

FINAL PROGRAMME

SUNDAY JUNE 21

15:00-21:00 PM Registration/Conference Check-in

MONDAY JUNE 22

09:30-12:30 PM

SESSION I

Chairmen: Thomas J. Webster and Djuro Koruga

09:30-10:00 AM

Welcoming Remarks

10:00-10:45 AM

*Plenary Talk: 15 Years of Conducting Nanomedicine
Research: Where are We Headed?*

Thomas J. Webster, Northeastern University, USA

10:45-11:15 AM

*Invited talk: PH Dependent Antibacterial Activity of Dextran-coated
Nanoceria*

Hilal Yazici, Ece Alpaslan, Thomas J. Webster, Northeastern University,
USA, King Abdulaziz University, Saudi Arabia*

11:15-11:30 AM

Coffee

11:30-11:50 AM

**Stem Cells from Fat Tissue and Their Application - Pilot Study in
Patients with Anal Fissures**

Katarina Andjelkov, Sforza M., Petrovic J., Krivokapic Z., BelPrime Clinic,
University of Medicine, Belgrade, Serbia*

11:50-12:10 PM

**Development of Pegylated PLGA Nanoparticle for Controlled and
Sustained Drug Delivery in Chronic Myeloid Leukemia**

Sampath Malathi, Sengottuvelan Balasubramanian, Guindy Campus
University of Madras, India*

GOLDEN SPONSOR CONFERENCE: **The International Journal of Nanomedicine**

SILVER SPONSOR CONFERENCE : **BIOPTRON, Zepter International**

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- 12:10-12:30 PM** **Raman & Fluorescence-based Multiplexed Realtime Imaging**
Dae Hong Jeong, Sinyoung Jeong, Yoon-Sik Lee, Keon Wook Kang, and Dong Soo Lee, Seoul National University, Seoul National University College of Medicine, Korea*
- 12:30-12:50 PM** **Sers Nano Probes for Bio Applications**
Yoon-Sik Lee, Professor, School of Chemical and Biological Engineering, Pioneer Research Program Chair, Seoul National University, Korea
- 13:00-14:30 PM** Break for Lunch
- 14:30-16:30 PM** **SESSION II**
Chairmen: Alexander N. Kharlamov and Ljiljana Korugic-Karasz
- 15:00-15:30 PM** **Invited talk: The Polymeric Thermoelectric Energy Harvesting Systems for Biomedical Applications Iodine-doped MEH-PPV Blends with Carbon Nanotubes**
Ljiljana Korugic-Karasz, Murat Tonga, Patrick S. Taylor, Eugene Wilusz, Frank E. Karasz, Paul M Lahti, University of Massachusetts, Natick Soldier RDE Center, USA*
- 15:30-15:50 PM** **Investigation of the Hev Blue Light Blocking Effect of Nanophotonic Material**
Bozica Bojovic, Marija Tomic, Marina Nikolic, Dragomir Stamenkovic, Djuro Koruga, University of Belgrade, Zelezara Smederevo d.o.o., Optix d.o.o, University of Belgrade and European Centre of Peace and Development, Serbia*
- 15:50-16:10 PM** **Characterisation of Photonic Nanomaterials for Contact Lenses, Before and After Exposure to External Magnetic Field by Spinner Magnetometer and Optomagnetic Imaging Spectroscopy**
Marija Tomic, Bozica Bojovic, Dragomir Stamenkovic, Lidija Matija, Djuro Koruga, University of Belgrade, Optix*

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16:10-16:30 PM **Long-term Outcomes in Population Undergoing Plasmonic Photothermal Therapy of Atherosclerosis with Silica-gold Nanoparticles: Safety in Nanom-fim Trial**
Alexander N. Kharlamov, Ural Institute of Cardiology, Russia

17:00-19:00 PM **POSTER SESSION (1-10)**

TUESDAY JUNE 23

09:00-12:00 PM **SESSION III**
Chairmen: Alexander Majouga and Suzana Miljkovic

09:00-09:45 AM **Plenary talk: Water Based Nanomedicine: Diamagnetic / Paramagnetic Properties of Water, Healthy and Unhealthy Biological Tissues**
Djuro Koruga, University of Belgrade and European Centre of Peace and Development, Serbia

