



8th WORLD CONGRESS ON NEW TECHNOLOGIES (NEWTECH'22)



August 03 - 05, 2022 | Prague, Czech

Dr. Devika Chithrani
University of Victoria, Canada

Dr. Domenico Lombardo
CNR - (Consiglio Nazionale delle Ricerche), Italy

CONGRESS CHAIR

TECHNICAL PROGRAM CHAIR

PHYSICAL CONFERENCE

Wednesday, August 03

03:00 PM - 05:00 PM : Registrations

Thursday, August 04

7:30 AM Registration

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VIRTUAL CONFERENCE

Wednesday, August 03

03:00 PM - 05:00 PM : Registrations

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Mechanical Destabilization of Lipid Membranes by Nanoparticles: From Microplastics to Gold Nanoparticles - PAGE 12

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12:55 PM

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1:55 PM

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8th WORLD CONGRESS ON NEW TECHNOLOGIES (NEWTECH'22)

August 03 - 05, 2022 | Prague, Czech Republic

The Organizing and Scientific Committees would like to welcome you to the 8th World Congress on New Technologies (NEWTECH'22).

NEWTECH'22 consists of four conferences:

- 13th International Conference on Nanotechnology: Fundamentals and Applications (ICNFA'22)
- 12th International Conference on Environmental Pollution and Remediation (ICEPR'22)
- 8th International Conference on Biotechnology and Bioengineering (ICBB'22)
- 6th International Conference on Energy Research and Technology (ICERT'22)

The Congress aims to become one of the leading international annual events in the fields of new technologies. This Congress will provide excellent opportunities for scientists, researchers, and industrial specialists to present their research achievements and to develop new collaborations and partnerships with experts in the field.

We are pleased to welcome conference attendees to the beautiful city of Prague, Czech Republic. Prague, Czech Praha, city, capital of the Czech Republic. Lying at the heart of Europe, it is one of the continent's finest cities and the major Czech economic and cultural centre. The city has a rich architectural heritage that reflects both the uncertain currents of history in Bohemia and an urban life extending back more than 1,000 years. During your time here, we hope that you have an opportunity to explore Prague's many museums, beaches, and the warm ambience and hospitality of the city.

We thank you for your participation and contribution to the 8th World Congress on New Technologies (NEWTECH'22).

We wish you a very successful and enjoyable experience.

Dr. Devika Chithrani
University of Victoria, Canada

CONGRESS CHAIR

Dr. Domenico Lombardo
CNR - (Consiglio Nazionale delle Ricerche), Italy

Technical Program Chair

13th International Conference on Nanotechnology: Fundamentals and Applications (ICNFA'22)

The Organizing Committee of the 13th International Conference on Nanotechnology: Fundamentals and Applications (ICNFA'22) would like to thank the following members for accepting to contribute to the conference.

Scientific Committee Members:

Dr. Nicolas Abatzoglou, Université de Sherbrooke, Canada

Dr. Yoshinobu Baba, Nagoya University, Japan

Dr. Thomas M. S. Chang, McGill University, Canada

Dr. Shaochen Chen, University of California, San Diego, USA

Dr. Bernadeta Dobosz, Adam Mickiewicz University in Poznań, Poland

Dr. Hans Fecht, University of Ulm, Germany

Dr. Masami Furuuchi, Kanazawa University, Japan

Dr. Luigi Falciola, Università degli Studi di Milano, Italy

Dr. Jeff Th. M. De Hosson, University of Groningen, , Netherlands

Dr. Redhouane Henda, Laurentian University, Canada

Dr. Antonio Vicente Herrera Herrera, Universidad de La Laguna, Spain

Dr. Kenichi Kasahara, Ritsumeikan University, Japan

Dr. Alexander Korsunsky, University of Oxford, United Kingdom

Dr. Mihaela Kusko, National Institute for Research and Development in Microtechnologies, Romania

Dr. Dongyang Li, University of Alberta, Canada

Dr. Rahul M. Mane, Shivaji University, India

Dr. Daisuke Onoshima, Nagoya University, Japan

Dr. Muthukumaran Packirisamy, Concordia University, Canada

Dr. Harry E. Ruda, University of Toronto, Canada

Dr. C N Ramchand, MagGenome Technologies Pvt.Ltd India

Dr. K. K. Singh, Birla Institute of Technology & Science Pilani, India

Dr. Sivaram Arepalli, Rice university, USA

Dr. Aimin Song, University of Manchester, UK

Dr. Jules Thibault, University of Ottawa, Canada

Dr. Liqiu Wang, University of Hong Kong, China

Dr. Jackie Y. Ying, Institute of Bioengineering and Nanotechnology, Singapore

Dr. Ludwig Vinches, École de Technologie Supérieure, Canada

12th International Conference on Environmental Pollution and Remediation

(ICEPR'22)

The Organizing Committee of the 12th International Conference on Environmental Pollution and Remediation (ICEPR'22) would like to thank the following members for accepting to contribute to the conference.

Scientific Committee Members:

Dr. Monika Bojko, Jagiellonian University, Poland

Dr. Priscilla Boccia, INAIL/DIT, Italy

Dr. Fabiana Corami, CNR-IDPA, Italy

Dr. Francesca Costabile, Institute of Atmospheric Sciences and Climate, Italy

Dr. Elisabetta Franchi, Eni S.p.A., Italy

Dr. Dragos Gudovan, University Politehnica of Bucharest, Romania

Dr. Jennifer Gubitosa, University of Bari Aldo Moro, Italy

Dr. Charles Lee, The University of Newcastle, Singapore

Dr. Woo Hyoung Lee, University of Central Florida, USA

Dr. Jianbing Li, Univeristy of Northern British Columbia, Canada

Dr. Domenico Morabito, University of Orléans, France

Dr. Maria Rita Muzzi, Universidade Federal de Minas Gerais, Brazil

Dr. Tomasz Płociniczak, University of Silesia, Poland

Dr. Vito Rizzi, University of Bari Aldo Moro, Italy

Dr. Marek Trojanowicz, University of Warsaw, Poland

Dr. Chih-Huang Weng, I-Shou University, Taiwan

Dr. Chunlong Zhang, University of Houston-Clear Lake, USA

8th International Conference on Bioengineering and Biotechnology (ICBB'22)

The Organizing Committee of the 8th International Conference on Bioengineering and Biotechnology (ICBB'22) would like to thank the following members for accepting to contribute to the conference.

