

Dear Colleagues, we would like to invite you to visit the lecture presented by:

Dr. Raffaella Sesana
Politecnico di Torino

on the topic of:

**Stresses And Thermal Effects:
Engineering Research Applications**

Date: January 30, 2018 (Wednesday) at 13.00, approximate duration 4 hours

Location: Room No. 623, 6th floor of the FME, CTU in Prague, Technická 4, Prague 6

Content:

- Physics laws and radiation phenomena (45 min)
- Thermocameras and thermographic instrumentation, thermographic analysis (active and passive, direct and lock-in, online and offline techniques...) (60 min)
- Stress and thermal effects (45 min): Thermoelasticity, Thermolasticity, Micro plasticity
- Application to engineering research (90 min): Quasistatic phenomena, HCF limit assessment, Crack propagation, Defect inspection in welding, Strain propagation in twip alloys



**RAFFAELLA
SESANA**

- PhD 1998, Politecnico di Torino
- Assistant professor of “Design and Construction of Machines” in the Dept. of Mechanics and Aerospace Engineering - Politecnico di Torino (Italy) since 2004
- Expertise:
 - LCF and HCF fatigue (analytical and experimental)
 - Non-conventional materials (Material experimental calibration; analytical modeling; FEM structural modeling)
 - Experimental techniques (standard lab testing; thermography and non-destructive testing)

The lecture will be presented in English. The entry to the lecture is for free. Due to a limited number of seats, the attendants should apply to it by Jan Papuga (papuga@pragtic.com). In case too many unregistered attendants will come, the registered participants will have priority to enter the room.

On behalf of FME CTU and CSM committee:



Prof. M. Růžička

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