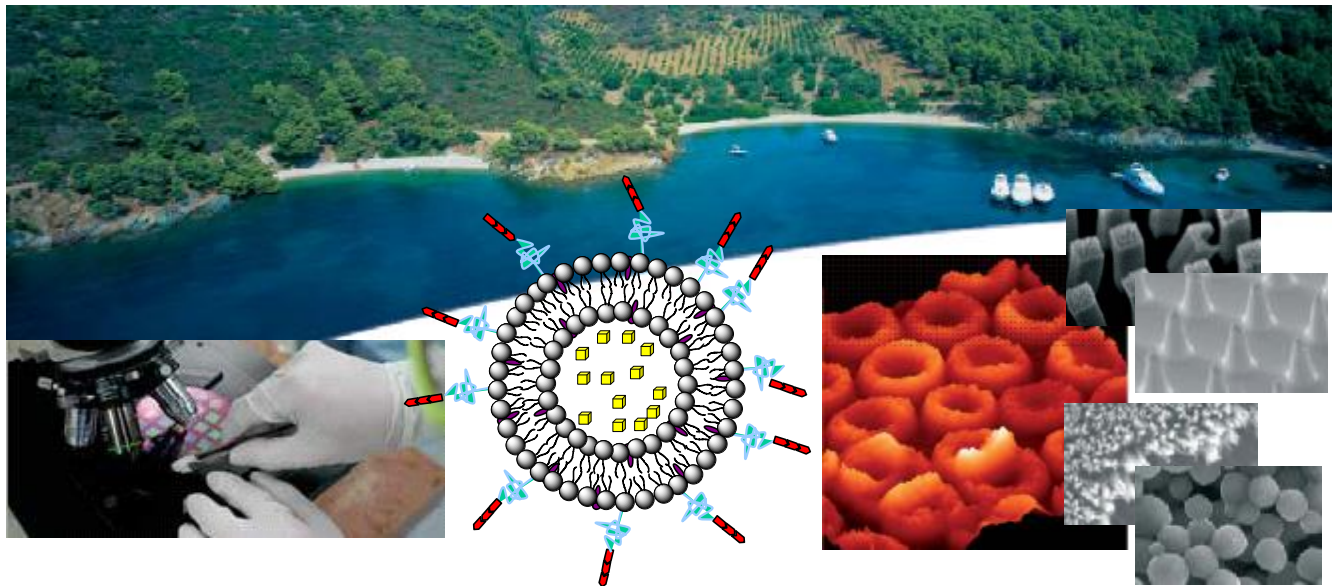




# NANOMEDICINE

## PROGRAMME



INTERNATIONAL CONFERENCE ON NANOMEDICINE

**September 9 –11, 2007**

**Porto Carras Grand Resort, Chalkidiki, Greece**

# NANOMEDICINE

International Conference on NANOMEDICINE

**Technical Theme:**

*" Nanotechnology for Health "*

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## Organizing Committee

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Prof. Costas Kiparissides (*AUTH & CERTH, Greece*)

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Dr. Olga Kammona (*CPERI/CERTH, Greece*)

Prof. Chrysanthos Zamboulis (*AUTH & CERTH, Greece*)

Prof. Nicos Maglaveras (*AUTH & CERTH, Greece*)

Prof. Asterios Tsiftoglou (*AUTH, Greece*)

Dr. Silke Megelski (*DECHEMA, Germany*)

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## International Program Committee

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Patrick Boisseau (*CEA-Léti, France*)

Vinod Subramaniam (*University of Twente/MESA+ Research Institute, The Netherlands*)

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Klaus-Michael Weltring (*Bioanalytik - muenster, Germany*)

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Christoph Schmitz (*Maastricht University, The Netherlands*)

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## Sponsors

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The Scientific Committee is grateful to the following organizations for their contributions to NANOMEDICINE.

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# NANOMEDICINE

**SUNDAY, SEPTEMBER 9, 2007**

20<sup>00</sup>      **Registration**

21<sup>00</sup>      *Reception*

**MONDAY, SEPTEMBER 10, 2007**

08<sup>30</sup> – 08<sup>45</sup>    **Opening Session - ROOM ...**

08<sup>45</sup> – 09<sup>45</sup>    **Plenary Lecture - ROOM ...**

**“Multifunctional Nanoparticles for Medical Applications”**

**O. Farokhzad**, *Harvard-MIT Division of Health Sciences & Technology, USA*

**INVITED SESSION I (I-1) – ROOM ...**

**Chairman: P. Debbage**

*Medical University of Innsbruck, Austria*

**Co-Chairman: G. Molema**

*University of Groningen, The Netherlands*

09<sup>45</sup> – 10<sup>20</sup>    Quantitative Visualization of Nanometer Scale Protein Aggregates Relevant to Neurodegenerative Disease

