Tenth Young Researchers' Conference Materials Science and Engineering

December 21-23, 2011, Belgrade, Serbia Serbian Academy of Sciences and Arts, Knez Mihailova 35 & 36

Program and the Book of Abstracts

Materials Research Society of Serbia Institute of Technical Sciences of SASA

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Aim of the Conference

Main aim of the conference is to enable young researchers (post-graduate, master or doctoral student, or a PhD holder younger than 35) working in the field of materials science and engineering, to meet their colleagues and exchange experiences about their research.

Topics

Nanostructured materials

New synthesis and processing methods Materials for high-technology applications Biomaterials

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Results of the Conference

Beside printed «Program and the Book of Abstracts», which is disseminated to all conference participants, selected and awarded peer-reviewed papers will be published in the journals Tehnika – Novi Materijali and Chemical Industry. The best presented papers, suggested by Session Chairpersons and selected by Awards Committee, will be proclaimed at the Closing Ceremony.

VI/5

Oxidation of hydroxide ions at platinum modified zeolite electrode

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NaX zeolite was modified by platinum via impregnation/thermal decomposition technique, using Pt(II)-acetylacetonate in acetone as an impregnating solution. The samples were characterized by scanning electron microscopy. The mixture of modified zeolite and 10 wt. % of carbon black, in a form of thin layer, was pasted to a glassy carbon surface by nafion. The hydroxide ion oxidation was studied on this electrode by cyclic voltammetry. The response of modified zeolite electrodes was compared with platinum electrode, bare and covered with nafion film. The presence of nafion improved reproducibility of both covered platinum electrode and platinum modifed zeolite electrode.