

Fyzika ve firmě

V jarním semestru 2019 pokračuje **kurz F5900** jehož cílem je představit z blízka i z dálky firmy a instituce, ve které najdou vaše fyzikální znalosti to nejlepší uplatnění.

<http://is.muni.cz/predmet/sci/jaro2019/F5900>

Na zájemce se těší ve **středy od 16:00 v posl. F1**

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Advanced Technology Europe
 • Systems Engineering & Applications
 • Electronic Technologies
 • Mechanical & Simulation Technologies
 • Programs

Core Technologies/Competencies
 Air, Thermal & Power Management System:
 • APU: Auxiliary Power Units
 • Engine: Turbojets, Turbofans, Turboprops
 • BMS: Bleed Management Systems

- Gather and analyze customer requirements
- Develop systems architecture
- Conduct trade-off studies
- Run simulations and conduct performance analyses

First Class Detectors

Synthetic YAG crystal
 ■ High efficiency – low noise
 ■ Fast response
 ■ Unlimited lifetime
 ■ Suitable for high vacuum

SE – Everhard-Thornley type with YAG
 Fast imaging rate (20ns/pix)

Dwell/pix	1Mpix	100 fields analysis
50 ns	50 s	> 1 hour
100 ns	0.2 s	< 3 min

Fig. On-line SE/BSE signal mixing

Fast detectors save time!!

TESCAN
 PERFORMANCE IN NANOSPACE

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Ultrasonic Level and Temperature Sensor
 Measuring Principle

oil level
 reference height

BVT Technologies

Experimental arrangement

The use of thermodiffusion for mass transport enhancement. Active part of sensor Heating and thermistor on the back side of sensor

Motor
 Output cable towards evaluation unit
 Sensor connector (KKA)
 Elastic metal contact
 Sealing
 Insulating layer
 Thermostat block
 Heating circuit of sensor
 Measured electrolyte
 Working electrode
 Alumina or BeO sensor substrate
 Pelletier element

SHW

Magnetronové napra
 ➤ vývoj magnetického pole

Myšlenka
 ↓
 Simulace MP (FEMM)
 ↓
 Konzultace s konstruktérem
 ↓
 Návrh

MĚŘENÍ NA REÁLNÉM POVRCHU

STOPY BROUŠENÍ

RŮSTOVÉ DEFEKTY

reflects the pulse solves the echo, (ToF)

Agico – 3. Příklady použití přístroje

Extenzí neogenní (jižní Itálie)
 CT 27-03

Basin-scale
 Grain-scale