**V. Subramaniam**, *Biophysical Engineering Group, University of Twente, The Netherlands*

10<sup>20</sup> – 10<sup>55</sup>    Delivery of Drugs with Nanocarriers over the Blood-Brain Barrier: An Overview

**Chr. Schmitz**, *University of Maastricht, The Netherlands*

10<sup>55</sup> – 11<sup>30</sup>    *Coffee Break – Poster Viewing*

11<sup>30</sup> – 12<sup>05</sup>    Changes and Challenges in Clinical Diagnostics: Convergence of Technologies, Convergence of Players

**P. Boisseau**, *CEA-Leti, France*

12<sup>05</sup> – 12<sup>40</sup>    Embryonic, Fetal and Adult Stem Cells: Current Trends and Future Applications

**N. Anagnou**, *School of Medicine, University of Athens, Greece*

12<sup>40</sup> – 14<sup>15</sup>    *Lunch*

14<sup>15</sup> – 15<sup>35</sup>    **TWO PARALLEL AFTERNOON SESSIONS (DD-1, D-1)**

## **DELIVERY OF P/P DRUGS (DD-1) – ROOM ...**

**Chairman: E. Mastrobattista**

*University of Utrecht, The Netherlands*

**Co-Chairman: K. Tokatlidis**

*IMBB-FORTH and University of Crete, Greece*

- 14<sup>15</sup> – 14<sup>35</sup> Protein Nanoparticles Based on Coordinative Binding  
G. Hribar<sup>1</sup>, A. Žnidaršič<sup>2</sup>, M. Bele<sup>2</sup>, P. Venturini<sup>2</sup>, V. Gaberc-Porekar<sup>1</sup>, V. Menart<sup>1,3</sup>  
<sup>1</sup>*Department of Biosynthesis and Biotransformation, National Institute of Chemistry, Ljubljana, Slovenia*  
<sup>2</sup>*Department of Materials Electrochemistry, National Institute of Chemistry, Ljubljana, Slovenia*  
<sup>3</sup>*Lek Pharmaceuticals d.d., a Sandoz Company, Ljubljana, Slovenia*
- 14<sup>35</sup> – 14<sup>55</sup> Development of Thermosensitive Nanoparticles for Drug Delivery  
B. Albaigés-Gubert, N. Agulló, C.E. Semino, S.Borrós  
*Barcelona Bioengineering Center (BBC), Institut Químic de Sarrià (IQS), Universitat Ramon Llull, Spain*
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G. Gregoriadis, A. Bacon and P. Laing  
*Lipoxen Plc, London Bioscience Innovation Centre, London, United Kingdom*
- 15<sup>15</sup> – 15<sup>35</sup> The Emerging Field of Carbon Nanotube Pharmacology  
K. Kostarelos, *The School of Pharmacy, University of London, London, United Kingdom*
- 15<sup>35</sup> – 15<sup>55</sup> Supported Lipid Bilayers and Vesicles; A Platform for Screening of Nanoparticle and Molecular Interactions with Membranes  
B. Kasemo, *Chalmers University of Technology, Gothenburg, Sweden*

## **CONVERGING PERSONALISED HEALTH PLATFORM WITH NANOMEDICINE APPLICATIONS**

**(D-1) – ROOM ...**

**Chairman: N. Maglaveras**

*Aristotle University of Thessaloniki, Greece*

**Co-Chairman: M. Casella**

*Fondazione Don Carlo Gnocchi Onlus - Polo Tecnologico, Italy*

- 14<sup>15</sup> – 14<sup>35</sup> New Generation of Smart Sensors for Biochemical and Bioelectrical Applications  
G. Kotrotsios, *CSEM, Switzerland*
- 14<sup>35</sup> – 14<sup>55</sup> Convergent Technologies (NBIC) in Personalised Health and Nanomedicine: Major Challenges and Opportunities  
F. Martin-Sanchez, *Istituto de Salud Carlos III, Spain*
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N. Maglaveras, *AUTH / CERTH-IBBR, Greece*
- 15<sup>15</sup> – 15<sup>35</sup> Some Design Considerations for Theranostics in Nanomedicine  
P. Debbage, *Medical University of Innsbruck, Austria*



15<sup>55</sup> – 16<sup>20</sup> *Coffee Break – Poster Viewing*

16<sup>20</sup> – 17<sup>50</sup> **POSTER SESSION – ROOM ...**

**Chairman: C. Kiparissides**

*Aristotle University of Thessaloniki & Centre for Research and Technology Hellas, Greece*

**Co-Chairman: E. Markvicheva**

*Russian Academy of Sciences, Russia*

16<sup>20</sup> – 16<sup>25</sup> “Poster 1”

Poly(lactide)-Poly(glycidol) Block Copolymer as a New Material for Nanoparticles Formation

