

European Congress on

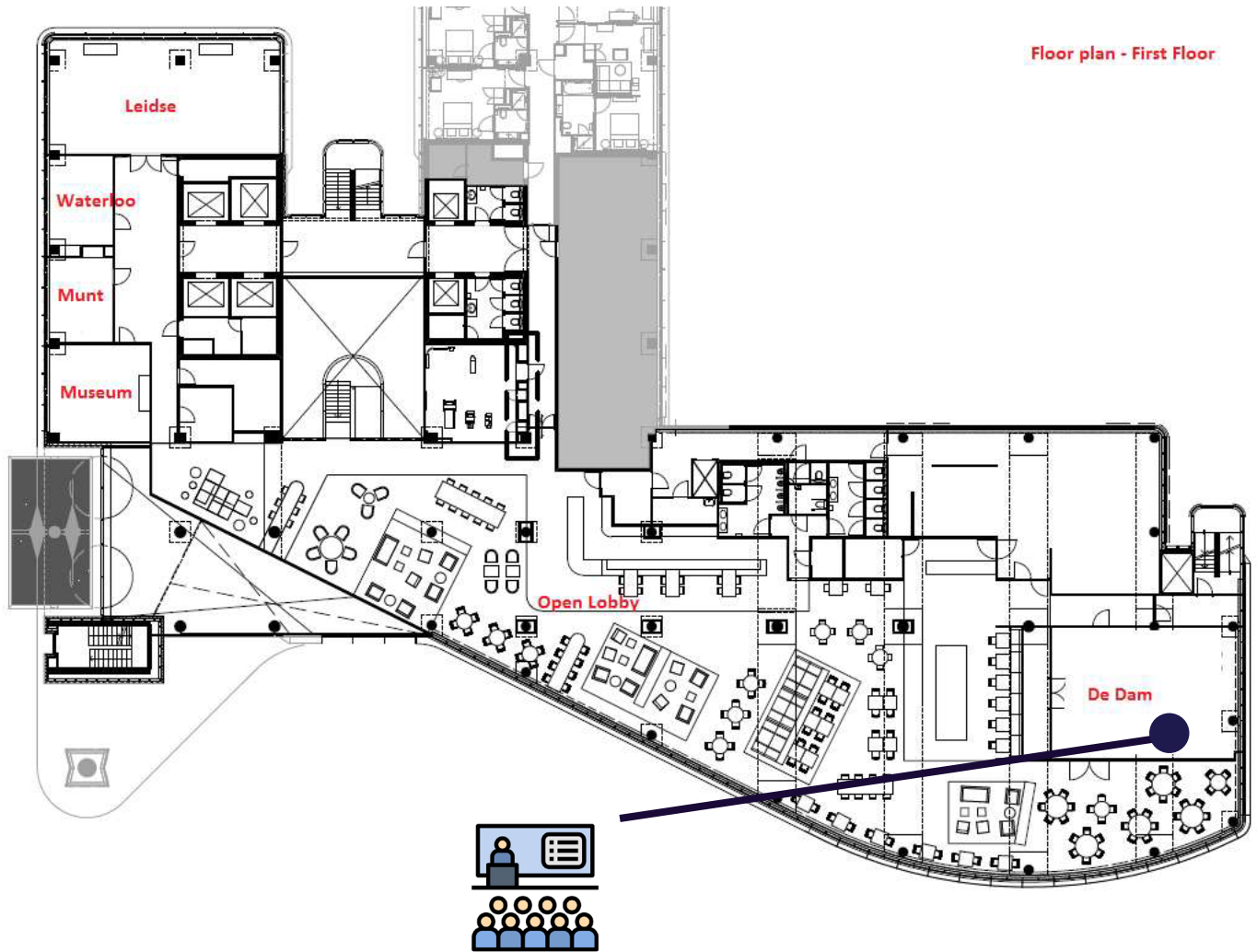
MATERIALS SCIENCE AND ENGINEERING

April 03-04, 2025

Amsterdam, Netherlands

Address: 355 S. Main St., Falls Tower
1st Floor, Greenville,
South Carolina, 29601, USA

Floor Map



#ConferenceHall - De Dam

Wifi Details:

Username: Holiday Inn

Password not required - Open Wi-Fi

SCIENTIFIC PROGRAM

#DAY 1 - April 03, 2025

Meeting Hall: De Dam

08.30 - 09.15 Registrations

Moderator

Biswa Nath Bhadra, French National Centre for Scientific Research, France

09.15 - 09.30 Introduction

Keynote Presentations

09.30 - 10.15	Title: Design Essentials for Future Ready Micro/Nano Cleanrooms
Eric Stuiver , Deerns Group, The Netherlands	
10.15 - 11.00	Title: 4D Analyses of Kirkendall Porosity and Microstructure in Diffusion Couples of Ni/Ni-Based Superalloy Cmsx-4
Bettina Camin , Hochschule Bremerhaven, Germany	
11.00 - 11.45	Title: Computation-Driven Design of Materials Related to Lithium-Ion Batteries through Theoretical Studies
Jyh-Chiang Jiang , National Taiwan University of Science and Technology, Taiwan	