Scientific Committee Members:

Dr. Yu-Cheng Chen, University of Pennsylvania, USA

Dr. Giuliana d'Ippolito, CNR-Istituto di Chimica Biomolecolare (ICB), Italy

Dr. Erwin Ilegems, Karolinska Institutet, Sweden

Dr. Andreas Kremling, Technische Universität München, Germany

Dr. Ponnusamy Senthil Kumar, Sri Sivasubramaniya Nadar College of Engineering, India

Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy

Dr. Tau Chuan Ling, University of Malaya, Malaysia

Dr. Jason Northey, UCSF, USA

Dr. Melanie MacGregor, University of South Australia, Australia

Dr. Wensheng Qin, Lakehead University, Canada

Dr. Bindu S., Ramaiah Institute of Technology, India

6th International Conference on Energy Research and Technology (ICERT'22)

The Organizing Committee of the 6th International Conference on Energy Research and Technology (ICERT'22) would like to thank the following members for accepting to contribute to the conference.

Scientific Committee Members:

Dr. Umberto Berardi, Ryerson University, Canada

Dr. Alessandro Carmona-Martínez, CIRCE, Spain

Dr. Wen-Feng Lin, Loughborough University, UK

Dr. Ming-Chang Lu, National Taiwan University, Taiwan

Dr. Grzegorz Sierpiński, Silesian University of Technology, Poland

Dr. Kamaruzzaman Sopian, National University of Malaysia, Malaysia



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National University of Singapore, Singapore

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Heat Mitigation in an Australian Coastal City with a Dry-Summer Climate

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Flinders University, Australia

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Dr. John Yeow, Page 6

University of Waterloo, Canada

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University of Illinois, USA

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Harvard University, USA

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Universitat Rovira i Virgili, Spain

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Dr. Giuliana D'Ippolito,

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Istituto di Chimica Biomolecolare (ICB), Italy

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Through Physics and Smart Materials, Breaking the Efficiency (Droop) Barrier in Light Emitting Diodes for the Ultimate Solid-State Lighting

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Dr. Can Bayram,

University of Illinois, USA

AFTERNOON SESSION

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8:00 AM - 9:00 AM REGISTRATION

08:30 AM - 8:45 AM

Official Opening of the Congress

Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy Technical Program Chair

08:45 AM - 09:40 AM

ICEPR'22 PLENARY LECTURE - VIRTUAL

Session Chair: Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy



Nature-based Systems (NbS) for Mitigation of Environmental Pollution

Dr. Rajasekhar Bala,

National University of Singapore, Singapore

Professor Balasubramanian (Bala) is a Full Professor in the Department of Civil and Environmental Engineering at National University of Singapore. He has established an internationally recognized interdisciplinary research program to study and solve environmental problems of major concern including air pollution and water pollution. He has recently introduced a new educational program in “Sustainable Urban Development” to create a new generation of intellectuals who are capable of discovering and providing innovative solutions to the intricate issues of energy crisis, renewable energy, global warming, climate change, and pollution. His research has resulted in about 280 papers, published in scholarly journals with 18,000 citations and an H-index of 75. He is a recipient of many research awards including “Alan Berman Research Publication Award (Department of the Navy (USA))”, “Highly Cited Research Article Award (Elsevier)” and “PROSE (Professional and Scholarly Excellence) Award”. He has also received numerous teaching awards. He is a Lead Author for the United Nations Environment Program (UNEP)’s 6th Global Environment Outlook Report. He is a member of the Science Panel of the Asia-Pacific Clean Air Partnership (APCAP), appointed by UNEP. He is a Fellow of the Royal Society of Chemistry. Prof Bala is on the editorial board of several international journals.

9:40 AM - 10:25 AM |

ICEPR'22 KEYNOTE LECTURE - PHYSICAL

Session Chair: Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy



Tailings-Based Engineered Barriers for Waste Containment

Dr. Mamadou Fall

University of Ottawa, Canada

Dr. Mamadou Fall is a Full Professor in the Department of Civil Engineering at the University of Ottawa (Canada), the Chair of the Department of Civil Engineering and the Vice President Technical of the Canadian Geotechnical Society. He graduated from the Earth Science Institute at the University of Dakar (Senegal) and was awarded a PhD excellence scholarship for his PhD studies in Germany. Subsequently, he was granted a postdoctoral fellowship by the German Research Foundation and coordinated the German Research Chair of Environmental Geosciences and Geotechnics

Prof. Fall and his team are performing leading-edge research in the geotechnical and geoenvironmental fields in close collaboration with the industry, major federal and provincial governmental institutions, and international partners. He has been leading several major research projects that are related to geotechnical hazards and risks, mine waste management, underground disposal of nuclear wastes, problem grounds and coupled thermo-hydro-mechanical-chemical (THMC) processes in geosystems. He is currently supervising a large research team of postdoctoral researchers and graduate students (PhD and Master).

Over the years, his research programs have obtained substantial funding from a number of agencies and private companies, and findings of his research group have been used and implemented by the industry, key federal and national agencies, and numerous institutions or organizations worldwide. These research findings and impacts have been recognized by several awards and distinctions as well as have been broadcasted by national and international televisions. Prof. Fall is included in the World's Top 2% Scientists list, published by Stanford University in 2021.

ICEPR'22 KEYNOTE LECTURE - VIRTUAL

10:25 AM - 11:10 AM

Session Chair: Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy



Heat Mitigation in an Australian Coastal City with a Dry-Summer Climate

Dr. Huade Guan,
Flinders University, Australia

Dr Huade Guan is Associate Professor in Hydrology at Flinders University, Australia. His research interests are mostly focused on water resource and environmental issues from the interface of land surface and atmosphere, through soil and vegetation, to groundwater table. He leads ecohydrology and hydrometeorology research group (EcoH2OMe) at Flinders.

Huade Guan is a Chief Investigator of the National Centre for Groundwater Research and Training since 2009. His research in NCGRT started from field-based investigation of vegetation water use under various climate conditions, using hydraulic, micrometeorological, physiological and isotopic methods, developed to numerical modelling of plant transpiration and drought responses, and to remote sensing analysis of large-scale interactions of climate and vegetation.

Huade Guan has led several government-funded urban microclimate and ecohydrology projects, aiming for improving resilience to changing climate in urban environment. Subjects of these projects include urban heat island, sea breeze cooling, climate-dependent energy consumption, and integrated urban water and greenery management.

Associate Professor Guan's research also includes subjects of climate teleconnections, hydrological processes in mountains, agricultural hydrology, carbon sequestration, and contaminated water and soil remediation.

