



Volume 13, No. 4, 2011

**MATERIAL ENGINEERING
&
NANOTECHNOLOGY**

CONTENTS

V. Ostrovskii

Surface “Homogeneity vs. Heterogeneity” Problem for Thermally Stabilized Crystalline Bodies and the Nature of heterogeneous Catalysis

M.Ioelovich, S. Noy, E. Shathin

Nanoparticles Made from Amino-Resin

M.Ioelovich

Nano-Structural Approach to Description of Enzymatic Hydrolysis of Pretreated Biomass

G.Ahmedov, Z. Mamedov, A. Alekperov, A. Bayramov

Kinetics of Phase Transformations of Bi_2Se_3 Nano-Thickness Films

G.Muravin, B. Muravin

Advantages and Limitations of Supermartensitic Stainless Steels

Yu.Krichevets, O.Terniak

Nanowires and Nanotubes Methods of Preparation



O.Figovsky, D.Beilin

Adhesion Strength of Joints of Precast Silicate Polymer Concrete
Structural Elements

A.Baskevich, V. Sobolev

Study of Short Range Ordering of Amorphous Cr-C Alloys Obtained
by Pulse Electrodeposition

E. Rybnov, R Sanzharovsky, D. Beilin

On the Durability of Reinforced Concrete Structures

O.Figovsky, O. Birukov, L. Shapovalov, F. Leykin

Hydroxyurethane Modifier as Effective Additive for Epoxy Matrix

12th INTERNATIONAL CONFERENCE “HAHOTEX ’2011”
“Environmental Friendly Nanotechnologies for Industry”
Kazan, Russia 30.11.- 02.12. 2011

R.S. Varma

Greener Biomimetic Approach to the Synthesis of Nanomaterials
and Sustainable Applications of Nano-Catalysis

**Kattesh V. Katti, Ajit Zambre, Ravi Shukla, Nripen Chanda,
Ch. W. Caldwell, Kavita Katti, Anandhi Upendran, C. Cutler,
E.J. Boote, Raghuraman Kannan**

Green Nanotechnology: An Environmentally Benign Approach
with Implications in Nanomedicine and High-Tech Industry

O.Figovsky, D.Pashin, I.Nasyrov, Z.Khalitov, D.Valeeva

Simulation of the Diffraction by Chiral Nanotubes of Arbitrary Composition

O.Figovsky, D.Pashin, I.Nasyrov, Z.Khalitov, D.Valeeva

Simulation of the Diffraction by a Circular Nanotubes
and Pseudoorthogonality Effect

LETTERS

V. Polyakov

On Calculation of the Stress-Strain State of the Pneumatic Spherical Shell
in Air Flow

I.Ruban, N. Voropatva, M. Istomin, O.Figovsky

Presowing Nanotreatment of Seed with Use of Biologically Active Nanochips

L.Dinevich, L.Ingel, A.Khain

Evaluations of Vertical Transport of Ice-Forming Particles Produced
by Ground-Base Generators



SCIENTIFIC ISRAEL
Technological Advantages

CONGRATULATION
80 years Mr. Avraam Sharnopolsky