11.45 - 12.00 Networking and Refreshments @ Foyer

12.00 - 12.15 Group Photo

Oral Presentations

Session Chair:

Eric Stuiver, Deerns Group, The Netherlands

Sessions: Materials Science and Engineering | Energy & Hybrid Materials | Nanodevices & Sensors | Surface Science | Additive Manufacturing of Materials

12.15 - 12.40	Title: Water Electrospray, Hydroxyl Radical Water, and its Applications
Seung S Lee , KAIST, Korea	
12.40 - 13.05	Title: Next-Gen Solar Photocatalysis: Vacancy-Tailored 1D Melem Nanorods for Enhanced Photocatalytic CO ₂ Reduction Coupled with Organic Synthesis under Visible Light
Pratibha Saini Urhan , Friedrich-Schiller-Universitat Jena, Germany	

13.05 - 14.00 Lunch @ Restaurant

14.00 - 14.25	Title: Photomemristor Sensor Based on Two-Dimensional Crystals for Artificial Vision
Gennady N Panin , Russian Academy of Sciences, Russia	
14.25 - 14.50	Title: Development of Anti-Corrosive and Anti-Fouling Coatings for Marine Application
Sathiya Paulraj , National Institute of Technology Tiruchirappalli, India	
14.50 - 15.15	Title: Electrochemically Assisted Growth of Organic/Inorganic Hybrid Thin Films
Biswa Nath Bhadra , French National Centre for Scientific Research, France	
15.15 - 15.40	Title: Exploiting the Performance of Indoor Dye-Sensitized Solar Cells using Copper Polymer Gel Electrolytes with γ -Butyrolactone Solvent
Fatima Santos , University of Porto, Portugal	
15.40 - 16.05	Title: Grain Structure, Strength and Degradation Mechanisms of Hastelloy X Welds by Laser Beam Welding Process
Sathiya Paulraj , National Institute of Technology Tiruchirappalli, India	
16.05 - 16.30 Refreshments @ Foyer	
16.30 - 16.55	Title: Mechanical Strength Analysis of Additive Manufactured PLA Specimens with Variable Infill Patterns and Densities
Gouri Vignesh Jawalkar , Indian Institute of Technology Kharagpur, India	
Poster Presentation	
P01	Title: Flexible Morphological Regulation of Photothermal Nanodrugs: Understanding the Relationship of Structure, Photothermal Effect and Tumoral Biodistribution
Shukun Li , Eindhoven University of Technology, Netherlands	
P02	Title: Development of Pani/CuMn ₂ O ₄ Nanocomposite via Hydrothermal Method as a Novel Electrode Material for Supercapacitor
Abdulraheem SA Almalki , Taif University, Saudi Arabia	
e-Poster Presentation	
E-Poster 1	Title: The Use of Wool Fibers as a Column Packing Medium for the Dynamic Adsorption of Methylene Blue Dye from Aqueous Solutions
Bogdan-Constantin Condurache , Institute of Macromolecular Chemistry Petru Poni, Romania	
E-Poster 2	Title: Effect of Magnetic Properties on Deperming using Preisach Model
Sang Hyeon Im , Dong Eui University, South Korea	
E-Poster 3	Title: Development of Sustainable Thermoplastic Composites using Flax-Jute Hybrid Fibers as Reinforcement
Melisa Yeke , METYX Composites-Telateks A.S, Turkey	

E-Poster 4	Title: Analysis of Influence of Magnetic Materials during Deperming for Reducing the Magnetic signals of a Warship
Sang Hyeon Im , Dong Eui University, South Korea	
E-Poster 5	Title: Bending, Stability and Natural Vibrations of a Graphene Sheet
Samvel H Sargsyan , Shirak State University, Armenia	

Day 1 Concludes followed by Award Felicitations

SCIENTIFIC PROGRAM

#DAY 2 - April 04, 2025

Meeting Hall: Rembrandt 4

Moderator

Nekane Guarrotxena, Spanish National Research Council, Spain

Keynote Presentations

10.00 - 10.45	Title: Interface Analysis of Diffusion-Welded Nickel/Nickel-Based Superalloy Cmsx-4
Bettina Camin, Hochschule Bremerhaven, Germany	
10.45 - 11.30	Title: Electrocatalytic Mechanism of Nitrogen Reduction on IrO_2 (110) Surface: A DFT Study
Jyh-Chiang Jiang, National Taiwan University of Science and Technology, Taiwan	

11.30-11.45

Networking and Refreshments @ Foyer

11.45 - 12.30	Title: Eliminating Implant Infection: 30,000 Nanotextured Orthopedic Implants in Humans with No Infection
Thomas J Webster, Northeastern University, USA	

