

TENTATIVE **PROGRAM**

2020 World Summit on Materials Science and Nanotechnology

March 26 - 27, 2020, Madrid, Spain

Venue:

Hotel Crowne Plaza Madrid Airport Calle de Lola Flores, 1, 28022 Madrid, Spain

Research Lake, 50 Fountain Plaza, Suite 1400, Buffalo, NY, USA , 14202, Tel: +1 (716)-229-8999 e-mail: <u>materials@researchlakeconferences.com. connect@researchlake.com</u>





TENTATIVE **PROGRAM**







88-

SCIENTIFIC SESSIONS

- 1. Materials Research
- 2. Computational Materials Science
- 3. Emerging technologies in Materials Science
- 4. Biomaterials and Nanomaterials
- 5. Composite Materials
- 6. Ceramics and Polymers
- 7. Materials Synthesis and Processing
- 8. Applications of Advanced Materials
- 9. Semiconductors, Alloys, and Metallurgy
- 10. Glass Science and Technologies
- 11. Metallic and Organic Materials
- 12. Advances in Graphene Research and 2D Materials
- 13. Magnetic Materials
- 14. Emerging Smart Materials
- 15. Nanotechnology in Medicine
- 16. Nanotechnology in Engineering
- 17. Future of Nanotechnology
- 18. Benefits and Applications of Nanotechnology
- 19. Spin Electronics, Amphiphilic materials
- 20. Superconductors and Advanced Engineering Polymers
- 21. Biomedical devices and 3D Printing
- 22. Catalysis Chemistry



ADVISORY Committee members



George R. St. Pierre

George R. St. Pierre received his doctorate in 1954 from the Massachusetts Institute of Technology. After a tour of duty at the Air Force Materials Laboratory and industrial research at the Inland Steel Company, he joined the faculty at The Ohio State University where he has been a full professor since 1964 and Chairman since January 1, 1984. During the past twenty-five years, he has served on many University councils, professional society committees, government advisory panels, and industrial consulting groups. He served as Associate Dean of the

Graduate School from 1964 to 1966. Dr. St. Pierre has published over one hundred papers as well as many technical reports for government and industry in connection with contract research, consulting, and committee assignments inducing three recent reports for the Office of Technology Assessment, U.S. Congress.

Dr. St. Pierre's other recent associations include serving as Visiting Professor at the University of Newcastle, Australia, in 1975 and as I.P.A. Fellow, U.S.E.P.A., during the summer of 1976. He was elected a Fellow of The Metallurgical Society in 1976 and a Fellow of the American Society for Metals 1n 1982. He has received several awards for his research and teaching including the ASM Bradley Stoughton. Award, the Fontana and MacQuigg Awards at OSU, the 1978 Alumni Association Distinguished Teacher Award, and the Borer Award. He has been selected to receive the 1987 ASM Gold medal.

Digby Macdonald

Digby D. Macdonald is the current Professor in Residence at the University of California, Berkeley's Departments of Nuclear Engineering and Materials Science and Engineering. After growing up and obtaining his bachelor's degree in New Zealand, Macdonald moved to Canada to receive his PhD in Chemistry from the University of Calgary.

Throughout his career, his has held numerous positions at Ohio State University and Pennsylvania State University. He has received many awards for his scientific work, including the 2014 Frumkin Memorial



Medal from the International Society of Electrochemistry for his work on passivity and passivity breakdown. His work on the properties of aqueous solutions at high temperatures and pressures also earned him the 2013 Gibbs Award.

Additionally, ECS has presented him with the Wagner Memorial and Uhlig Awards. Aside from being named Fellow of ECS, he also holds fellow status at NACE-International, Royal Society of Canada, Royal Society of New Zealand, ASM International. World Innovation Foundation, Institute of Corrosion, and International Society of Electrochemistry.





Farid Menaa

Dr. Farid Menaa is an inter- and multi-disciplinary professional with worldwide reputation. He has three international post-doctoral terms in Oncology, Dermatology, and Hematology; MBA Entrepreneurship and MD candidate. During his ongoing career, he has mainly contributed to the identification and functions of new human disease-causing genes and variants, formulated natural products for anti-aging and developed innovative theranostic strategies against cancers, cardiovascular diseases, diabetes, obesity and infectious diseases. He has more than 10

years' experiences either in the academic, hospitals or industrial sectors.