11:10 AM - 11:30 AM **COFFEE BREAK**

MORNING SESSION

11:30 AM - 12:45 PM

Nanomaterials, Nanodevices: Fabrication, Characterization and Application I - PHYSICAL

SESSION CHAIR: Dr. Marcin Nyk, Wrocław University of Science and Technology, Poland & Dr. Dae Joon Kang, Sungkyunkwan University, South Korea

ICNFA 143

11:30 - 11:45

Hydrophobic Nanofibrous Materials for Prevention of Postoperative Tissue Adhesions

Marketa Klicova, Technical University of Liberec Studentska 2, Czech Republic

Authors: Marketa Klicova, Jachym Rosendorf, Michal Krejcik, Jana Horakova

ICNFA 138

11:45 - 12:00

Electronic Transport Study of Bistable Cr@C28 Single-Molecule Device for High-Density Data Storage Applications

Chiara Elfi Spano, Politecnico di Torino, Italy

Authors: Chiara Elfi Spano, Fabrizio Mo, Yuri Ardesi, Massimo Ruo Rochl, Gianluca Piccinini, Mariagrazia Graziano

ICNFA 106

12:00 - 12:15

Effect of Growth Medium of Fusarium Oxysporum in the Synthesis of Cadmium Sulfide Nanoparticles

Diana Alexandra Calvo Olvera, Unidad Querétaro, Instituto Politécnico Nacional Querétaro, Qro., México

Authors: J.D.A. Loa, J.L. Pichardo-Molina, A. Calvo-Olvera, O. Hernández-Jiménez, N. G. Rojas-Avelizapa

ICNFA 122

12:15 - 12:30

ZnO nanowire UV sensors by spray-coating and their transfer length measurement

Simas Račkauskas, Kaunas University of Technology, Lithuania

Authors: Mindaugas Ilickas, Brigita Abakevičienė, Rasa Mardosaitė, Domantas Peckus, Simas Račkauskas

ICNFA 125

12:30 - 12:45

Influence of magnetite synthesis method on the structure, morphology and dielectric properties

Adrian Radoń, Silesian University of Technology, Poland

Authors: Adrian Radoń, Rafal Babilas

12:45 PM - 12:50 PM

GROUP PHOTO

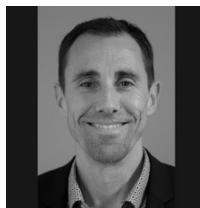
12:50 PM - 01:50 PM

LUNCH

ICNFA'22 KEYNOTE LECTURE

01:50 PM - 02:35 PM

Session Chair: Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy



A Glance at Biobased and Sustainable Aromatic Polymers for Coatings and Binders

Dr. Sylvain Caillol,
Montpellier University, France

Sylvain Caillol is Research Director with CNRS. He graduated engineer from the National Graduate School of Chemistry of Montpellier in 1998 and then received his M. Sc. Degree in Chemistry from the University of Montpellier. He received his PhD degree in 2001 from the University of Bordeaux. Subsequently he joined Rhodia Company. Later, promoted Department Manager, he headed the Polymer Research Department in the Research Center of Aubervilliers. In 2007 he joined the CNRS at the Institute Charles Gerhardt of the University of Montpellier where he started a new research topic dedicated to Green Chemistry and Biobased Polymers. He is also Scientific Manager of Institute Carnot Chimie Balard Cirimat. He is co-author of more than 200 articles, patents and book chapters. He won the Green Materials Prize in 2018 and 2020 and was nominated Pioneering Investigator by the Royal Society of Chemistry in 2019.

ICNFA'22 KEYNOTE LECTURE - Virtual

2:35 PM - 03:20 PM

Session Chair: Dr. Domenico Lombardo, CNR - (Consiglio Nazionale delle Ricerche), Italy**Multi-Pixel Field Emission Based X-ray Generators***Dr. John Yeow,*

University of Waterloo, Canada

John T. W. Yeow received the B.A.Sc. degree in electrical and computer engineering, and M.A.Sc. and PhD. degrees in mechanical and industrial engineering from the University of Toronto, Toronto, ON, Canada. He is currently a Professor and a University Research Chair in the Department of Systems Design Engineering at University of Waterloo, Waterloo, ON, Canada. He is focused on the development of micro/nanodevices for a wide range of applications. He is a recipient of the Professional Engineers Ontario Young Engineer Medal, Professional Engineers Ontario Engineering Excellence Award, Natural Science & Engineering Research Canada Innovation Challenge Award, Douglas R. Colton's Medal of Research Excellence, Micralyne Microsystems Design Award, Ontario Ministry of Research and Innovation's Early Researcher Award, University of Toronto Alumni Association 7T6 Early Career Award, 2011 IEEE NANO Excellence Paper award and IEEE Canada Outstanding Engineer Award. He was a Canada Research Chair in Micro/Nanodevices (2004 – 2019). He served as the Editor-in-Chief of the IEEE Nanotechnology Magazine from 2014 – 2019, a Senior Editor of the IEEE Transactions on NanoBioscience, and an Associate Editor of the IEEE Transactions of Nanotechnology, and Microsystems & Nanoengineering. He is a Fellow of the Canadian Academy of Engineering, the Engineering Institute of Canada, Engineers Canada, and a Member of College of New Scholars, Artists and Scientists of the Royal Society of Canada. He was a IEEE Nanotechnology Technical Council (NTC) Distinguished Lecturer, and a recipient of the 2021 IEEE NTC Distinguished Service Award.

AFTERNOON SESSIONS

03:20 PM - 04:25 PM

Water and Wastewater Management and Treatment II - PHYSICAL

SESSION CHAIR: Dr. Jose Vinicio Macías Zamora, IIO-UABC, Mexico

ICEPR 172 **Supported Geopolymer Adsorbents for Nutrient Removal from Urban Run-off Waters: Pilot Case Study**

03:20 - 03:35

Tatiana Samarina, Kajaani University of Applied Sciences, Finland
Authors: Tatiana Samarina, Outi Laatikainen

ICEPR 133 **Assessing Transport of Microplastics in the Ergene River**

03:35 - 03:50

Zeynep Akdoğan, Institute of Environmental Sciences, Boğaziçi University, Turkey
Authors: Zeynep Akdoğan, Basak Guven, Ahmet E. Kıdeyşo

ICEPR 121 **Inhibitory Effect of Silver and Nanosilver on Activated Sludge Fed with Proteinaceous Feed**

03:50 - 04:05

Başak KILIÇ, Bogazici University, Turkey
Authors: Başak Kılıç, Ferhan Çeçen, Ayşe Gül Peker

ICEPR 151 **Management of Asbestos-cement in Excavated Earths**

04:05 - 04:20

Ivano Lonigro, Sapienza University of Rome, Italy
Authors: Sergio Malinconico, Federica Paglietti, Sergio Bellagamba, Silvia Serranti, Giuseppe Bonifazi, Ivano Lonigro

ICEPR 159 **Nematode response to soil rehabilitation of a nickel mining area in Hinatuan Island, southern Philippines**