M. Gadzinowski, B. Miksa, S. Slomkowski

*Center of Molecular and Macromolecular Studies, Polish Academy of Sciences, Poland*

16<sup>25</sup> – 16<sup>30</sup> “Poster 2”

Development of a Nanostructured Surface Coating to Study Cellular Responses

N. Mari-Buyé<sup>1</sup>, W. S. O’Shaughnessy<sup>2</sup>, K. K. Gleason<sup>2</sup>, C. Colominas<sup>1</sup>, C. E. Semino<sup>1,2</sup>, S. Borrós<sup>1</sup>

<sup>1</sup>*Barcelona Bioengineering Center (BBC), Institut Químic de Sarrià (IQS), Universitat Ramon Llull, Barcelona, Spain*

<sup>2</sup>*Massachusetts Institute of Technology, Cambridge, MA, USA*

16<sup>30</sup> – 16<sup>35</sup> “Poster 3”

Structure Determination and Investigation of Structure Activity Relationships for Chitosaccharide based Nanomaterials

Ö.V. Rúnarsson<sup>1</sup>, J. Holappa<sup>2</sup>, T. Nevalainen<sup>2</sup>, M. Hjálmarsson<sup>3</sup>, T. Järvinen<sup>2</sup>, Th. Loftsson<sup>1</sup>, J.M. Einarsson<sup>4</sup>, H. Steinsson<sup>1</sup> and M. Másson<sup>1</sup>

<sup>1</sup>*Faculty of Pharm., Univ. of Iceland*

<sup>2</sup>*Dep. of Pharmac. Chem., Univ. of Kuopio*

<sup>3</sup>*Prog. Biomed. Sci., Reykjavik University*

<sup>4</sup>*Genis EHF, Iceland*

16<sup>35</sup> – 16<sup>40</sup> “Poster 4”

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T. S. Levchenko<sup>1</sup>, G. Mountrichas<sup>2</sup>, V. P. Torchilin<sup>1</sup>, St. Pispas<sup>2</sup>

<sup>1</sup>*Department of Pharmaceutical Sciences and Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, USA*

<sup>2</sup>*Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece*

16<sup>40</sup> – 16<sup>45</sup> “Poster 5”

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K. Kotti, O. Kammona, O. Kotrotsiou, S. Chaitidou and C. Kiparissides

*Department of Chemical Engineering, Aristotle University of Thessaloniki and Chemical Process Engineering Research Institute, Thessaloniki, Greece*

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<sup>1</sup>*Department of Pharmacy University of Iceland,* <sup>2</sup>*Össur hf.*
- 16<sup>55</sup> – 17<sup>00</sup> “Poster 8”  
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A. O. Choi, M. Behrendt, M. P. Jain, D. Maysinger  
*Department of Pharmacology and Therapeutics, McGill University, Montreal, Quebec, Canada*
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S. Papadimitriou, D.N. Bikiaris  
*Laboratory of Organic Chemical Technology, Department of Chemistry, Aristotle University of Thessaloniki, Greece*
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*Laboratory of Pharmacology, Dept. of Pharmaceutical Sciences, Aristotle University of Thessaloniki, Macedonia, Greece*
- 17<sup>10</sup> – 17<sup>15</sup> “Poster 11”  
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O. Craciunescu<sup>1</sup>, L. Moldovan<sup>1</sup>, M. Lungu<sup>2</sup>, C. Vasile<sup>3</sup>, D. Bojin<sup>4</sup>, O. Zarnescu<sup>5</sup>  
<sup>1</sup>*National Institute R-D for Biological Sciences, Bucharest, Romania*  
<sup>2</sup>*S.C. INCERPLAST S.A., Bucharest, Romania*  
<sup>3</sup>*“P. Poni” Institute of Macromolecular Chemistry, Iassy, Romania*  
<sup>4</sup>*University “Politehnica” of Bucharest, Romania*  
<sup>5</sup>*Faculty of Biology, University of Bucharest, Romania.*
- 17<sup>15</sup> – 17<sup>20</sup> “Poster 12”  
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*Department of Chemical Engineering, Aristotle University of Thessaloniki and Chemical Process Engineering Research Institute, Thessaloniki, Greece*
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T. Borowik<sup>1,2</sup>, M. Przybyło<sup>1,2</sup>, M. Langner<sup>1,2</sup>  
<sup>1</sup>*Department of Biomedical Engineering, Wrocław Technical University, Wrocław, Poland*  
<sup>2</sup>*CBR Novasome Sp. z o.o., Wrocław, Poland*
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L.C. Papadopoulou, A.S. Tsiftoglou and P.F. Foltopoulou

*Laboratory of Pharmacology, Dept. of Pharmaceutical Sciences, Aristotle University of Thessaloniki, Greece*