As Chief Scientific Officer and Vice-President R&D at Fluorotronics, Inc. he actively participated in the development of the disruptive "Carbon-Fluorine Spectroscopy". Dr. Menaa collaborates with various organizations worldwide. He is a member of several prestigious medical and scientific organizations and editorial boards in the field of medicine, science, technology and business, including in the nano-segment. He has authored more than 100 articles including research and review articles, books, book chapters, textbooks, proceedings, and has participated to over 200 scientific international events including as co-organizer, keynote speaker, chairman. Dr. Menaa's worldwide collaborations, holistic point of view and strong expertise in various fields led him to prevent, implement early diagnosis, and develop efficient and safer therapy.

Khwaja G Hossain

Khwaja G Hossain completed Ph.D. from the University of Wales, Aberystwyth, UK in 1995 and postdoctoral studies from Chiba University, Matsudo, Japan and North Dakota State University, Fargo, ND, USA. Currently working as a professor at Mayville State University, Mayville. He has published more than 40 papers in reputed journals. A recepient of several federal and state grants, leading research projects in biological and material sciences.





Ramachandra Naik

Dr. Ramachandra Naik completed M.Sc. in Physics in 2011 from Bangalore University, Ph.D.in materials science, Physics in 2019 from Bharathiar University, presently working as Assistant Professor in the Department of Physics, New Horizon College of Engineering, Bangalore, India.

Sam Hsien-Yi HSU

Dr. Sam Hsien-Yi HSU obtained his Ph.D. degree under the supervision of Prof. Kirk S. SCHANZE at the University of Florida with focusing on photophysical behaviors of functional metallopolymer materials for solar energy and optoelectronic applications.







Khaled Habib

Dr. Khaled Habib holds a Ph.D. in Chemical and Materials Engineering from the Optical Science and Technological Center of the University of Iowa, Iowa City, Iowa, USA, 1988. Mr.Habib was a Post Doctoral Fellow at the Chemical Engineering Dept., and Materials science Dept., of the Technical University of Aachen, Aachen, Germany, 1991-1992.

Manoj Gupta

Born in New Delhi in 1961, Manoj Gupta had his schooling in the same town and graduated in Metallurgical Engineering in 1984 from Visvesveraya Regional College of Engineering, Nagpur, securing a first class with distinction. Following that Manoj completed his M. Eng. degree (Metallurgy) in 1987 from Indian Institute of Science, Bangalore and was awarded the GOLD MEDAL. He pursued his doctoral programme in University of California, Irvine and obtained his Ph.D. in 1992. After that he spent 4 months as Post-Doctoral Fellow in University of Alberta, Canada.



He took up the job in NUS, Singapore in 1993 and is continuing there till now. Currently, Dr. Manoj Gupta is an Associate Professor. He was formerly, Head of Materials Division of the Mechanical Engineering Department and Director designate of Materials Science and Engineering Initiative of National University of Singapore. His current research interests include processing, microstructure and properties evaluation of advanced structural materials for multiple engineering and biomedical applications.

To his credit are: (i) 'Disintegrated Melt Deposition' technique, a unique liquid-state processing method, and (ii) 'Hybrid Microwave Sintering' technique, an energy efficient solid-state processing method, to synthesize AI and Mg light-metal alloys/micro/nano-composites. He has published over 400 peer reviewed research papers in various international journals and owns two US patents related to development of processing techniques and advanced materials. He has also co-authored four books, 'Microwave and Metals' and 'Magnesium, Magnesium Alloys and Magnesium Composites', published by John Wiley and "Insight into Designing Biocompatible Magnesium Alloys and Composites" and "Metallic Amorphous Alloy Reinforcements in Light Metal Matrices" by Springer in 2015. He is an editorial board member of more than 10 international journals and a peer reviewer of 36 international journals related to materials science. Dr Gupta has the working experience in various countries such as USA, Canada and India besides Singapore.