04:20 - 04:25

Joey Genevieve Martinez, Mindanao State University - Iligan Institute of Technology, Philippines
Authors: Joey Genevieve Martinez, Rowena Benavides, Judelyn Patero, Antoine Bonnefoy, Jamiel Macaraya

04:50 PM - 05:45 PM

Biotechnology- PHYSICAL

SESSION CHAIRS: Dr. Sergio Bellagamba, INAIL - DIT, Italy

ICBB 022

Fractionating of synthetic biology waste stream into nutrient rich extract for cosmetic industry

4:50 - 05:05

Bruno Bruno, Universidade Católica Portuguesa, Portugal

Authors: Bruno Bruno, Carla Cálix, João Burgal, Catarina Oliveira

ICBB 040

Immobilized Biocatalysts in NSAIDs Utilization

05:05 - 05:20

Anna Dzionek, University of Silesia in Katowice, Poland

Authors: Anna Dzionek, University of Silesia in Katowice, Poland

ICBB 041

NSAIDs Biodegradation in Activated Sludge by Drug-Consuming Bacterial Strains in SBR System

05:20 - 05:35

Ariel Marchlewicz, University of Silesia in Katowice, Poland

Authors: Ariel Marchlewicz, Katarzyna Hupert-Kocurek, Urszula Urszula, Danuta Wojcieszynska

ICBB 001

The Non-Saponin Fraction Of Korean Red Ginseng Prevents Sarcopenia By Maintaining Immune Homeostasis In Old C57BL/6J Mice

05:35 - 05:40

Boo-Yong Lee, CHA University, South Korea

Authors: Boo-Yong Lee, Hyun-Ji Oh, Heegu Jin

ICBB 030

New Strategy to Develop Metabiotic Sourdoughs for Gluten-Free Bread Functionalization

05:40 - 05:45

Mihaela-Aida Vasile, 1 "Dunărea de Jos" University of Galati, Romania

Authors: Bogdan Păcularu-Burada, Gabriela-Elena Bahrim , Mihaela-Aida Vasile

Environmental Sustainability and Risk Assessments I- PHYSICAL

05:45 PM - 06:15 PM

SESSION CHAIR: Dr. Tatiana Samarina, Kajaani University of Applied Sciences, Finland

ICEPR 128

Prediction of Drought Damage using Meteorological Factor Analysis in Corn

05:45 - 05:50

Sung Joo Kim, Hankyong National University, Republic of Korea
Authors: Seong Ju Lee, Sung Joo Kim, Tae Won Kim, Yang Yeol Oh, Tae Wan Kim

ICEPR 149

Contaminated Areas Management in Pipeline Clandestine Deviation Sites in Brazil

05:50 - 06:05

Leonardo Mansor, PETROBRAS TRANSPORTE SA TRANSPETRO, Brazil
Authors: Leonardo Mansor

ICEPR 137

Assessment of Drought Tolerance using Chlorophyll Fluorescence Analysis in Garden Plants

06:05 - 06:10

Taeseon Eom, Hankyong National University, Republic of Korea
Authors: Tae-seon Eom, Seong-ju Lee, Taek-jin Yoon, Seung-Won Han, Sung-Yung Yoo

ICEPR 138

Photochemical Characteristics of Radish (*Raphanus sativus*) Leaf Grown under Different Nitrogen (N) Fertilization

06:10 - 06:15

Taeseon Eom, Hankyong National University, Republic of Korea
Authors: Tae-seon Eom, Seong-ju Lee, Ye-Bin Hwang, Tae Wan Kim

IGNFA'22 KEYNOTE LECTURE - PHYSICAL

8:30 AM - 9:15 AM

Session Chair: Dr. Domenico Lombardo CNR - (Consiglio Nazionale delle Ricerche), Italy**High Performance Nanogenerators for Energy Harvesting and Sensing Applications*****Dr. Dayan Ban,***

University of Waterloo, Canada

Dayan Ban is a Professor of Nanotechnology Engineering in the Department of Electrical and Computer Engineering of the University of Waterloo. He received a B.Sc. and M.Sc at the University of Science and Technology of China, Hefei, China. He received a Ph.D. in Electrical and Computer Engineering from the University of Toronto, Toronto, Ontario, Canada, in 2003. During 2001-2002, he was a visiting scientist at Nortel Networks Optical Components, Ottawa, Ontario, Canada. Dr. Ban was on staff at the Institute for Microstructural Sciences of the National Research Council, Ottawa, from Sept. 2002 to Oct. 2005. He was a visiting scientist at the Research Lab of Electronics at MIT, Boston, US in 2009. Dr. Ban is a senior member of IEEE/LEOS and a registered Professional Engineer in Ontario. His research interests include optoelectronic devices, quantum cascade lasers, energy harvesting devices as well as scanning probe microscopy technique. Dr. Ban has authored or coauthored over 220 papers in refereed journals and conference proceedings and has contributed 2 book chapters and 13 patents/patent applications.

MORNING SESSIONS

09:15 AM- 10:20 PM

Greenhouse Effect, Global Warming, and Climate Change - PHYSICAL

SESSION CHAIR: Dr. Tatiana Samarina, Kajaani University of Applied Sciences, Finland

ICEPR 152

Analysis of Sea Surface Temperature due to Climate Change using Satellite Products and Spatial Gap-filling Approaches

09:15 - 09:30

Jihye Ahn, Pukyong National University, South Korea

Authors: Jihye Ahn, Yangwon Lee

ICEPR 154

Statistical Analysis of Plant Phenology in South Korea Using ASOS and MODIS Data

09:30 - 09:45

Geunah Kim, Pukyong National University, South Korea

Authors: Geunah Kim, Yangwon Lee

ICEPR 155

Spatial Gap-filling of GK-2A/AMI AOD products for Estimation of Particulate Matter using Machine Learning

09:45 - 10:00

Youjeong Youn, Pukyong National University, South Korea

Authors: Youjeong Youn, Yangwon Lee

ICEPR 166

Atmospheric Correction of Sentinel-2 Satellite Images for Improvement of Vegetation Indices

10:00 - 10:15

Seoyeon Kim, Pukyong National University, South Korea

Authors: Seoyeon Kim, Yangwon Lee

ICEPR 139

Biochemical analysis of Betalain Biosynthesis and Photosynthesis of Amaranth (*Amaranthus tricolor* L.) by Dessication under high-temperature

10:15 - 10:20

Sung Joo Kim, Hankyong National University, Republic of Korea

Authors: Seungyeon Jang, Jiyoung Shim, Yunjun Choe, Sung Joo Kim, Tae Wan Kim

ICEPR 168

Response of Pea Seedlings on Multi-Walled Carbon Nanotubes Seed Treatments

10:20 - 10:25

Anna Gorczyca, University of Agriculture in Krakow, Poland

Authors: Anna Gorczyca, Ewa Pocięcha, Ewelina Matras

10:25 AM - 10:40 AM COFFEE BREAK

Nanomaterials, Nanodevices: Fabrication, Characterization and Application II - PHYSICAL

10:40 AM - 11:50 AM

SESSION CHAIR: Dr. Simas Rackauskas, Kaunas University of Technology, Lithuania & Dr. Spoiala Angela, University Politehnica of Bucharest, Romania

ICNFA 129

Universal transfer of micro/nanostructures by solvation of salmon DNA thin films.

