Scientific Program

Joint Event

25th Nano Congress for Future Advancements

&

12th Edition of International Conference on

Nanopharmaceutics and Advanced Drug Delivery

August 16-18, 2018 | Dublin, Ireland

Day-1

August 16, 2018

08:30-09:00 Registrations

Opening Ceremony

09:00 - 09:20

Meeting Hall @ Tower Suite

KEYNOTE FORUM

09:20 - 09:30 Introduction

09:30 - 10:00 Title: **Microtubular nanomembrane devices: From energy storage to reproduction technologies**
Oliver G. Schmidt, Institute for Integrative Nanosciences, Germany

10:00 - 10:30 Title: **Bio-inspired anionic polymers as a platform for designing novel nanoscale intracellular drug delivery systems**
Rongjun Chen, Imperial College London, UK

10:30 - 11:00 Title: **Progress in aligning nanomedicine with precision therapeutic approaches for the treatment of chronic diseases**
Andrew David Miller, King's College London, UK

GROUP PHOTO 11:00–11:05

Networking & Refreshment Break 11:05-11:20 @ Foyer

Sessions: **Nano Biomaterials | Nano Materials Synthesis and Characterisation | Nano Sensors | Advanced Nanomaterials | Nanotechnology and Biomedical Applications | Drug Delivery Research | Nanomedicine | Pharmaceutical Nanotechnology**

Chair: **Anthony N. Papathanassiou,** National and Kapodistrian University of Athens, Greece

PLENARY SESSION

11:20 - 11:50 Title: **Restoration of damaged dental enamels using nano-scale iron-calcium phosphate minerals and femto-second pulsed near-IR lasers**
Animesh Jha, University of Leeds, UK

11:50 - 12:20 Title: **Effect of LCP/PET blend composition and spinning parameters on nanofiber formation condition**
Han-Yong Jeon, Inha University, South Korea

12:20 - 12:50 Title: **Synthesis, X-ray crystal structure, emission property, and DFT calculation of monoprotonated polypyridine**
Naokazu Yoshikawa, Nara Women's University, Japan

12:50-13:20 Title: **Nanogauges for integration of strain sensors integrated into matter**
Thomas Maurer, University of Technology of Troyes, France

Lunch Break 13:20-14:00 @ Peacock Restaurant

14:00 - 14:30 Title: **Functionally antagonistic nano-engineering**
Il-Kwon Oh, Korea Advanced Institute of Science and Technology, South Korea

14:30 - 15:00 Title: **The use of flow imaging microscopy for nanoparticle analysis in biopharmaceuticals**
Kent Peterson, Fluid Imaging Technologies Inc., USA

SPEAKER FORUM

15:00 - 15:25 Title: **Encapsulation of nanoparticles in composite gel microparticles for lung imaging and drug delivery**
Robert K Prudhomme, Princeton University, USA

15:25 - 15:50 Title: **Nanotechnology approaches for intensifying localized combination therapy for precision treatment of early stage breast cancer**
Patrick J Sinko, Rutgers, The State University of New Jersey, USA

Networking and Refreshments Break 15:50-16:05 @ Foyer

16:05 - 16:30 Title: **Attenuated protein toxins as intracellular nucleic acid delivery fibromyalgia and chronic pain vectors**
Simon C W Richardson, University of Greenwich, UK

16:30 - 16:55 Title: **Smart combination nanopreparations for cancer: bringing drugs inside cells and to individual organelles**
Vladimir P Torchilin, Northeastern University, USA

16:55 - 17:20 Title: **Antibody-proteases as a novel biomarker and a unique target to suit translational tools to be applied for biodesign, bioengineering and regenerative medicine therapeutic for a treatment of EGFR-dependent breast cancer tumors**
Sergey Suchkov, Sechenov University, Russia

PANEL DISCUSSION & NETWORKING

Day-2

August 17, 2018

Meeting Hall @ Tower Suite

KEYNOTE FORUM

09:20 - 09:30 **Introduction**

09:30 - 10:00 Title: **Solution processable phosphorescent organic light emitting diodes**
Jacek Ulanski, Lodz University of Technology, Poland

10:00 - 10:30 Title: **Personalized and precision medicine as a unique healthcare model to secure the national and international biosafety**
Sergey Suchkov, Sechenov University, Russia

10:30 - 11:00 Title: **A breakthrough in enhancing the therapeutic index of immunotherapy and target therapy for cancer**
Pauline Y Lau, Suntec Medical, USA

Networking & Refreshment Break 11:00-11:15 @ Foyer

Sessions: Nano Applications | Nano Science and Technology | Medical Applications in Nanotechnology | Biomarkers and Personalized Medicine | Cancer and Nanotechnology | Nanomaterials for drug delivery | Novel Drug Delivery Systems

Chair: Animesh Jha, University of Leeds, UK
Co-Chair: Simon C W Richardson, University of Greenwich, UK

PLENARY SESSION

11:15 - 11:45 Title: **Nanocarbon-based electrode technology for soft electronics**
Joong Tark Han, Korea electrotechnology Research Institute, Republic of Korea

11:45 - 12:15 Title: **Attractive advanced cell therapy by using bioresorbable magnetic nanoparticles**
Silvia Panseri, National Research Council of Italy, Italy

12:15 - 12:45 Title: **Thermally reduced gold nanoparticles confined by ordered mesoporous carbon as an efficient catalyst for selective hydrogenation**
Ying Wan, Shanghai Normal University, China

