

# NTF 2012 Conference Program

Thursday 11. 10. 2012

<b>8:30 - 10:00</b>	<b>Registration</b>	<b>Room T-215</b>
<b>10:00 - 11:45</b>	<b>Plenary session</b>	<b>Room T-020</b>
<b>Conference opening</b>		
Ilona Müllerová	Institute of Scientific Instruments of the Academy of Sciences of the Czech Republic	Scanning Low Energy Electron Microscopy
Pavel Tománek	Fakulta elektrotechniky a komunikačních technologií VUT v Brně	Do You Like Science? Do Not Be Afraid of Nanotechnology
Greet Langie	KU Leuven, Belgium	The New Faculty of Engineering Technology @ KU Leuven Applies E-Learning To Take Advantage of The Multicampus Model

**11:45 – 13:30 Lunch**

<b>13:30 - 15:30 Room T8-225</b>		<b>13:30 - 15:30 Room T8-322</b>	
<b>Session 1</b>		<b>Session 2 and 5</b>	
K Liedermann	Dielectric Relaxation Spectroscopy of CCTO Ceramics Modified with Transition Metals and Lanthanides	I. Zelinka	Evolutionary Dynamics and Chaotic Systems
I. Abuetwirat	Measurement of The Temperature Dependence of Complex Permittivity at Different Frequencies for Niobium Oxide Film at Commercial Electrolytic Capacito	P. Ošmera	Fractal Structure of Electron
V. Sanchez–Fajardo	Characterization of Lightweight Concrete Blocks with Basaltic Lapilli Aggregate by Dielectric Spectroscopy	M. Pekař	Thermodynamics and Rates of Chemical Reactions
P. Hockicko	Dielectric and Acoustic Study of Lipon Glasses	O. Zmeškal	Statistics of Fractal Systems
P. Tofel	New Possibilities in Non Destructive Testing by Electro-Ultrasonic Spectroscopy	O. Salyk	Organic Semiconductor as Hydrogen Sensing Material
M. Kopecký	Experimental Set-Up for Testing of Tantalum Capacitors in The Wide Temperature Range	M. Lesňák	MO SPR – Theory and Experiment
G. Cséfalvay	Acoustic Emission Signal Parameter Analysis	M. Vondra	Equivalent Circuit of Polypyrrole-Based QCM
A. Knápek	Surface Examination of Ultra-Sharp Cold Field-Emission Cathode	P. Sedlák	Model of Adsorption-Desorption Noise in QCM Gas Sensors
		I. Zelinka	Evolutionary Dynamics and Chaotic Systems

**15:30 - 16:00 Coffee break + posters**

<b>16:00 - 17:00 Room T8-225</b>		<b>16:30 - 17:30 Room T8-322</b>	
<b>Session 4</b>		<b>Session 3</b>	
E. Prokopyeva	Cell Viability Measurement	P. Synek	Microwave Plasma Torch for Synthesis of CNTS and Iron Oxide Nanoparticles
J. Sergeev	Ultrasharp Field-Emission Cathodes with Epoxy Coating	A. Obrusník	Simulations of Ar/H <sub>2</sub> Plasma in a Microwave Plasma Torch

D. Dallaeva	Scanning Tunneling Microscopy of High-Resistance Sic-Aln Solid Solutions
P. Škarvada	Microholes On The Silicon Solar Cell Surface

N. Bogatyreva	Absorption Properties of Mixtures of SF <sub>6</sub> + PTFE ARC Plasmas

**17:00 – 17:30 Posters**

**17:30 Departure for dinner and evening workshop**

**Return by 24:00**

## Friday 12. 10. 2012

<b>9:30 - 10:30 Room T8-225</b>	
<b>Session 2</b>	
J. Hlaváčová	Physics Popularization and informal Education
O. Holá	New Trends in Education of Physics at Secondary Schools
P. Hockicko	Analysis of Vehicle Stopping Distances
R. Holubová	Computer Based Experiments

**10:30 - 11:00 Coffee break**

<b>11:00 - 12:15 Room T8-225</b>	
<b>Session 2</b>	
J. Hollan	Light as a Disruptor To Be Quantified
P. Hruška	New Ways in Demonstrations of Optical Phenomena in Lecturing Physical Optics (FYO)
J. Svobodová	Physics and Environmental Studies for Teachers
J. Tilli	Poster Presentation as The Report of a Self-Designed Laboratory Experiment – a Case Study
P. Sadovský	Methods of Kindling Active Attention

**13:30 Guided tour in physics laboratories**