10:40 - 10:55 *Dae Joon Kang, Sungkyunkwan University, South Korea*

Authors: Hyunje Park, Dae Joon Kang

ICNFA 141

Spectrally Resolved Nonlinear Optical Properties Of Colloidal Quantum Confined Semiconductor Dots, Rods And Nanoplatelets

10:55 - 11:10

Marcin Nyk, Wroclaw University of Science and Technology, Poland

Authors: Marcin Nyk, Magda Antoniak, Katarzyna Nawrot, Dominika Wawrzyńczyk, Marek Samoć

ICNFA 142

Oxidation Of Benzene, Toluene And Hexane Over Pt Modified Fly Ash Zeolite X

11:10 - 11:25

T. Todorova, Institute of Catalysis, Bulgarian Academy of Sciences, Bulgaria

Authors: Yu. Kalvachev, T. Todorova, A. Liutcanova, R. Velinova, A. Naydenov

ICNFA 115

Experimental Methods for Nanofluidics: Focus On Sealing Technology for Delicate Nanomaterials

11:25 - 11:40

Said Pashayeva, Laboratoire Charles Coulomb (L2C), Univ. Montpellier & CNRS, France & Azerbaijan National Academy of Sciences, Azerbaijan

Authors: Said Pashayeva, Laboratoire Charles Coulomb (L2C), Univ. Montpellier & CNRS, France & Azerbaijan National Academy of Sciences, Azerbaijan

ICNFA 120

Development Of Nanocomposites Based On PLA And Functionalized Graphene Oxide

11:40 - 11:45

Raúl Quijada, Universidad de Chile, Santiago, Chile

Authors: Raúl Quijada, Remilson Cruz, Humberto Palza, Mehrdad Yazdani-Pedram, Héctor Aguilar-Bolados

ICNFA 126

Optimization of the Synthesis of Au @ SiO₂ Core-Shell Nanostructures, and their Modification

11:45 - 11:50

Elżbieta Adamska, University of Gdańsk, Poland

Authors: Elżbieta Adamska, Agata Kowalska, Beata Grobelna

11:45 PM - 12:10 PM

Water and Wastewater Management and Treatment III - PHYSICAL

SESSION CHAIR: Dr. Jose Vinicio Macías Zamora, IIO-UABC, Mexico

ICEPR 178

Analysis of the effectiveness of the system improving water quality in the WOPR facility

11:45 - 12:00

Bogna Buta, Wrocław University of Environmental and Life Sciences, Poland

Authors: Bogna Buta, Mirosław Wiatkowski, Paweł Tomczyk, Łukasz Gruss, Witold Skorulski

ICEPR 129

Comparison of Effectiveness of Cl_2/UV and PDS/Fe Advanced Oxidation Processes in Removing Diclofenac from the Aquatic Environment

12:00 - 12:05

Michał Nowakowski, Adam Mickiewicz University in Poznań, Poland

Authors: Michał Nowakowski, Iwona Rykowska, Robert Wolski, Przemysław Andrzejewski

ICEPR 126

Removal Of Pesticides From Waters With Zeolites And Zeolite-Carbon Composites

12:05 - 12:10

Magdalena Andrunik, AGH University of Science and Technology, Poland

Authors: Magdalena Andrunik, Mateusz Skalny, Tomasz Bajda

12:00 PM - 12:55 PM **LUNCH**

ICNFA KEYNOTE LECTURE - PHYSICAL

12:55 PM - 01:40 PM

ICNFA'22 KEYNOTE LECTURE - VIRTUAL

SESSION CHAIR: TBD

**Through Physics and Smart Materials, Breaking the Efficiency (Droop) Barrier in Light Emitting Diodes for the Ultimate Solid-State Lighting***Dr. Can Bayram,*

University of Illinois, USA

Prof. Can Bayram is an Associate Professor in the Department of Electrical and Computer Engineering, a resident faculty at the Nick Holonyak, Jr Micro and Nanotechnology Laboratory, and an affiliate faculty of the Carle Illinois College of Medicine and Health Care Engineering Systems Center of University of Illinois at Urbana-Champaign, IL, USA. He is an expert in III-V materials and photonic and electronic devices. He has performed more than 3,000+ epitaxial growths with metalorganic chemical vapor deposition systems and fabricated detectors, light emitting diodes, solar cells, resonant tunneling diodes, and transistors in class 100 and 1000 cleanrooms totaling 20,000+ hrs equipment usage. His current research interests lie in the intersection of novel III-V materials, hetero-structures, and photonic and electronic quantum devices. Particularly, his research group explores III-V materials and novel devices, hetero-integration of III-Vs on unconventional platforms such as graphene and silicon, heat transport across/through semiconductors, efficiency droop mechanisms and remedies in AlInGaN emitters, and ultra-fast THz photonics/electronics. Prof. Bayram's work has been recognized widely. He is the recipient of the International Union of Pure and Applied Physics Young Scientist Prize in Optics, IEEE Nanotechnology Council Early Career Award, an NSF CAREER Award, a CS Mantech Best Paper Award, an AFOSR Young Investigator Award, the IEEE Electron Devices Society Early Career Award, and a Best Paper Award at the 11th International Conference on Infrared Optoelectronics. For his achievements in ultraviolet-to-terahertz engineering of III-V semiconductor materials and devices, OSA, SPIE, and IEEE recognized him with senior member status. Prof. Bayram supervised/supervising 3/4 Ph.D. Theses, 1/1 M.S. thesis, 5/1 senior theses and (co-) authored 54 journal papers (h-index \geq 25), 39 conference proceeding papers, 2 book chapters, and has \geq 47 patents issued/pending.