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S. Lousinian, S. Logothetidis  
*Physics Department, Lab for Thin Films-Nanosystems & Nanometrology (LTFN), Aristotle University of Thessaloniki, Thessaloniki, Greece*
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<sup>1</sup>*LETI-MINATEC/DTBS, CEA Grenoble, France*  
<sup>2</sup>*ANIMAGE, CERMEP, Lyon, France and INSERM, Institut Albert Bonniot, La Tronche, France*
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K.T. Al-Jamal<sup>1</sup>, N. Vargesson<sup>2</sup> and K. Kostarelos<sup>1</sup>  
<sup>1</sup>*Nanomedicine Lab, Centre for Drug Delivery Research, The School of Pharmacy, University of London, London, United Kingdom*  
<sup>2</sup>*Cell and Molecular Biology, Imperial College London, London, United Kingdom*
- 17<sup>45</sup> – 17<sup>50</sup> “Poster 18”  
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<sup>1</sup>*Institute of Organic and Pharmaceutical Chemistry, National Hellenic Research Foundation, Athens, Greece*  
<sup>2</sup>*Department of Pharmaceutical Technology, School of Pharmacy, University of Athens, Athens, Greece*
- 17<sup>45</sup> – 17<sup>55</sup> “Poster 19”  
The Control of the Energetic Parameters: Important Step in Understanding the Stability and Reactivity of the Micro and Nanostructured Materials  
S. Tanasescu, C. Marinescu, F. Teodorescu  
*Institute of Physical Chemistry of the Romanian Academy, Bucharest, Romania*

21<sup>00</sup> – 24<sup>00</sup> ***Gala Dinner***

**TUESDAY, SEPTEMBER 11, 2007**

**INVITED SESSION (I-2) – ROOM ...**

**Chairman: M. Eaton**  
*UCB Celltech, United Kingdom*

**Co-Chairman: A. Jordan**  
*MagForce Nanotechnologies AG and Charité Universitätsmedizin Berlin, Germany*

- 09<sup>00</sup> – 09<sup>35</sup> Using ICT in Personal Management Health Applications in Cardiovascular Diseases  
**J. Habetha**, *PHILIPS, The Netherlands*
- 09<sup>35</sup> – 10<sup>10</sup> Nonviral Gene Delivery: From Simple Transfection Agents to Artificial Viruses  
**E. Mastrobattista**, *Department of Pharmaceutical Sciences, University of Utrecht, The Netherlands*
- 09<sup>10</sup> – 10<sup>45</sup> Tumour Targeting: Current Status and Future Opportunities  
**R. Gaspar**, *Universidade de Lisboa, Portugal*
- 10<sup>45</sup> – 11<sup>20</sup> Recent Trends in Regenerative Medicine: An Overview  
**E. Tognana**, *Fidia Advanced Biopolymers, Italy*
- 11<sup>20</sup> – 11<sup>50</sup> *Coffee Break – Poster Viewing*
- 11<sup>50</sup> – 13<sup>30</sup> **TWO PARALLEL MORNING SESSIONS (G-1, G-2)**

**GENERAL SESSION I (G-1) – ROOM ...**

**Chairman: Ch. Grandfils**

*University of Liege, Belgium*

**Co-Chairman: G. Gregoriadis**

*Lipoxen Plc, United Kingdom*

- 11<sup>50</sup> – 12<sup>10</sup> Selected Applications of Nano-Particles for Health, Safety and Convenience  
H. Schmid  
*Fraunhofer-Institut Chemische Technologie (ICT), Pfinztal, Germany*
- 12<sup>10</sup> – 12<sup>30</sup> Photosensitiser-Nanoparticle Conjugates for the Photodynamic Therapy of Cancer  
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*University of East Anglia, United Kingdom*
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A.S. Tsiftoglou<sup>1</sup>, S.A. Lazos<sup>1</sup>, T.A. Brussali<sup>2</sup> and T. Chronis<sup>2</sup>  
*<sup>1</sup>Laboratory of Pharmacology and <sup>2</sup>Laboratory of Pharmaceutical Technology, Dept. of Pharmaceutical Sciences, Aristotle University of Thessaloniki, Macedonia, GREECE*
- 12<sup>50</sup> – 13<sup>10</sup> Site-Specific Intracellular Protein Targeting to Mitochondria  
K. Tokatlidis  
*IMBB-FORTH and University of Crete, Greece*
- 13<sup>10</sup> – 13<sup>30</sup> Rapid Pre-Assessment and Analysis of Nanoparticle Toxicity on the Human Microvasculature Using Non-Conventional Tests  
R. E. Unger<sup>1</sup>, K. Peters<sup>2</sup>, A. Sartoris<sup>1</sup>, C. J. Kirkpatrick<sup>1</sup>  
*<sup>1</sup>Institute for Pathology, REPAIR Lab, Johannes-Gutenberg University, Mainz  
<sup>2</sup>Center for Medical Research, Biomedical Research Center, Univeristy of Rostock, Germany*

