Development at FOI. Niklas Wingborg, FOI, Sweden
- 11.50 **18.** A new generation of minimum smoke propellants – From development to production. Tor Erik Kristensen, FFI and Thomas Deschner, Nammo, Norway
- 12.20 **Lunch**
- 13.30 **19.** Development of Ionic Liquid Propellants Based on High Energetic Materials. Hiroki Matsunaga. Department of Chemical Engineering, Fukuoka University, Japan
- 13.50 **20.** European Green Propellant LMP-103S Space Qualification. Mathias Persson, ECAPS
- 14.10 **21.** Ignition methods for ADN-based liquid monopropellants – Recent Results of the EU H2020 Project Rheform. Michele Negri, DLR, Lampoldshausen, Germany
- 14.30 **Coffee**
- 15.00 **22.** Rocket propulsion programs at Nammo using hydrogen peroxide as propellant. Jan-Erik Rønningen, Nammo Raufoss, Norway
- 15.20 **23.** Performance Evaluation of High Performance Green Monopropellant with Hydrogen Peroxide and Ethanol. Baek Seungkwan, Korea Advanced Institute of Science & Technology (KAIST), South Korea
- 15.40 **24.** ADN synthesis improvements. Jonas Johansson, FOI, Sweden
- 16.00 **End**

Program. Visit to Eurenco, Karlskoga, May 19, 2016

- 07.30 Departure by Bus from Scandic Victoria Tower
- 18.00 Arrival by Bus to Scandic Victoria Tower
- 18.45 Arrival by Bus to Arlanda Airport