Správa z Konferencie doktorandov FEI – Elitech 2008

Dňa 20.5.2008 sa na FEI STU Bratislava konala Konferencia doktorandov FEI – ELITECH '08. Bolo na nej prezentovaných spolu 41 príspevkov, ktoré odzneli v 4 sekciách:

Sekcia 1: Fyzika, Jadrová fyzika, Jadrová energetika

1. Peter Bezák, Vladimír Nečas: Methodology of dismantling and demolition evaluation within
2. Juraj Breza, Petr Dařílek, Vladimír Nečas: Study of thorium advanced fuel cycle utilization in light water reactor VVER-440
3. Július Dekan, Marcel Miglierini, Danica Staššíková-Štukovská: Mössbauer study of archeological slag
4. Miroslava Diešková, Peter Bokes: Identification of the structural units of the ultrathin $Al/AlO_x/Al$ thin films and interfaces
5. Katarína Klučárová, Vladimír Nečas: Coolant flow in fuel assemblies Used in VVER-440 reactor type
6. M.Ladziansky, A.Šagátová, V.Nečas: Changes in semi-insulating GaAs detectors after neutron bombardment
7. Svetozár Michálek, Ján Haščík, Gabriel Farkas: Delayed neutron fraction (β_{eff}) calculation and measurement in training reactor VR-1
8. František Ondra, Vladimír Nečas: Methods of control of uncertainties in calculation of nuclear power plant decommissioning parameters
9. Milan Pavúk, Marcel Miglierini: Surface nanostructure evolution and in situ crystallization of amorphous $Fe_{79}Mo_8Cu_1B_{12}$ alloy
10. S.Sojak, V.Kršjak, V.Slugeň, S.Stanček, M.Petriska, K.Vitázek, S.Stacho: Application of the positron annihilation spectroscopy for study of chromium effect in radiation treated ferritic/martensitic steel
11. M.Stacho, G.Farkas, V.Slugeň, S.Sojak: Mapping of the neutron flux density distribution in pressure vessel of reactor VVER-440/V-213
12. Matej Zachar, Vladimír Nečas: Radioactive vast management in the process of nuclear installation decommissioning

Sekcia 2: Elektroenergetika, Elektrické stroje a prístroje, Mechanika

1. Rastislav Belák: Eddy currents in finite elements method
2. Vladimír Goga: Energy absorption of cellular materials
3. Peter Janiga: Program of calculation of the behaviour of power systems during short-circuit
4. Vladimír Goga: Characterisation of polyurethane foam with respect to its energy absorption
5. Juraj Kubica, Dragan Minovsky: Comparison of small hydro power in Macedonia and Slovakia
6. Marek Krasňan: Daylight as a fundamental substance for humans
7. Miroslava Smitkova: Analysis of processes for hydrogen production
8. Sandra Tabišová: Influence of the surrounding temperature on LED

Sekcia 3: Mikroelektronika

1. T.Ižák, M.Marton, M.Vojs, M.Veselý, R.Redhammer, M.Varga: Nucleation analysis of synthetic diamond on Si substrates
2. Lenka Michalíková, Bohuslav Rezek, Alexander Kromka, Marie Kalbáčová: Research on selective adhesion and arrangement of osteoblast-like cells on nanocrystalline diamnod micro-patterns
3. J.Mihálov, V.Stopjaková, J.Brenkuš: Design of integrated sigma-delta analog-to-digital converters
4. Miroslav Mikolasek, Roman Holly, Wolfgang Hilber, Kurt Hingerl, Bernard Jakoby: Design, fabrication and test of 3D AC electro-osmotic micropump based on SU-8/glass technology
5. E.Raschman, D.Ďuračková: Digital cell CNN
6. A.Reháková, I.Hotový, I.Fasaki, M.Kompitsas: Characterisation of TiO_2 semiconducting oxide thin for gas detection
7. Martin Šoka: Study of substituted NiZn ferrites
8. M.Varga, M.Veselý, Š.Bederka, T.Ižák, M.Marton, R.Redhammer: Chemical vapor deposition reactors for diamnod synthesis at FEI STU

Sekcia 4: Informatika, Automatizácia, Rádioelektronika, Telekomunikácie

1. Zdenko Brezović, Vladimír Kudják: Model PLL phase-noise performance in Matlab
2. Lukáš Adamko, Matúš Jókay, Milan Vojvoda: Statistical analysis of ECRYPT eSTREAM profile1 stream ciphers
3. Peter Kubinec: Geometrical determination of comb filter reverberator parameters
4. Michal Mikuš: New way of factoring numbers
5. Lucia Noskovičová: Camera calibration method based on direct linear transformation
6. M.Oravec, I.Sekaj: Selected population characteristics for evolutionary algorithms
7. Tomas Palenik: Matrix modelling of OFDM transmission
8. Abdullah Sultan, Oldřich Ondráček: Fetal ECG processing
9. Peter Šaštinský, Ján Hribik, Miloslav Hruškovic: The circuits ensuring sinusoidal taking of current from AC line
10. Stanislav Števo: Local area network designed by genetic algorithm
11. Jozef Šurda, Jozef Púčik, Oldřich Ondráček, Stanislav Lovás: Harmonic-to-noise ratio of emotional speech
12. Ahmad Yassine, Van Phuong Tran, Peter Farkaš: A new broadcasting technique with hybrid ARQ control for wireless networks
13. Ján Zemanovič, Peter Hajach, Peter Podhoranský, Filip Krajčovič: Input impedance calculation of off centere fed microstrip slot antenna

Odborné komisie v každej sekcii vyhodnotili po dva najlepšie príspevky. Sú to tieto práce:

1. sekcia:
- Milan Pavúk, Marcel Miglierini: Surface nanostructure evolution and in situ crystallization of amorphous $Fe_{79}Mo_8Cu_1B_{12}$ alloy
- Miroslava Diešková, Peter Bokes: Identification of the structural units of the ultrathin $Al/AlO_x/Al$ thin films and interfaces

2. sekcia:
- Vladimír Goga: Characterisation of polyurethane foam with respect to its energy absorption

- Miroslava Smitkova: Analysis of processes for hydrogen production
3. sekcia:
- Lenka Michalíková, Bohuslav Rezek, Alexander Kromka, Marie Kalbáčová: Research on selective adhesion and arrangement of osteoblast-like cells on nanocrystalline diamnod micro-patterns
- Miroslav Mikolasek, Roman Holly, Wolfgang Hilber, Kurt Hingerl, Bernard Jakoby: Design, fabrication and test of 3D AC electro-osmotic micropump based on SU-8/glass technology

4. sekcia:
- Ahmad Yassine, Van Phuong Tran, Peter Farkaš: A new broadcasting technique with hybrid ARQ control for wireless networks
- Michal Mikuš: New way of factoring numbers

V Bratislave 26.5.2008   doc. Ing. Ivan Sekaj, PhD
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