**GENERAL SESSION II (G-2) – ROOM ...**

**Chairman: N. Anagnou**

University of Athens, Greece

**Co-Chairman: E. Tognana**

*Fidia Advanced Biopolymers, Italy*

11<sup>50</sup> – 12<sup>10</sup> 3-D Bone and Cartilage Constructs in Alginate Hydrogels from Murine Embryonic Stem Cells

Y.-S. Hwang<sup>1</sup>, M.R. Placzek, J. M. Cha, A. Chan<sup>1</sup>, S.G. Kazarian<sup>1</sup>, J. M. Polak and A. Mantalaris<sup>1</sup>

<sup>1</sup>*Department of Chemical Engineering, South Kensington Campus, Imperial College London, United Kingdom*

12<sup>10</sup> – 12<sup>30</sup> Peptides Entrapped in Biodegradable PLGA Microparticles Accelerate Tissue Repair at Gastric Ulcer Treatment in Rats

E.Markvicheva<sup>1</sup>, K. Stashevskaya<sup>1</sup>, I. Prudchenko<sup>1</sup>, S. Strukova<sup>2</sup> and Ch. Grandfils<sup>3</sup>

<sup>1</sup>*Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Miklukho-Maklaya Str., 16/10, 117997 Moscow, Russia*

<sup>2</sup>*Lomonosov Moscow State University, Faculty of Biology, Vorob'evy Gory, 119992 Moscow, Russia*

<sup>3</sup>*Interfacultary Biomaterial Centre (CEIB), University of Liege, Belgium*

12<sup>30</sup> – 12<sup>50</sup> Hemocompatibility Study of New Polycations Tailored to Mask the Antigens of the Red Blood Cells

Ch. Grandfils<sup>1</sup>, Ch. Sevrin<sup>1</sup>, P. Foresto<sup>2,3</sup>, F. Relancio<sup>3</sup>, V. Danieli<sup>2,3</sup>, A. Korol<sup>2</sup>, L. Di Tullio<sup>2</sup>, N. Valverde<sup>2,3</sup>, D. Sondag<sup>4</sup>, B. Riquelme<sup>2,3</sup>

<sup>1</sup>*Centre Interfacultaire des Biomatériaux (CEIB), Université de Liège, Institut de chimie, Liège (Sart-Tilman), Belgium*

<sup>2</sup>*Facultad de Ciencias Bioquímicas y Farmacéuticas, UNR, Rosario, Argentina.*

<sup>3</sup>*Applied Optics to Biology, Instituto de Física Rosario (CONICET-UNR) – Rosario, Argentina.*

<sup>4</sup>*Service du Sang, Centre de Transfusion Sanguine, Liège, Belgium.*

12<sup>50</sup> – 13<sup>10</sup> AFM Study of Platelets Interactions with Carbon-based Nanocoatings for Cardiovascular Stents

V.Karagkiozaki<sup>1,2</sup>, S.Logotheidis<sup>1</sup>, G.Giannoglou<sup>2</sup>

<sup>1</sup>*Aristotle University of Thessaloniki, Department of Physics, Thessaloniki, Greece*

<sup>2</sup>*AHEPA Hospital, 1st Cardiology Department, AUTH, Thessaloniki, Greece*

13<sup>10</sup> – 13<sup>30</sup> Quantitative Analysis of Drugs in Corporal Fluids Using Surface-Enhanced Raman Spectroscopy.

A.C. Manikas<sup>1</sup>, A. Soto Beobide<sup>1</sup>, J. Collazos-Castro<sup>2</sup> and G. A. Voyiatzis<sup>1</sup>

<sup>1</sup>*Foundation for Research and Technology, Institute of Chemical Engineering and High Temperature Chemical Processes (FORTH/ICE-HT), Rio-Patras, Hellas*

<sup>2</sup>*Neural Repair Laboratory, Hospital Nacional de Paraplégicos, Toledo, Spain*

13<sup>30</sup> – 15<sup>30</sup> **Lunch**

15<sup>30</sup> – 16<sup>50</sup> **TWO PARALLEL AFTERNOON SESSIONS (DD-2, D-2)**

