

UNIVERSIDAD SAN FRANCISCO DE QUITO
Materials Research Conference - CIMA 2024
"Calderón de la Barca" Theater



AGENDA

Thursday, November 28th

Registration

Inaugural Event

Plenary Session 1

Prof. Pulickel Ajayan.

Nano-Engineered Materials

Chair, Department of Materials Science and NanoEngineering - RICE University, Texas, United States

Nanomaterials Session - Chairs: Prof. Thomas Cadenbach

Talk # 1

Nanomaterials

Pedro Francisco Zamora Dávila - Carbon Nanotubes with Gibberellin for Nanosensing and Corn Seeds Germination

Talk # 2

Nanomaterials

Johnny Fabricio Chimborazo Guerrón - Sustainable Production of Silver Nanoparticles via Guayusa Extract as a Bio-Reducing Agent

Talk # 3

Nanomaterials

Thomas Cadenbach - Lighting The Way: Unveiling Bismuth Ferrite Hollow Spheres For Eco-Friendly Photocatalytic Degradation Of Organic Pollutants

Talk # 4

Nanomaterials

Julio C. Chacon-Torres - Chitosan Based Biocomposites for Antibacterial Food Packaging Applications in Ecuador

Coffee Break

Advanced Applications in Materials Eng. Session - Chairs: Prof. Alfredo Valarezo, and Prof. Lorena Bejarano

Talk # 1

Advanced Applications in Materials Engineering

Lorena Bejarano - Solid-Particle Erosion of Laser Cladding, and Thermal Sprayed Coatings for Surface Reclamation of Grey Cast Iron Components at Elevated Temperature

Talk # 2

Advanced Applications in Materials Engineering

Alfredo Valarezo - 3D Multiscale Modeling of Multilayer TBCs

Talk # 3

Advanced Applications in Materials Engineering

Christian Narváz-Muñoz - Síntesis y evaluación de una membrana ultrasensible para la detección de iones de cobre en muestras de agua.

Talk # 4

Advanced Applications in Materials Engineering

Lizbeth Zamora-Mendoza - Desarrollo de hidrogeles en capas a base de celulosa: síntesis, caracterización y uso en la administración de fármacos.

Talk # 5

Advanced Applications in Materials Engineering

David Sango - Uso de celulosa vegetal en la liberación controlada de ibuprofeno a través de un sistema de pastillas multicapa.

Talk # 6

Advanced Applications in Materials Engineering

Ambar Carolina Yépez Intriago - Modelado para el Proceso de Recuperación de una Turbina Tipo Pelton con el Método de Soldadura por Pases de Revenido.

Plenary Session 2

Prof. Sanjay Sampath

Industry and Academy Partnerships for Advanced Applications in Coatings

Materials Science and Chemical Engineering Department - Director of Center for Thermal Spray Research, Stony Brook University - New York, USA

LUNCH

Talk # 7

Advanced Applications in Materials Engineering

Oscar Raul Almeida Molina - Composite materials based on clays with ZnO nanoparticles and multiwall-carbon-nanotubes for CO2 capture.

Talk # 8

Advanced Applications in Materials Engineering

Edward Ebner Avila Sosa - Understanding the structural disorder in two cobalt coordination polymers based on 2-bromoterephthalate

Advanced Materials for Construction Session - Chairs: Prof. Eva Lantsoght, and Prof. Francisco Jativa

Talk # 1

Advanced Materials for Construction

Eva Lantsoght - Advanced concrete materials for construction: from mixes to bridge applications

Talk # 2

Advanced Materials for Construction

Francisco Jativa - Experiments on concrete test beams with recycled aggregates and natural fibers

Talk # 3

Advanced Materials for Construction

William Giovanni Quitiaquez Sarzosa -

Coffee Break

Plenary Session 3

Prof. Enzo Martinelli

BEST Project - Bio-based composites to create energy-efficient and structurally durable materials.

University of Salerno

Talk # 4

Advanced Materials for Construction

Dora Paulina Gaibor Llanos - Fungal Biocomposites in Space Construction: A Comprehensive Review on Sustainable Materials and In Situ Resource Utilization

Talk # 5

Advanced Materials for Construction

Maria Augusta Rojas Molina - Caracterización de propiedades físico-mecánicas de la piedra pómez utilizada en el patrimonio edificado de Latacunga

Talk # 6

Advanced Materials for Construction

Maria Isabel Paz Suarez - Muestreo de Maderas Nativas y Endémicas de Galapagos

Talk # 7

Advanced Materials for Construction

Carlos Guillermo Vargas Febres - Caracterización de pigmentos inorgánicos para la producción de pinturas aplicadas a la arquitectura

Talk # 1

Polymers

Cristian Andrés Marcillo Zapata - Resistencia al ataque ácido en matrices geopoliméricas utilizando como precursor escoria de alto horno.

Materials for Energy Session - Chair: Prof. Rafael Soria

Talk # 1

Materials for Energy

Benjamin Andrés Pusay Villarroel - A perspective to improve the efficiency of solar cells using heterojunction solar cells based on silicon and emerging thin film solar cells.

Talk # 2

Materials for Energy

Rafael Soria - Energy transition in Ecuador: demand for materials versus local supply

CocTEL de Bienvenida

Location: "Salón Azul"