AFTERNOON SESSIONS

Environmental Protection - PHYSICAL

01:40 PM - 02:35 PM

SESSION CHAIR: Dr. Jose Vinicio Macías Zamora, IIO-UABC, Mexico & Dr. Boo-Yong Lee, CHA University, South Korea

ICEPR 131

SAFE REMOVAL OF UNDERGROUND ASBESTOS-CEMENT WATER PIPES

01:40 - 01:55

Sergio Bellagamba, IInail (Italian Workers' Compensation Authority - Research Division) , Italy

Authors: Sergio Bellagamba, Federica Paglietti, Sergio Malinconico, Beatrice Conestabile della Staffa, Giuseppe Bonifazi2 Daniele Taddei

ICEPR 170

01:55 PM - 02:10 PM

Heavy Metals and Polycyclic Aromatic Hydrocarbons in Soils and Plants Cultivated On Contaminated Soil after Application Of Fertilizers With The Addition Of Zeolite Composites Mixed With Leonardite

Justyna Szerement, AGH University of Science and Technology, Poland

Authors: Justyna Szerement, Krzysztof Jurek, Adam Kowalski, Jakub Mokrzycki, Renata Jarosz, Lidia Marcińska-Mazur, Monika Mierzwa-Hersztek

ICEPR 150

02:10 - 02:25

Starvation and Cadmium Affect Glutathione and Detoxifying Enzymes in Larvae of Spodoptera Exigua from Control and Cadmium Strain

Anna Pompka, University of Silesia in Katowice, Poland

Authors: Anna Pompka, Alina Kafel, Elżbieta Szulińska

ICEPR 142

02:25 - 02:30

Nanocomposite Membranes Based On Chitosan Embedded With Antimicrobial Nanoparticles for Water Purification Applications

Angela Spoială, University Politehnica of Bucharest, Romania

Authors: Angela Spoială, Cornelia-Ioana Ilie, Roxana Doina Truşcă, Denisa Ficai, Ludmila Motelică, Ovidiu Cristian Oprea, Anton Ficai, Ecaterina Andronescu

ICEPR 176

02:30 - 02:35

Application of an innovative method of improving water quality on the Turawa Reservoir - Ventura facility

Pawel Tomczyk, Wroclaw University of Environmental and Life Sciences, Poland

Authors: Pawel Tomczyk, Mirosław Wiatkowski, Bogna Buta, Łukasz Gruss, Witold Skorulski

02:35 PM - 02:55 PM

Coffee Break

02:55 PM - 03:45 PM

Environmental Sustainability and Risk Assessments II - PHYSICAL

SESSION CHAIR: Dr. Pawel Tomczyk, Wrocław University of Environmental and Life Sciences, Poland & Dr. Marcin Nyk, Wrocław University of Science and Technology, Poland & Dr. Sergio Bellagamba, INAIL - DIT, Italy

ICEPR 167

Promoting of Environmental Education via Outdoor Activities in Finland: Clean Games case

02:55 - 03:00

Anna Belenikhina, Kajaani University of Applied Sciences, Finland
Authors: Tatiana Samarina, Anna Belenikhina, Outi Laatikainen

ICEPR 160

Effect of Environment-Like Amount and Environment-Like Shaped PET-microparticles (3-7 μm) on Chlamydomonas reinhardtii and Chlorella vulgaris

03:00 - 03:15

Katarína Molnárová, Mendel University, Czech Republic
Authors: Katarína Molnárová, Michaela Durďáková, Ondřej Pěnčík

ICEPR 169

Are PBDEs In Marine Sediments From The Coast Of Baja California Mexico Increasing In Time? A Problem Revisited

03:15 - 03:30

Jose Vinicio Macías Zamora, Universidad Autónoma de Baja California, México
Authors: J. Vinicio Macías-Zamora , Nancy Ramírez-Álvarez, Félix Augusto Hernández-Guzmán, Cristina Quezada-Hernández

ICEPR 156

PET Microparticles Has Severe Toxic Effects to Arabidopsis thaliana in Hydroponic Cultivation

03:30 - 03:45

Attila Kuscera, Mendel University Brno, Czech Republic
Authors: Attila Kuscera, Daniel Klofáč, Ondřej Pěnčík

07:00 PM - 10:00 PM

Cruise Tour

Virtual Conference

MORNING SESSION

11:30 AM - 12:30 PM

Water and Wastewater Management and Treatment I - VIRTUAL

SESSION CHAIR: Dr. Jennifer Gubitosa, University of Bari “Aldo Moro”, Italy

ICEPR 112

A Preliminary Analysis of the Correlation of Heavy Metals with TN, TP and TSS in Constructed Wetland

11:30 - 11:45

Fujia Yang, Swinburne University of Technology, Australia

Authors: Fujia Yang, Shirley Gato-Trinidad, Iqbal Hossain

ICEPR 124

Recyclable Cyclodextrin Nanosponges for the Removal of Emerging Contaminants

11:45 - 12:00

Vito Rizzi, Università degli Studi, Italy

Authors: Vito Rizzi, Jennifer Gubitosa, Angela Agostiano, Francesco Trotta, Paola Fini, Pinalysa Cosma

ICEPR 105

Bisphenol A and bisphenol S biodegradation in the river water-sediment microcosms and their impact on the biodiversity of autochthonous microbial community

12:00 - 12:15

Magdalena Noszczyńska, University of Silesia in Katowice, Poland

Authors: Magdalena Noszczyńska, Magdalena Pacwa-Płociniczak, Kinga Bondarczuk, Zofia Piotrowska-Segetz

ICEPR 127

Water Quality Assessment of Keelung Port

12:15 - 12:30

Erdy Aganus, National Taiwan Ocean University, Taiwan

Authors: Erdy Aganus, Jung-Chang WangI, Chia-An YangI, Nathalia Quintero

AFTERNOON SESSION I

Biomedical Engineering I - VIRTUAL

12:30 PM - 01:00 PM

SESSION CHAIR: Dr. Jennifer Gubitosa, University of Bari “Aldo Moro”, Italy

ICBB 002 **Analysis of Deaths Reported for Percutaneous Cardiac Ablation Catheter Devices**

12:30 - 12:35

Sungjoon Kang, Harvard University, South Korea

Authors: Sungjoon Kang, Sujata Bhatia

ICBB 011 **Deep Brain Stimulation: Neural Tissue Response and Analysis of Adverse Events**

12:35 - 12:40

Mabel Chen, Mounds View High School, USA

Authors: Mabel Chen, Sujata Bhatia

ICBB 023 **Mechanosensitive hormone signaling promotes mammary progenitor expansion and breast cancer progression**

12:40 - 12:45

Jason J. Northey, University of California San Francisco, USA

Authors: Jason J. Northey, Yoshihiro Yui, Mary-Kate Hayward, Connor Stashko, FuiBoon Kai, Janna K. Mouw, Dhruv Thakar, Jonathon N. Lakins, Alastair J. Ironside, Susan Susan, Rita A. Rita A., E. Shelley Hwang, Hwang Weaver

