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IAP-SEMINAR

ANNOUNCEMENT

Date: **Tuesday, 10.1.2017**

Time: **16:00 s.t.**

Location: Technische Universität Wien, Institut für Angewandte Physik, E134

yellow tower "B", 5th floor, Sem.R. DB gelb 05 B (room number

DB05L03), 1040 Wien, Wiedner Hauptstraße 8-10

Lecturer: **Dr. Katharina Dobes** *)

RUAG Space GmbH, Wien

Subject: Materials and Process Engineering for Space Applications

Abstract: RUAG Space is the leading European supplier for products in the space industry. The

Austrian branch is specialized in supplying on-board electronics and mechanisms as

well as thermal hardware for satellites.

In the development and manufacturing of space equipment, the selection and control of suitable materials and manufacturing processes is of vital importance. The design and environmental requirements of each individual mission will govern the selection criteria. Materials and processes need to be evaluated and verified for their performance and reliability under the harsh conditions that a spacecraft will encounter during its lifetime. These include (but are not limited to) vacuum, temperature extremes, vibration, radiation, atomic oxygen, long storage and operational lifetime and - for sensitive applications such as e.g. optical systems - also stringent cleanliness requirements.

This talk aims at giving some inside into the responsibilities and challenges of a

materials and process engineer in the space industry.

All interested colleagues are welcome to this seminar lecture (45 minutes presentation followed by discussion).

¹⁾ Dipl.-Ing. Dr.techn. Katharina Dobes studied Technical Physics at TU Wien and left the Institute of Applied Physics in 2014 to work for RUAG Space GmbH. She has recently been selected as FEMtech Female Expert of the Month September 2016, a prestigious acknowledgement for the achievements of successful women working in research and technology by the Federal Ministry for Transport, Innovation and Technology (BMVIT).