09:45-10:15 AM **Invited talk: Nanohybrid Magnetic Materials for Biomedical Application**
Alexander Majouga, Efremova M.V., Beloglazkima E.K., Rudakovskaya P.G., Zyk N.V., Golovin U.I., Klyachko N.L., Panova E.I., Shetinin I.V., Sviridenkova N.V., Savchenko A.G., Lomonosov Moscow State University, Derzhavin Tambov State University, National University of Science and Technology, Russia*

10:15-10:35 AM **Remanent Magnetism on Nano and Pico Tesla Level of Biological Tissues**
Aleksandra Dragicevic, Lidija Matija, Zoran Krivokapic, Andrej Ilankovic, Djuro Koruga, University of Belgrade, Clinical Centre of Serbia, University of Belgrade and European Centre of Peace and Development, Serbia*

10:35-10:50 AM Coffee

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- 10:50-11:10 AM** **Water Structured by Very Low Concentration of Fullerol: Implications for Dominant Role of Water in Their Antioxidant and Radioprotective Effects**
Jelena Muncan, Ivana Mileusnic, Boris Kosic, Lidija Matija, University of Belgrade, Serbia*
- 11:10-11:30 AM** **Development of Moisturising Skin Care Product with Nano Harmonized Substance**
Suzana Miljkovic, Lidija Matija, Jelena Muncan, Jadran Bandic, Djuro Koruga, European University Novi Sad, University of Belgrade, ORS Hospital, University of Belgrade and European Centre of Peace and Development, Serbia*
- 11:30-11:50 AM** **Biophysics of Pain Suppression by Polarized Light and Near Infrared Irradiation: Exposure of Acupuncture Points on Nano Scale**
Sergiy A. Gulyar, Zynaida A. Tamarova, Bogomoletz Institute of Physiology National Academy of Sciences of Ukraine, International Medical Innovation Centre Zepter, Ukraine*
- 12:00-14:00 PM** **POSTER SESSION (11-20)**
- 14:00-15:00 PM** Break for lunch
- 15:00-17:30 PM** **SESSION IV**
Chairmen: Alexander Majouga and Suzana Miljkovic
- 15:00-15:30 PM** **Invited talk: Rapid Bone Regeneration with Nano-Hydroxyapatite Coated with a Chitosan-poly (d,l)-lactide-co-glycolide Bone-filling Material with Osteoconductive and Antimicrobial Properties**
Nenad Ignjatovic, Uskokovic V., Ajdukovic Z., Mihajilov-Krstev T., Uskokovic D., Institute of Technical Sciences of the Serbian Academy of Science and Arts, Belgrade, Serbia, University of Illinois at Chicago, USA, University of Nis, Serbia*

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| 15:30-15:50 PM | <p>MGO Nanomaterials Improve Cell Functions and Reduce Bacterial Infections for Orthopedic Tissue Engineering Applications
 <i>Daniel J. Hickey*, Thomas J. Webster, Northeastern University, USA, Abdulaziz University, Saudi Arabia</i></p> |
| 15:50-16:10 PM | <p>Silver Nanoparticle-embedded Polymersome Nanocarriers for the Treatment of Antibiotic-resistant Infections
 <i>Benjamin M. Geilich*, Anne L. van de Ven, Srinivas Sridhar, Thomas J. Webster, Northeastern University, USA, King Abdulaziz University, Saudi Arabia</i></p> |
| 16:10-16:25 PM | <p>Coffee</p> |
| 16:25-16:45 PM | <p>Selenium Nanoparticle Coatings for Anti-cancer, Anti-bacterial Bone Endoprostheses
 <i>Michelle Stolzoff*, Thomas J. Webster, Northeastern University, USA</i></p> |
| 16:45-17:05 PM | <p>Drug Releasing Implants Based on Nanoengineered Titania Nanotubes for Localized Bone and Cancer Therapy
 <i>Dusan Losic*, Karan Gulatu, Gagandeep Kaur, Shaheer Maher, Shafiur Rahman, Gerald J. Atkins, David M. Findlay, Andreas Evdokiou, University of Adelaide, Australia</i></p> |
| 17:05-17.25 PM | <p>Ultrastable Surfactant Free Metal Nanoparticles Study for Biomedical Applications
 <i>Rauwel E*, Rauwel P., Guha M., Lorena S. Gracia, Kuunal S., Wragg D., Tallinn University of Technology, Estonia, University of Oslo, Norway, University of Tartu, Estonia</i></p> |