ICBB 043 **Do medical device monopolies impact safety and quality? Analysis of adverse events for Abiomed Impella(R) heart pumps**

12:45 - 01:00

Vaishnavi Tummala, Harvard University, USA

Authors: Vaishnavi Tummala, Sujata K. Bhatia

12:50 PM - 01:50 PM LUNCH

01:50 PM - 02:35 PM

ICEPR'22 KEYNOTE LECTURE - VIRTUAL

Session Chair: Dr. Jennifer Gubitosa, University of Bari "Aldo Moro", Italy



Heterogeneous Ozone Effects on the DNA Methylome of Bronchial Cells Observed In a Crossover Study

Dr. Marie-Abele Bind,
Harvard University, USA

Marie-Abele Bind is an Instructor of Investigation at the MGH Biostatistics Center. Her research interests focus on developing causal inference methods for quantifying the effects of randomized and non-randomized exposures on various outcomes and understanding the mechanisms explaining these effects. Her current research is funded by the NIH Early Independence Award program. She completed her joint PhD in Biostatistics and Environmental Health at the Harvard School of Public Health, working with Professors Joel Schwartz and Brent Coull. She then became a Ziff postdoctoral Fellow at the Harvard University Center for the Environment. In 2016, she was awarded an Early Independence Award (NIH High-Risk High-Reward research grant) and became Research Associate in the Department of Statistics. From 2017 to 2021, she became a John Harvard Distinguished Science Fellow.

2:35 PM - 03:20 PM

IGERT'22 KEYNOTE LECTURE - VIRTUAL

Session Chair: Dr. Jennifer Gubitosa, University of Bari "Aldo Moro", Italy



Building Resiliency to Climate Change: What Path for the Building Energy Demand?

Dr. Umberto Berardi,
Ryerson University, Canada

Dr. Berardi is Canada Research Chair in Building Science, Full Professor, and Director of the BeTOP center at Ryerson University in Toronto, Canada. His main research interests are related to the study of innovative solutions and new materials for improving the performance within the built environment. Recently, he has been focusing on integrating nanotechnologies into building systems. He has mainly focused on organic PCMs, such as paraffin and bio-PCM, and on granular and monolithic aerogel. Dr. Berardi has an extensive publication record, including 130 peer-reviewed journals, 130 international conference papers, and five books. Dr. Berardi's publications have received 10,000 citations in Google Scholar, where he has an h-index of 45, while Scopus database counts over 6,000 citations and an h-index of 40. Dr. Berardi has a body of funded research comprising over \$2.5 M in government and private sector sponsored research. He has been awarded a CFI-JELF; NSERC Discovery Grant; Early Research Award from the MRI and many other

AFTERNOON SESSIONS II

3:20 PM - 04:25 PM

Biomedical Engineering II - VIRTUAL

SESSION CHAIR: Dr. Jason J. Northey, University of California San Francisco, USA

ICBB 007 **Assessment of 3D Printing for Surgical Instrument Manufacturing**
03:20 - 03:35

Thomas B. Chang, Harvard University, USA

Authors: Thomas B. Chang, Sujata K. Bhatia

ICBB 020 **Analysis of Malfunctions & Injuries Attributed to CT Scanners Before and After the Pandemic**
03:35 - 03:50

Derry X. Li, Methacton High School, USA

Authors: Derry X. Li, Sujata K. Bhatia

ICBB 024 **An Agent-Based Model for Localized COVID-19 Transmission Dynamics and Intervention Impacts**
03:50 - 04:05

Jason Starr, Briarcliff High School, USA

Authors: Jason Starr, Morgan Kain, Sujata Bhatia

ICBB 005 **Embryo editing technology and its effect on conceptions of motherhood**
04:05 - 04:20

Tiffany Yeung, The Lawrenceville School, USA

Authors: Sujata Bhatia, Harvard University, USA

ICBB 025 **An Analysis of Discrepancies in Commonly Used Measures of Autism Prevalence**
04:20 - 04:25

Aidan L. Lin, Brophy College Preparatory, USA

Authors: Aidan L. Lin, Sujata K. Bhatia

04:35 PM - 04:50 PM COFFEE BREAK

AFTERNOON PARALLEL SESSION I - SANCHO 3 (ICBB)

04:25 PM - 04:50 PM

Drugs and Pharmaceutical Products - VIRTUAL

SESSION CHAIR: Dr. Vito Rizzi, Università degli Studi, Italy

ICBB 009

4:25 - 4:40

The Effect of Age on Gene Therapy Efficacy for RPE65 Leber's Congenital Amaurosis: A Pooled Analysis

Megan Tian, Lakeridge High School, USA

Authors: Megan Tian, Sujata K. Bhatia

ICBB 019

4:40 - 4:45

Unexpected Decline in Insulin Adverse Events Signals a Possible Decline in Insulin Use

Alek Karagozian, Harvard University, USA

Authors: Alek Karagozian, Sujata K. Bhatia

ICBB 027

4:45 - 4:50

Surge in Adverse Events for Prescription Opioids and Opioid Overdose Treatments during the COVID-19 Pandemic

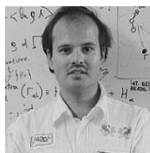
Oliver Boesch, Harvard University, USA

Authors: Oliver L. Boesch, Sujata K. Bhatia

09:00 AM - 9:45 AM

ICBB'22 KEYNOTE LECTURE - VIRTUAL

SESSION CHAIR: Dr. Jennifer Gubitosa, University of Bari “Aldo Moro”, Italy



Mechanical Destabilization of Lipid Membranes by Nanoparticles: From Microplastics to Gold Nanoparticles.

Dr. Vladimir Baulin,
Universitat Rovira i Virgili, Spain

Vladimir Baulin did his doctorate studies in theory of polymers at Commissariat à l’Energie Atomique (CEA-Grenoble). He has obtained a PhD degree in physics from Université Grenoble-Alpes, France in 2003. In 2004-2006 he was a postdoctoral researcher at the Institut Charles Sadron, Strasbourg, France. Since 2008 Vladimir Baulin leads a group of Soft Mater theory at the University Rovira i Virgili (URV), Tarragona, Spain (<http://vbaulin.softmat.net>). In 2014-2018 he was a Coordinator of EU funded Initial Training Network SNAL: Smart Nano-objects for Alteration of Lipid bilayers (<http://itn-snal.net>). From 2021 he is a Distinguished researcher Beatriz Galindo at URV.