12:45 - 13:15 Title: **Smart biomimetic nanoparticles: A new platform for nanomedicine**
Monica Montesi, National Research Council of Italy, Italy

Lunch Break 13:15-14:00 @ Peacock Restaurant

SPEAKER SESSION

14:00 - 14:25 Title: **Nanotheranostics: TPGS micelles for early diagnosis and therapy of cancer**
Muthu Madaswamy Sona, University of Singapore, India

14:25 - 14:50 Title: **Influence of molecular structure and temperature on the adsorption behavior of PEO-PPO-PEO surfactants: A QCM-D study**
Lorenz De Neve, Ghent University, Belgium

14:50 - 15:15 Title: **Nano particle targeting assessed by novel photo acoustic and PET imaging: Internal normalization by multi spectral imaging**
Robert K Prudhomme, Princeton University, USA

15:15 - 15:40 Title: **Nano-amorphous *abiraterone* acetate formulation with improved bioavailability and eliminated food effect**
Tamás Solymosi, NanGenex Inc., Hungary

Networking & Refreshment Break 15:40-16:00 @ Foyer

16:00 - 16:25 Title: **Controlled release of bovine serum albumin from surfactant modified alginate beads**
Nilay Kahya, Istanbul Technical University, Turkey

16:25 - 16:50	**Title: Immunoliposomes containing simvastatin, targeted towards EGFR, as potential therapeutic for a treatment of EGFR-dependent breast cancer tumors** **Lucyna Matusewicz,** University of Wroclaw, Poland

POSTER PRESENTATIONS 16:50–17:20 @ LUCAN ROOM

Poster Judge: Pauline Y Lau, Suntec Medical, USA

NC & NDD 01	**Title: Flexible superhydrophobic heater with silver nanowires and carbon nanotubes** **Jong Seok Woo,** Morgan Advanced Materials, South Korea
NC & NDD 02	**Title: CodeSphere: Molecular encoding of nanoparticles for targeted cargo delivery** **Keith Henry Moss,** National Veterinary Institute, Denmark
NC & NDD 03	**Title: Formulation of peptide and protein therapeutics into nanoparticles by ion pairing for prolonged activity and improved delivery** **Robert K Prudhomme,** Princeton University, USA
NC & NDD 04	**Title: Characterization stability and cell viability tests on ionic-gradient liposomes designed for the delivery of etidocaine** **Juliana Damasceno Oliveira,** University of Campinas, Brazil
NC & NDD 05	**Title: Anticancer activity of G rich aptamer AS1411 grafted to gold nanospheres: From synthesis to mechanism study** **Samaneh kabirian Dehkordi,** University of Lyon, France
NC & NDD 06	**Title: Nanomedicine: From high tech to global health** **Robert K Prudhomme,** Princeton University, USA
NC & NDD 07	**Title: Phosphonium carbosilane dendrimers: Efficient non-viral vectors for siRNA delivery to adenocarcinoma cells *in vitro*** **Regina Herma,** University of Jan Evangelista Purkyna, Czech Republic

PANEL DISCUSSION & NETWORKING

Day-3

August 18, 2018

Meeting Hall @ Nash Room

09:20 - 09:30	**Introduction**
09:30 - 10:00	**Title: Epitaxial oxides on silicon for nanoelectronic applications** **H. Jörg Osten,** Leibniz University Hannover, Germany
10:00 - 10:30	**Title: Graphene-based nano materials for energy storage and photocatalysis** **Jae-Jin Shim,** Yeungnam University, Republic of Korea

10:30 - 11:00 Title: **Silver nanoparticles in municipal wastewaters and environmental fate**
Christian Gagnon, Aquatic Contaminants Research Division, Canada

Networking & Refreshment Break 11:00-11:15 @ Foyer

Sessions: Advanced Nanomaterials | Nanotech for Energy and Environment | Spintronic Devices | Medical Applications in Nanotechnology | Nano Materials Synthesis and Characterisation | Nanotechnology for Biological Systems | Nano Science and Technology

Chair: Ewa Kazimierska, Swansea University, UK

PLENARY SESSION

11:15 - 11:45 Title: **Pre-formulation of Nanostructured Lipid Carriers (NLC) for drug delivery: Excipient-excipient interaction**
Laura Oliveira-Nascimento, State University of Campinas, Brazil

11:45 - 12:15 Title: **Dispersed nano-graphene platelets within water-soluble bio-compatible polymers: Characterization of multi-scale electric charge flow in combined pressure and temperature conditions**
Anthony N. Papathanassiou, National and Kapodistrian University of Athens, Greece

12:15 - 12:45 Title: **How carbon nanotubes functional groups influence copper electrodeposition for electrical transmission**
Ewa Kazimierska, Swansea University, UK

12:45 - 13:15 Title: **Nanoscale optical trapping: Current challenges and future directions**
Carlo Bradac, University of Technology of Sydney, Australia

Lunch Break 13:15 -14:00 @ Peacock Restaurant

14:00 - 14:30 Title: **Nano engineered plasma polymer films for biomedical applications**
Krasimir Vasilev, University of South Australia, Australia

14:30 - 15:00 Title: **Sub-oxide passivation of silicon nanoparticles produced by mechanical attrition**
David Moweme Unuigbe, University of Cape Town, South Africa

Networking & Refreshment Break 15:00-16:00 @ Foyer

PANEL DISCUSSION

Awards & Closing Ceremony 16:00 - 16:30