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WEDNESDAY JUNE 24

09:00-12:00 PM

SESSION V

Chairmen: Petra Povalej Bržan and Sergiy A. Gulyar

09:00-09:45 AM

*Plenary talk: **The Science of Entrepreneurship in Nanomedicine**
Aamir Butt, Nanomedical Accelerace, UK*

09:45-10:15 PM

*Invited talk: **Aquaphotomic Study of Hydrated Hydroxylated Fullerene Based on Skin Nanocream: Water Based Nanomedicine**
Lidija Matija*, Muncan J., Tsenkova R., Mileusnic I., Koruga D., University of Belgrade, Serbia, Kobe University, Japan, University of Belgrade and European Centre of Peace and Development, Serbia*

10:15-10:35 PM

***Nanophysical approach of endocervical and exocervical smears characterization using optomagnetic imaging spectroscopy**
B. Jeftic*, M. Papic-Obradovic, L. Matija, Dj. Koruga, University of Belgrade, European Centre of Peace and Development, Serbia*

10:35-10:55 AM

***Bioinformatics Education in Slovenia from an IT Perspective**
Milan Zorman, Peter Kokol, Gregor Stiglic, Petra Povalej Brzan*, Matjaz Debevc, University of Maribor, Slovenia*

10:55-11:15 PM

***BIOPTON Hyperpolarized Nano-Photodynamic Light Therapy in Medicine**
Michael McNamara*, Sanja Vranic, Djuro Koruga, BIOPTON AG, Wollerau, Switzerland and International Department of Biomedical Engineering and Nanomedicine, ECPD /University of Belgrade, Belgrade, Serbia*

11:15-11:45 PM

Coffee

12:00-13:00 PM

***Workshop: ECPD programs in nanomedical engineering and nanaomedicine**
Djuro Koruga, University of Belgrade and European Centre for Peace and Development, Serbia*

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13:00 -15:00 PM

Break for lunch

15:00-17:00 PM

Workshop: **Start-up Companies in Nanomedicine**

Aamir Butt, Nanomedical Accelerace, UK

THURSDAY JUNE 25

09:00-10:00 AM

Books promotion:

Basic Knowledge, Clinical Symptoms and Treatment of Depression

Authors: Sushil Sharma, Saint James School of Medicine, Bonaire, Dutch Caribbean, Netherlands

and

Introduction to Biomedical Chronodynamics

Authors: Suzana Miljkovic, Bozica Bojovic, Djuro Koruga, DonVas, Belgrade, Serbia.

10:00-10:15 AM

Coffee

10:30-20:00 PM

Visit of Dubrovnik or/and Budva

FRIDAY JUNE 26

10:00-11:00 AM

Award Ceremony, Closing Speeches

Thomas J. Webster, Aamir Butt, Djuro Koruga

12:00 PM

Departure Hotel

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POSTER SESSION I (1-10)

P01. MRI-contrasted Au-Fe₃O₄ Hybrid Nanoparticles for Advanced Radiotherapy

Filippo Benetti, Devid Maniglio, Luca Minati, Aldo Valentini, Giorgio Speranza, Claudio Migliaresi, University of Trento, Fondazione Bruno Kessler, Azienda Provinciale pre I Servizi Sanitari, Italy*

P02. New Hope for Eradication of HIV from the Body: the Role of Polymeric Nanomedicines in HIV/AIDS Pharmacotherapy

Jimma Likisa Lenjisa, Minyahil Alebachew Woldu, Gizaw Dabessa Satessa, College of Medicine and Health Sciences, Ethiopia

P03. Controlled Drug Delivery by Polymer-Gold Nanoconjugates

Mani Gajendiran, Sengottuvelan Balasubramanian, Guindy Campus University of Madras, India

P04. Coating Polyurethane Surfaces by Electrostatic Charging Followed by dip Coating/Electrophoretic Deposition

Garima Bhardwaj, Northeastern University, USA

P05. Electrospun Silk Doped with Selenium nanoparticles to Enhance Antibacterial Properties

Stanley Chung, Michelle Stolzoff, Batur Ercan, Thomas J. Webster, Northeastern University, USA

P06. Potential of Cerium Oxide Nanoparticles as Reactive Oxygen Scavengers

Ece Alpaslan, Hilal Yazici, Merlyn Vargas, Amit K. Roy, Jaime Gallego, Thomas J. Webster, Northeastern University, USA, Universidad de Antioquia UdeA, Colombia, King Abdulaziz University, Saudi Arabia