**NANOCARRIER SYSTEMS FOR DRUG DELIVERY (DD-2) – ROOM ...**

**Chairman: R. Gaspar**

*Universidade de Lisboa, Portugal*

**Co-Chairman: D. Russel**

*University of East Anglia, United Kingdom*

- 15<sup>30</sup> – 15<sup>50</sup> Local Pharmacological Effects and Site-Specific Inhibition of Glomerulonephritis Progression by Targeted Delivery of Dexamethasone to Glomerular Endothelium.  
J. A.A.M. Kamps, S. A. Ásgeirsdóttir, H. I. Bakker, P. J. Zwiers, P. Heeringa, H. Morselt, H. E. Moorlag, G. Molema  
*Department of Pathology & Laboratory Medicine, Medical Biology section, University Medical Center Groningen (UMCG), University of Groningen, The Netherlands*
- 15<sup>50</sup> – 16<sup>10</sup> Physicochemical and Drug Delivery Aspects of Liposome Encapsulated Anti-Inflammatory Biological Agents  
M. Trif<sup>1</sup>, L. Moldovan<sup>2</sup>, M. Moisei<sup>1</sup>, O. Craciunescu<sup>2</sup>, F. Chelu<sup>1</sup>, A. Roseanu<sup>1</sup>, J. M. Brewer<sup>3</sup>  
<sup>1</sup>*Institute of Biochemistry, Romanian Academy, Bucharest, Romania*  
<sup>2</sup>*National Institute for C-D in Biological Sciences, Romanian Ministry of Research, Bucharest, Romania*  
<sup>3</sup>*University of Strathclyde, Centre for Biophotonics, Glasgow, Scotland, UK*
- 16<sup>10</sup> – 16<sup>30</sup> Biopolymeric Hydrogels for Nanomedicine  
M. Borgogna, E. Marsich, I. Donati, P. Mozetic, A. Cesàro and S. Paoletti  
*Department of Biochemistry, Biophysics and Macromolecular Chemistry, University of Trieste, Italy*
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*Institute of Physical Chemistry, NCSR “Demokritos”, Greece*

## **NANOPARTICLES FOR DIAGNOSTICS (D-2) – ROOM ...**

**Chairman: P. Boisseau**

*CEA-Leti, France*

**Co-Chairman: H. Schmid**

*Fraunhofer-Institut Chemische Technologie (ICT), Germany*

- 15<sup>30</sup> – 15<sup>50</sup> Recombinant Antibody Targeted Magnetic Nanoparticles for Cancer Imaging and Therapy  
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<sup>1</sup>*Department of Oncology, <sup>3</sup>Department of Molecular Medicine, Royal Free and University College Medical School UCL, London, UK. <sup>2</sup>RCS Unit of Biophysics, UCL Institute of Child Health, London, UK. <sup>4</sup>London Centre for Nanotechnology UCL, London, UK. <sup>5</sup>London School of Pharmacy, London, UK*
- 15<sup>50</sup> – 16<sup>10</sup> Nanoparticle-based Cancer Biomarker Sensor  
G. Y. Kim, K. D. Daniel, Chr. C. Vassiliou, L. Josephson, M. J. Cima  
*Department of Materials Science & Engineering, Massachusetts Institute of Technology, Cambridge, USA*  
*Center for Molecular Imaging Research, Massachusetts General Hospital and Harvard Medical School, Charlestown, USA*

16<sup>10</sup> – 16<sup>30</sup> Synthesis and Optical Properties of Gold Nanorods with Applications in Nanomedicine  
C. Ungureanu, R. G. Rayavarapu, W. Petersen, T. G. van Leeuwen and S. Manohar  
*Institute for Biomedical Technology (BMTI), Biophysical Engineering group, Faculty of Science and Technology, University of Twente, The Netherlands*

16<sup>30</sup> – 16<sup>50</sup> Endocytosis of Nanoparticles  
C. Tekle<sup>1,2</sup>, K. Sandvig<sup>1,2</sup> and T.-G. Iversen<sup>1</sup>  
<sup>1</sup>*Department of Biochemistry, Centre for Cancer Biomedicine, Rikshospitalet-Radiumhospitalet HF, Montebello, Oslo, Norway*  
<sup>2</sup>*Department of Molecular Biosciences, University of Oslo, Norway*

16<sup>50</sup> – 17<sup>20</sup> **Coffee Break – Poster Viewing**

17<sup>20</sup> – 18<sup>40</sup> **TWO PARALLEL AFTERNOON SESSIONS (DD-3, D-3)**