ICBB'22 KEYNOTE LECTURE - VIRTUAL

9:45 AM - 10:30 AM

Session Chair: Dr. Jennifer Gubitosa, University of Bari "Aldo Moro", Italy**TBD.*****Dr. Giuliana D'Ippolito,***

Istituto di Chimica Biomolecolare (ICB), Italy

From 01/01/2021-today, Senior researcher at Institute of Biomolecular Chemistry (ICB), National Research Council of Italy (CNR), Pozzuoli, Italy. From 16/12/2009 to 31/12/2020, Researcher at ICB-CNR of Pozzuoli, Italy.

10:25 AM - 10:40 AM COFFEE BREAK

MORNING SESSION I

10:40 AM - 12:00 PM **Environmental Sustainability and Protection- VIRTUAL**

SESSION CHAIR: Dr. Magdalena Noszczyńska, University of Silesia in Katowice, Poland

- ICEPR 120
10:40 - 10:55 **Growth Kinetics Of Bacteria Isolated From The Microbiota Of Tussilago Farfara L. Growing In Post-Industrial Mercury-Contaminated And Mercury Non-Contaminated Areas. Mera Gene Identification.**
Magdalena Trojańska, Jagiellonian University, Poland
Authors: Magdalena Trojańska, Martyna Rogala, Anna Kowalczyk, Dariusz Latowski, Monika Bojko
-
- ICEPR 123
10:55 - 11:10 **Proposing Chitosan/Snail Slime Blended Films As Sustainable Functional Masks/Patches for Cosmetics and Biomedical Applications**
Jennifer Gubitosa, Università degli Studi "Aldo Moro", Italy
Authors: Jennifer Gubitosa, Vito Rizzi, Angela Agostiano, Paola Fini, Pinalysa Cosma
-
- ICEPR 158
11:10 - 11:25 **Evaluation Of The Metal Removal Capability Of Endemic Chilean Species**
Lazo Andrea, Universidad Técnica Federico Santa María, Chile
Authors: Lazo Andrea, Lazo Pamela, Hansen Henrik K., Gutiérrez Claudia
-
- ICEPR 099
11:25 - 11:40 **Thermoreact® - An Innovative Remediation Product for In-Situ Neutralization of Halogens, Sulphur, Phosphorus and Mercury during Thermal Desorption**
Aurélien Vandekerckhove, Haemers Technologies SA, Belgium
Authors: Ysaline Depasse, Aline Jorden, Hatem Saadaoui, Jan Haemers
-
- ICEPR 141
11:40 - 11:55 **Environmental Impact Of An Informal Settlement On A Headwater Area At High-Risk Of Erosion In Brazil**
Maria Thereza Fonseca, Federal University of Minas Gerais, Brazil
Authors: Maria Thereza Fonseca, Samuel L. L. Silva², João P. Ferreira, Rayssa S. Nunes, Hugo L. M. de Paula², Jonatas F. da Cruz, Arthur Antão², Izabel N. R. Santos, Juni Cordeiro, Luiz Alberto I. Saenz, Eliane Maria Viera, Ricardo Motta Pinto Coelho, Maria Rita Scotti
-
- ICEPR 177
11:55 - 12:00 **Sustainable Water Storage Technology Based On Biodegradable Waste Materials**
Daria Marczak, Wrocław University of Environmental and Life Sciences, Poland
Authors: Daria Marczak, Krzysztof Lejcuś

ICEPR 134 **On The Democratization of the Fluid Flow Simulation**

12:00 - 12:15 *Jan Jindra, Engineering Software Steyr GmbH, Austria*

Authors: Martin Schifko, Alireza Eslamian, Vishal Maurya, Alexander Stadik, Ernesto Monaco, Rattandeep Singh, Josip Basic, Daniel Dietrich, Alexander Hinterreiter, Jan Jindra, Sai Karumuri, Muraleekrishnan Menon, Matthias Rettenbacher, Kamil Szewc, Daniel Rechberger, Petr Mucha, Farzad Kiani

11:55 AM - 12:55 PM LUNCH BREAK

AFTERNOON SESSION I

01:55 PM - 03:00 PM

Nanomaterials, Nanodevices: Fabrication, Characterization and Application III - VIRTUAL

SESSION CHAIR: Dr. Jennifer Gubitosa, University of Bari “Aldo Moro”, Italy

ICNFA 114 **Determining Surface Energies of Nanoparticles from the Contact Angles Measured with the NanoTRAPPED Method**

01:55 - 02:10

Andrei Honciuc, “Petru Poni” Institute of Macromolecular Chemistry, Romania

Authors: Andrei Honciuc, Oana-Iuliana Negru

ICNFA 131 **Self-closing Micro-Cuff for Neural Recording in the Locust**

02:10 - 02:25

Hasti Sajedi, University of Houston , USA

*Authors:*Hasti Sajedi, Navjot S. Randhawa, Dhara Parikh, Haleh Fotowat, Fabrizio Gabbiani, J. C. Wolfe

ICNFA 128 **Conducting Polymer Based Nanofibers as SoftActuator/ Sensor Devices**

02:25 - 02:40

Dr. Mihaela Beregoi, National Institute of Materials Physics, Romania

Authors: Dr. Mihaela Beregoi, Alexandru Evangelidis, Sorin Ion Jinga, Ionut Enculescu

ICNFA 134 **Interactive influence of Nanoparticle Size, Amount and Temperature on Thermal Conductivity and Dynamic Viscosity of Nanofluids**

02:40 - 02:55

Melda OZDINC CARPINLIOGLU, Gaziantep University, Turkey

Authors: Mahmut Kaplan, Melda Ozdinc Carpinlioglu

ICNFA 127 **Nanoencapsulation Of Neem Oil Using Inulin And Modified Starch For Use As Bioinsecticide**

02:55 - 03:00

Maria Elizabeth Fuentes Campos, Universidad Nacional Mayor de San Marcos, Peru

Authors: Maria Elizabeth Fuentes Campos, MARIA VERONICA CARRANZA OROPEZA

NOTES

NOTES



9th World Congress on New Technologies (NewTech'23)

August 09 - 11, 2023
Brunel University, London, United Kingdom

Next year, the Congress will be held on August 09 - 11, 2023 in Brunel University London, United Kingdom.

Please visit the website provided below for regular updates:

www.2023.newtechcongress.com

For inquiries and to obtain further information on the congress please email us at:
info@newtechcongress.com

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+1-613-834-9999

JOURNALS PUBLICATIONS

Selected articles from the congress will be published in one of the following journals after a secondary review process:

- International Journal of Theoretical and Applied Nanotechnology (IJTAN)
- International Journal of Environmental Pollution and Remediation (IJEPR)
- Journal of Biomedical Engineering and Biosciences (JBEB)

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AUGUST 03 - 05, 2022 | PRAGUE, CZECH REPUBLIC

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