P07. Skin Permeable Peptide Amphiphiles for Cosmetic Applications

Gujie Mi, Thomas J. Webster, Northeastern University, USA, King Abdulaziz University, Saudi Arabia

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P08. Understanding the Role of Nanoscale Topography of Polymer surfaces on Inhibiting Bacterial Adhesion and Growth for Catheter Applications

Luting Liu, Thomas J. Webster, Northeastern University, USA

P09. Selective Inhibition of Osteosarcoma Cell Function Induced by Curcumin-Loaded Self-assembled Arginine-Rich-RGD Nanospheres

Run Chang, Linlin Sun, Thomas J. Webster, Northeastern University, USA, King Abdulaziz University, Saudi Arabia

P10. DI-Peptide-Modified Gemini Surfactants as gene Delivery Vectors: Exploring the Role of the Alkyl Tail in the Physicochemical Characterisation and the Biological Activity

Mays Al-Dulaymi, Jackson Chitanda, Ronald Verrall, Pawel Grochulski, Ildiko Badea, University of Saskatoon, University of Saskatchewan, Canadian Light Source, Canada

POSTER SESSION II (11-20)

P11. Synthesis, Structural Characterisation and Application of Cadmium Sulfide Nanocrystals with Fluorescent Dyes for Solar Enhancement

Yashvant Rao, Gajendra Inwatia, Man Singha, Central University of Gujarat, India

P12. Development of Magnetic Nanoparticles (MNPs) Encapsulated Miltefosine Nanoparticle Drug Delivery System against *Leishmania donovani*

Rishikesh Kumar, Ganesh C Sahoo, VNR Das, Krishna Pandey, Sunil Kumar, Kalyani Trivedi, Yousuf Ansari, Sindhu Purva Rana, Manas Dixit, Rani Mansuri, Pradeep Das, Nanomedicine and Drug Discovery Department Agamkuan RMRIMS, India

P13. Intrinsic Anti-Proliferative, Anti-Migratory and Pro-Apoptotic Features of Multiwalled Carbon Nanotubes in Cancer Cells

Lorena Garcia-Hevia, Juan Villegas, Fidel Fernandez, Jesus Gonzales, Rafael Valiente, Monica L. Fanarraga, Universidad de Cantabria, Spain

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P14. Bio-Compatibilization of Multi-Walled Carbon Nanotubes by improving *in vivo* Degradation

Jeroen Heuts, Hector Teran, Carmen Pesquera, Lorena Garcia-Hevia, Jesus Gonzales, Rafael Valiente, Monica L. Fanarraga, Universidad de Cantabria, Spain

P15. Encapsulation and Release of RNA Molecules in Gelatin-based Nanoparticles

Maria Carmen Moran, Ines Fornies, Guliem Ruano, M. Antonia Basquets, M. Pilar Vinardell, Universitat de Barcelona, Spain

P16. Gelatin-based Nanoparticles for the Efficient Intracellular DNA Delivery

Maria Carmen Moran, Neus Rosell, Guillem Ruano, M. Antonia Basquets, M. Pilar Vinardell, Universitat de Barcelona, Spain

P17. Superhydrophobic Coatings for Antifouling in Shallow Euphotic Seawater

Michele Ferrari, F. Cirisano, L. Liggieri, F. Ravera, E. Santini, A. Benedetti, CNR- Istituto per l' Energetica e le Interfasi, Italy

P18. Cytotoxicity and Wettability Studies of Novel Laser Induced Medicines in Biomedical Fabrics

Michele Ferrari, Tatiana Tozar, Agota Simon, Andra Dinache, Adriana Smarandache, Ionut Relu Andrei, Mihai Boni, Mihail Lucian Pascu, Francesca Cirisano and M. Carmen Morán, CNR- Istituto per l' Energetica e le Interfasi, Italy, National Institute for Laser, Plasma and Radiation Physics, Romania, Universitat de Barcelona, Spain

P19. Preparation and Characterization of Nano-Calcium from Chicken Eggshell Powders for Dental Healthcare Application with Heat Treatment and Ballmilling Methods

Novra A.Sandi, Alfin Darari, Harini Sosiati, Firas Khoirunnisa, Mulya Fitrandi A.R, Alfiani Kurnia, Navilatul Ula, Indra Bramanti, Universitas Gadjah Mada, Diponegoro University, Indonesia