

Monday, July 28, 2008

9:00 – 18:00

Hall H

Special Focus Symposium on Nanotechnology and Nanoscience

Chair: Dr. S. Santoli, Director,
INT - International Nanobiological Testbed Ltd. (London), UK
Via A. Zotti 86, I-00121 Rome, Italy

Session 1 - Nanomaterials

Introduction and Welcoming Address

S. Santoli
INT - International Nanobiological Testbed Ltd., London, UK

Effect of Linker Molecules on the Attachment of Gold Nanoparticles on Indium Tin Oxide Surfaces

M. Oyama and A. Orimo
Graduate School of Engineering, Kyoto University, Japan

The Influence of Silver Nanoparticles in the Second Harmonic Generation of Er³⁺ doped PbO/GeO₂ Glasses

I.V Kityk¹, M.Piasecki¹, L. Reyes Pires Kassab², D.M.da Silva³
¹Inst.of Physics, J. Dlugosz Univ. Czestochowa, Poland; ²Laboratorio de Vitros e Datação, Faculdade de Tecnologia de São Paulo, São Paulo, Brazil; ³Departamento de Engenharia de Sistemas Eletrônicos, Escola Politécnica da USP, São Paulo, Brazil

Germanate and Tellurite Glasses with Metallic Nanoparticles for Photonic Applications

L. Reyes Pires Kassab¹, D. M. da Silva², R.da Almeida Pinto², C.B.de Araújo³, A.S.L.Gomes³
¹Laboratorio de Vitros e Datação, Faculdade de Tecnologia de São Paulo, São Paulo, Brazil;
²Departamento de Engenharia de Sistemas Eletrônicos, Escola Politécnica da USP, São Paulo, Brazil;
³Departamento de Física, Universidade Federal de Pernambuco, Brazil

Manifestation of Nanocrystallites in UV-Induced Piezooptics of Nanocrystallites

M. Piasecki
J. Duglosz University Czestochowa, Poland

LUNCH BREAK 12:00 – 14:00

Monday, July 28, 2008

9:00 – 18:00

Hall H

Session 2 – Nanobiology and Biomedicine

Steric Hindrance on Biochemical Reactions of Surface-Bound DNA

M. Castronovo^{*1,2,3,4}, S. Radovic⁵, Ch. Grunwald^{1,4}, L. Casalis^{1,3}, M. Morgante^{5,6}, G. Scoles^{1,3,4,7}

* present affiliation: NanoBioMed Laboratory, CBM S.c.r.l – Cluster of Molecular Biomedicine, Basovizza (Trieste), Italy

¹ELETTRA, Sincrotrone Trieste S.C.p.A., Basovizza (Trieste), Italy

²University of Trieste, Trieste, Italy

³SISSA-Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy; ⁴IIT-Italian Institute of Technology – SISSA Unit, Trieste, Italy; ⁵Univ. of Udine, Dept. of Agricultural and Environmental Sciences, Udine, Italy

⁶Istituto di Genomica Applicata, Parco Scientifico e Tecnologico di Udine ‘Luigi Danieli’, Udine, Italy

⁷Princeton University, Chemistry Department, Princeton NJ, USA

Polyelectrolyte-Based Nanostructures in Medicine

F. Zanuttin¹, S. Mandal², F. Petrera¹, J. Lopez-Viota Gallardo¹, E. Toffoli¹, S. Krol^{2*}

¹NanoBioMed Laboratory, CBM S.c.r.l – Cluster of Molecular Biomedicine, Basovizza (Trieste), Italy

^{2*}SISSA-Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy; corresponding and presenting Author

Nanobioprobes for Multimodal Molecular Imaging: Chemical Design, Spectral Characteristics and Biomedical Applications

R. Bakalova¹, Zh. Zhelev¹, I. Aoki¹, K. Matsumoto², V. Gadjeva³, I. Kanno¹

¹Molecular Imaging Center, NIRS – National Institute of Radiological Sciences, Inage, Chiba, Japan

²Research Center for Charged Particle Therapy, NIRS – National Institute of Radiological Sciences, Inage, Chiba, Japan

³Department of Chemistry and Biochemistry, Thracian University, Stara Zagora, Bulgaria

Receptors and Drugs as Logic Formulas

A.R. Grappone

Rome Second University, Faculty of Medicine; Ed.-in-Chief, ‘Metalogicon’ Intl. Journal

Logic in the Eyes of Biomacromolecules – Can Nanobiology Be Engineered?

S. Santoli

Intl. Nanobiological Testbed Ltd