**TARGETED DELIVERY (DD-3) – ROOM ...**

**Chairman: Chr. Schmitz**  
*University of Maastricht, The Netherlands*

**Co-Chairman: F. Sinner**  
*Joanneum Research, Austria*

17<sup>20</sup> – 17<sup>40</sup> Thermo-therapy Using Magnetic Nanoparticles  
K. Maier-Hauff<sup>1</sup>, P. Wust<sup>2</sup>, M. Johannsen<sup>3</sup>, B. Rau<sup>4</sup>, R. Scholz<sup>5</sup>, B. Thiesen<sup>6</sup>, J.-T. Ollek<sup>2</sup>, L. Eckelt<sup>5</sup>, C.H. Cho<sup>2</sup>, K. Taymoorian<sup>3</sup>, D. Böhmer<sup>2</sup>, F. Kahmann<sup>7</sup>, T. Henkel<sup>7</sup>, A. Brickenkamp<sup>7</sup>, P. Drozdzyński<sup>7</sup>, A. Jordan<sup>5,2</sup>  
<sup>1</sup>*Bundeswehrkrankenhaus Berlin, ZE Neurochirurgie, Berlin, Germany*  
<sup>2</sup>*Charité Universitätsmedizin Berlin, Klinik für Strahlentherapie, CVK, Berlin, Germany*  
<sup>3</sup>*Charité Universitätsmedizin Berlin, Klinik für Urologie, CCM, Berlin, Germany*  
<sup>4</sup>*Charité Universitätsmedizin Berlin, CCB/RRK, Klinik f. Chirurgie Chirur. Onkologie, Berlin, Germany*  
<sup>5</sup>*MagForce Nanotechnologies AG, Berlin, Germany*  
<sup>6</sup>*Charité Universitätsmedizin Berlin, Center of Biomedical Nanotechnology (CBN), Berlin, Germany*  
<sup>7</sup>*Private Clinical Practices for Urology, Berlin, Krefeld and Düsseldorf, Germany*

17<sup>40</sup> – 18<sup>00</sup> An Innovative Strategy to Study in Vivo Pharmacology of Targeted Drug Delivery Therapeutics  
G. Molema, S. A. Ásgeirsdóttir, P. J. Zwiers, P. Heeringa, and J. A.A. M.Kamps  
*Dept. Pathology & Laboratory Medicine, Medical Biology section, Division of Endothelial Biomedicine & Vascular Drug Targeting, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands*

18<sup>00</sup> – 18<sup>20</sup> Lipid Based Smart Nanostructures as Drug Delivery Formulations  
M. Monduzzi<sup>1</sup>, R. Angius<sup>1</sup>, S. Murgia<sup>1</sup>, A. Falchi<sup>2</sup>, G. Diaz<sup>2</sup>  
<sup>1</sup>*Dept. Scienze Chimiche, Cagliari University and CSGI, Italy*  
<sup>2</sup>*Dept. Citomorfologia, Cagliari University, Italy*

18<sup>20</sup> – 18<sup>40</sup> Photoinduced Cancer Treatment Using Nanostructured Titanium Dioxide Solution and Corresponding Molecular Mechanisms  
N. Lagopati<sup>a,b</sup>, A.I. Kontos<sup>b</sup>, P. Venieratos<sup>a</sup>, P. Kitsiou<sup>a</sup>, E.F. Tsilibari<sup>a</sup>,

P. Falaras<sup>b</sup>

<sup>a</sup>*Institute of Biology*, <sup>b</sup>*Institute of Physical Chemistry, NCSR "Demokritos", Athens, Greece*

**IMAGING (D-3) – ROOM ...**

**Chairman: K. Kostarelos**

*University of London, United Kingdom*

**Co-Chairman: T.-G. Iversen**

*University of Oslo and Institute for Cancer Research, Norway*

- 17<sup>20</sup> – 17<sup>40</sup> Tracking and Preventing Quantum Dot-Induced Cytotoxicity  
M. P. Jain, A. O. Choi, E. Przybytkowski, M. Behrendt, A. Khatchadourian, D. Maysinger  
*Department of Pharmacology and Therapeutics, McGill University, Montreal, Quebec, Canada*
- 17<sup>40</sup> – 18<sup>00</sup> Skin Piercing with Microneedles for Innovative Biosensors and User-friendly Microfluidic Transdermal Drug Delivery  
M. Casella<sup>a,e</sup>, F. Gramatica<sup>a</sup>, M. Bedoni<sup>b</sup>, E. Di Fabrizio<sup>d,e</sup>, E. Donetti<sup>b</sup>, M. Matteucci<sup>c</sup>  
<sup>a</sup>*Lab. Biofisica e Nanomedicina, Polo Tecnologico, Fondazione Don Gnocchi IRCCS-ONLUS, Milan, Italy*  
<sup>b</sup>*Dipartimento di Morfologia Umana, Università degli Studi di Milano, Milan, Italy*  
<sup>c</sup>*Sincrotrone Trieste "ELETTRA", Basovizza-Trieste, Italy*  
<sup>d</sup>*INFN-TASC- S.S., Basovizza-Trieste, Italy*  
<sup>e</sup>*BIONEM Lab, Dipartimento di Medicina Sperimentale e Clinica, Università Magna Graecia, Catanzaro, Italy*
- 18<sup>00</sup> – 18<sup>20</sup> New Highly Efficient, Multifunctional Nanoparticle for Diagnostics  
F. Sinner, R. Prassl  
<sup>1</sup>*Joanneum Research, Institute of Medical Technologies and Health Management, Graz, Austria*  
<sup>2</sup>*Institute of Biophysics and Nanosystem Research, Austrian Academy of Science, Graz, Austria*  
<sup>3</sup>*Medical University of Innsbruck, Department of Histology and Molecular Cell Biology, Innsbruck, Austria*
- 18<sup>20</sup> – 18<sup>40</sup> Targeted Stealth Liposomal Nanoparticles for Diagnostic Imaging  
M. Saba-Lepek<sup>1</sup>, E. von Guggenberg<sup>2</sup>, P. Debbage<sup>3</sup>, B. Stark<sup>1</sup>, R. Prassl<sup>1</sup>,  
<sup>1</sup>*Institute of Biophysics and Nanosystems Research, Austrian Academy of Sciences, Graz, Austria*  
<sup>2</sup>*Clinical Department of Nuclear Medicine, University of Medicine, Innsbruck, Austria*  
<sup>3</sup>*Department of Histology and Molecular Cell Biology, University of Medicine, Innsbruck, Austria*