Oral Presentations

Session Chair:

Bettina Camin, Hochschule Bremerhaven, Germany

Sessions: Nanomaterials | Mining and Metals

12.30 - 12.55	Title: Polymer-Nanoparticle Synergistic Approach for Bio and Energy Applications
Nekane Guarrotxena, Spanish National Research Council, Spain	

12.55 - 14.00

Lunch @ Restaurant

14.00 - 14.25	Title: Creating an Innovative Electrochemical Nitrite Sensors Utilizing Zn-Schiff Base Complexes
Zahra Akbari, University of Messina, Italy	
14.25 - 14.50	Title: Numerical Investigation of Sulfur Removal During Heat Hardening Induration of Direct Reduction Grade Iron Ore Pellets
Mehdi Azizkarimi, Golgohar Mining and Industrial Company, Iran	
14.50 - 15.15	Title: Anticancer Potentials of Zinc Oxide - Chamaemelum Nobile against Breast Cancer: A Novel Approach for Synergistic Breast Cancer Therapy
Alaa Yousef Ghidan, International University of Science and Scientific Research Development, UK	

15.15 - 15.40	Title: <i>In situ</i> Antitumor Vaccine Composed of a Nanostructured Emulgel System Carrying Immunogenic Chemotherapeutics in Immunization in Pre-Clinical Breast Cancer Models
---------------	--

João Paulo Figueiró Longo, University of Brasília, Brazil

Video Presentations

15.40 - 16.00	Title: Circumventing Challenges in Developing CVD Graphene on Steels for Extraordinary and Durable Corrosion Resistance
---------------	--

Raman Singh, Monash University, Australia

Day 2 Closing Ceremony followed by Award Ceremony

16.00 - 16.30

Networking and Refreshments @ Foyer

VIRTUAL PROGRAM

#DAY 1 - April 03, 2025

09.45 - 10.00 Introduction

Keynote Presentations	
10.00 - 10.30	Title: Azodye Photoaligned Nanolayers for New Liquid Crystals Display and Photonics Devices
Vladimir G. Chigrinov , Hong Kong University of Science and Technology, Hongkong	
Oral Presentations	
Sessions: Materials Science and Engineering Nano Materials Surface Science Polymers and Biopolymers Biomaterials	
10.30 - 10.55	Title: The Synergistic Effects of Graphene Nanoparticles on the Surface Wettability and Barrier Properties of Polydimethylsiloxane based Composite Coatings
Sachin Sharma Ashok Kumar , Taylor's University, Malaysia	
10.55 - 11.20	Title: Development of Biofunctional Materials by Surface Engineering using Low-Energy Non-Thermal Electron Beam Technology
Nic Gurtler , Fraunhofer Institute for Electron Beam and Plasma Technology, Germany	
11.20 - 11.45	Title: Development of PVA-Chitosan-Polyaniline Hydrogels with Adjustable APS Concentrations for Enhanced Stability and Optimized Solar Vapor Generation Efficiency
Syazwani Mohd Zaki , International Islamic University Malaysia, Malaysia	
11.45 - 12.10	Title: Nanotechnology: A Review on Personalized Cancer Therapy and Diagnosis
A. V. Vasanthi , Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, India	
12.10 - 12.35	Title: Use of Indocyanine Green Fluorescence Imaging in the Extrahepatic Biliary Tract Surgery
Orestis Ioannidis , Aristotle University of Thessaloniki, Greece	
12.35 - 13.00	Title: Nano Suspensions as a Promising Drug Delivery System
B. Medha Gayatri , Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, India	
13.00 - 13.25	Title: Explore the Thermal Properties, Kinetic and Thermodynamics Analysis of Local Beverage Wastes Pyrolysis Using TG/DTG: Implications for Sustainable Energy in Ethiopia
Alebel Abebaw Teshager , Bahir Dar University, Ethiopia	
13.25 - 13.50	Title: Nano-Optics based on Silicon and Gold Core-Shell Architectures for Biophotonics and Bioassays
A. Guillermo Bracamonte , Universidad Nacional de Córdoba, Argentina	

13.50 - 14.15	Title: Current Applications of AI/MI in Hot Strip Mill
S. Sikdar, RVS College of Engineering and Technology, India	
Keynote Presentation	
14.15 - 14.45	Title: Thermal-Induced Coarsening: Nanoparticle Size Modulation
Paulo C. De Moraes, Catholic University of Brasilia, Brazil	
Day 1 Concludes followed by Award Ceremony	

Bookmark the Dates



2nd European Congress on

MATERIALS SCIENCE AND ENGINEERING

November 13-14, 2025 | **Rome, Italy**



Contact us:

Email: info@c2pforum.com

contact@c2pforum.com

Phone: +1-864-920-0042