

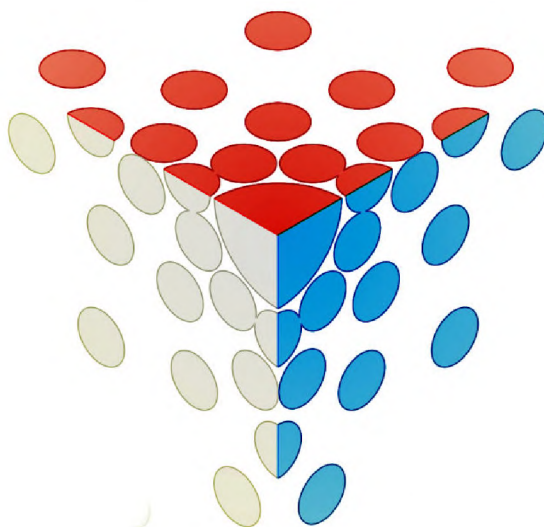
The joint event of

**The Eleventh Young Researchers' Conference
Materials Science and Engineering**

and

**The First European Early Stage Researchers' Conference on
Hydrogen Storage**

Belgrade, December 3rd - 5th, 2012



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PROGRAM AND THE BOOK OF ABSTRACTS

**MATERIALS RESEARCH SOCIETY of SERBIA
INSTITUTE of TECHNICAL SCIENCES of SASA
VINČA INSTITUTE of NUCLEAR SCIENCES, UNIVERSITY of BELGRADE
HYDROGEN STORAGE INITIATIVE SERBIA**

PROGRAM AND THE BOOK OF ABSTRACTS

**JOINT EVENT OF THE 11TH YOUNG RESEARCHERS' CONFERENCE: MATERIALS
SCIENCE AND ENGINEERING**

AND

**THE 1ST EUROPEAN EARLY STAGE RESEARCHERS' CONFERENCE ON HYDROGEN
STORAGE**

**Edited by:
Jasmina Grbović Novaković
Nenad Ignjatović**

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NOVEL ASYMMETRIC POLYETHERSULFONE MEMBRANES FOR ULTRAFILTRATION APPLICATION

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Ultrafiltration has recently become popular as a promising separation method in many industrial processes covering fractionation and concentration steps in the food, pharmaceutical and biotechnology industries as much as in water and wastewater treatments. This paper presents the synthesis of novel asymmetric polyethersulfone membranes containing an interpenetrating network of poly(glycidyl methacrylate) (PGMA). In order to improve the properties and application range of membranes, the epoxy groups from PGMA are converted to amine groups by ring opening under alkaline conditions. Membranes before and after functionalization are characterized by FTIR-ATR, elemental analysis and water permeability.

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