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## Social Programme

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**T**he social program planned, centered around the theme of *spouse appreciation*, aims to motivate the participation of all spouses. Swimming, sunbathing, short excursions and other social activities will be available. The Symposium banquet will take place on the evening of September 11.

### Sunday September 9, 2007

**21:00** **A** welcome reception hosted by the National Organizing Committee in honor of the participants will take place at ..... bar of MELITON Hotel. Wine and finger Buffet will be offered. The event is open to all participants and accompanying persons.

### Monday September 10, 2007

**21:00** **S**ymposium Banquet (Gala Dinner, Greek Music). The Symposium Banquet will take place at ..... Enjoy an informal Greek evening with local dishes and Greek wine. Besides the traditional Greek dinner, the Banquet will also include a cultural program with live music. These festivities, expected to last until the early hours of the morning, aim to honor the very important contributions of all spouses and companions to our technical community.

### Symposium Tour Program for Accompanying Persons

**T**he Symposium Program is designed to satisfy a variety of interests, with cruises, coach tours to famous archaeological sites and areas of historic interest, places worth seeing during your stay in Chalkidiki.

### Monday September 10, 2007

**10:00 - 16:00** **S**ightseeing trips and excursions to the major sites of Chalkidiki starting from the hotel.

### Tuesday September 11, 2007

**10:00 - 16:00** **S**wimming and sunbathing is strongly recommended. The Porto Carras Grand Resort boasts some of the bluest, cleanest and warmest waters in all of Greece. Enjoy this turquoise swimming paradise combined with the golden pristine sands.

**E**xplore Porto Carras Grand Resort: A great variety of bars, restaurants and shops each with its own unique atmosphere, provide plenty of choices for things to see and do.

**R**elax and Rejuvenate: The new Thalassotherapy and Spa center of Porto Carras - the biggest in Southeastern Europe (4.700m<sup>2</sup>) - applies in a modern way, the most ancient methods to health and beauty. By offering a wide range of treatments and therapies, our target is to relax totally, both your body and soul. All you have to do is visit our center, lay comfortably back, enjoy the view to the sea and let the experienced therapist hands guide you to a unique journey "in the land of senses...".

## Time Schedule NANOMEDICINE

Sunday, September 9		Monday, September 10		Tuesday, September 11	
		08:30-08:45	Welcome	09:00-11:20	INVITED SESSION II
		08:45-09:45	Plenary	09:00-11:20	Invited lectures
		09:45-13:10	INVITED SESSION I	11:20-11:50	Coffee Break - Poster Viewing
		09:45-10:55	Invited lectures	11:50-13:30	ORAL SESSIONS
		10:55-11:30	Coffee Break - Poster Viewing		G-1      G-2
		11:30-12:40	Invited lectures	11:50-13:30	Oral presentations
		12:40-14:15	Lunch	13:30-15:30	Lunch
		14:15-15:55	ORAL SESSIONS	15:30-16:50	ORAL SESSIONS
			DD-1      D-1		DD-2      D-2
		14:15-15:55	Oral presentations	15:30-16:50	Oral presentations
		15:55-16:20	Coffee Break - Poster Viewing	16:50-17:20	Coffee Break - Poster Viewing
		16:20-17:55	POSTER SESSION	17:20-18:40	ORAL SESSIONS
20:00	Registration	16:20-17:50	Poster presentations		DD-3      D-3
21:00	Reception	21:00-24:00	Gala Dinner	17:20-18:40	Oral presentations

**DD-1:** Delivery of P/P Drugs

**D-1:** Converging Personalised Health Platform with Nanomedicine Applications

**G-1:** General Session I

**DD-2:** Nanocarrier Systems for Drug Delivery

**D-2:** Nanoparticles for Diagnostics

**G-2:** General Session II

**DD-3:** Targeted Delivery

**D-3:** Imaging