SESSIONS

Title: Computer-Simulation of Crystal Nucleation and Growth in Polymers in the Bulk and Under Confinement

Nikos Ch. Karayiannis, Universidad Politecnica de Madrid (UPM), Spain

Title: Wear rate at RT and 100oC and operating temperature range of Cu50Zr50 shape memory alloy controlled through microalloying

Sergio Gonzalez Sanchez, Northumbria University, UK

Title: Synthesis and characterization of carbon dots coated Al2O3 nanofibers nanocomposite for Pb2+ ion adsorption and reuse for latent fingerprint detection

Bienvenu Gael, University of Johannesburg, South Africa

Title: Evaluation of postprocessing in 3D printing of Ti6Al4V scaffolds

Krzysztof Jastrzębski, Lodz University of Technology, Poland

Title: Cleaning cigarette butts and characterization of cellulose acetate

Celia Moreno González, Avda. de la Universidad, Spain

Title: In the way of development acoustical absorbers made from used cigarette butts

Ana M Gata Jaramillo, Avda. de la Universidad, Spain

Title: Effect of microalloying and co-microalloying on stress-induced martensitic transformation of Cu50Zr50 shape memory alloy at RT and 100oC

Abdurauf Younes, Northumbria University, UK

Title: Latent heat storage in building indoor double layer hemp shive structure elements

Edgars Krilovs, Riga Technical university, Latvia

Title: Enhancing the physical properties of metal oxide nanocomposites by sintering using steam

Anu Roshini, BITS Pilani KK Birla Goa Campus, India

Title: Large magnetostriction of bulk glassy alloys

Shahid Ali, Shanghai University, China



Title Electrical characterization of gallium nitride thin films synthesized by electrochemical deposition

Abdulraoof I.A.Ali, University of Pretoria, South Africa

Title: Gas sensor based on Two-dimensional materials

Aijun Yang, Xi'an Jiaotong University, China

Title: New perspectives for bactericidal medical devices and industrial application **Ariel Franco**, NanoSono, Israel

Title: Kinetics of Pyrite Oxidation in Simulated Mine Tailings Pond Conditions **Geoffrey Ray L. Nablo,** University of the Philippines, Philippines

Title: Mixed Phase Titanium Dioxide Nanoparticles Using Glacial Acetic Acid **Shilpy Bhullar**, Panjab University, India

Title: Numerical Study of Natural Convection in a Three-dimensional Cavity Heated by two portions and Filled with Nanofluids

SANNAD Mohamed, Ibn Zohr University, Morocco

Title: Emerging techniques for nanofibers fabrication and their applications **Subhash B. Kondawar**, Nagpur University, India

Title: The Structural, Mechanical, Thermal, Electronic and Optical properties of Halide perovskites[[Cs]]_2 TiX_6(X=Cl,Br,I): First-principles investigations

Youssef NOURI, Hassan II University of Casablanca, Morocco

Title: pH Stimulus Polymers: A Brief Overview of their Scope and Applications **Nayab Abdul Karim**, Pakistan

Title: Development of a nano hybrid dental composite **Rabia Aziz,** NED University of Engineering & Technology, Pakistan

Title: Adsorptive and catalytic properties of green synthesized ZnO and ZnO/NiFe2O4 nanocomposites

Tijani JO, Federal University of Technology, Nigeria

10 Speaker Slots available

12 Poster Slots available



VENUE

Hotel Crowne Plaza Madrid Airport Calle de Lola Flores, 1, 28022 Madrid, Spain

MADRID ATTRACTIONS



Basilica de San Francisco el Grande



Buen Retiro Park & the Crystal Palace



Museo Thyssen-Bornemisza



National Archaeological Museum



Centro de Arte de Reina Sofía



Fuente de Cibeles and Gran Via



Lázaro Galdiano Museum

Prado museum



Plaza Mayor

Puerta de Alcalá

For more detail on

Conference Registration | Participation | Abstract Submission | Sponsership | Exhibition Booth Space

Please Contact:

Sara Williams - Program Manager

Material Science 2020 Conference | March 26-27, Madrid, Spain Research Lake International Inc | 250 Yonge St., Suite 2201, Toronto, ON M5B 2L7

Phone: +1- 647-551-8989

Email: materials@researchlakeconferences.com materials@researchlakeconferences.net

For Registration, please click

https://researchlake.com/conferences/materials-science/registration



Research Lake International Inc.

Canada Office

250 Yonge Street, Suite 2201, Toronto M5B 2L7, Ontario, Canada

🖀 +1 (647) 551-8989

connect@researchlake.com

USA Office

50 Fountain Plaza, Suite 1400 Buffalo, NY, USA , 14202

🖀 +1 (716) 266-6262

🛞 www.researchlake.com

Our Destinations

USA | Canada | Europe | UK | Middles East | Asia Pacific