

CIMA 2026
DOMINGO

AGENDA EN ESPAÑOL

25 DE OCTUBRE DE 2026

AGENDA CIMA 2026

Programación del 25 al 30 de octubre

25 DOM

26 LUN

27 MAR

28 MIÉ

29 JUE

30 VIE

INICIO DEL EVENTO

17:00–17:30

Registro

CIMA 2026

LUNES

AGENDA EN ESPAÑOL

26 DE OCTUBRE DE 2026

MAÑANA

09:00–09:40	Frederico De Sousa Engineering Cyclodextrin-Based Drug Delivery Systems through Supramolecular Chemistry
09:40–10:05	Vladimir Reukov Aligned Polymer Fiber Scaffolds for Biomimetic Three-Dimensional Cell Culture
10:05–10:30	Camilo Zamora Ledezma Biocompatibility and Bioactivity of Titanium Alloys for Orthopedic and Dental Implant
10:30–10:55	Frank Alexis Secretos de Adhesión en Orquídeas: Mecanismos de Materiales Naturales
10:55–11:20	Pausa para café
11:20–11:45	Leonardo Basile Rapid Joule Heating Synthesis of Waste-Derived Turbostratic Graphene: Structural Characterization and Emerging Functional Applications
11:45–12:10	Edwin Vásquez From Textures to Currents: Chirality-Controlled Spin and Orbital Responses in Tellurium
12:10–12:35	Luis A. Zambrano Intriago NiFe-LDH@Biochar a saver satile catalyst for atrazine degradation under photoassisted and electrochemical operation
12:35–13:00	Ezequiel Zamora Ledezma Advanced Materials Applicationsfor Agriculture and Environmental Remediation: Two Ecuadorian Case Studies

CIMA 2026

LUNES · CONTINUACIÓN

AGENDA EN ESPAÑOL

26 DE OCTUBRE DE 2026

TARDE

17:00–17:30

Pausa para café

17:30–18:10

Enzo Martinelli

Bio-Based Composite Systems for Sustainable Seismic Strengthening of Masonry Buildings: A Cross-Scale perspective

18:10–18:35

Francisco Játiva

Effect of Bio-Minerals and Natural Fibers on Mechanical Performance of Cement Paste

18:35–19:00

Andrea Zarate Villacres

Use of Construction Waste in Concrete Design

19:00–19:25

Maria B. Lozano Molina

Nanotechnology-Enabled Construction Materials for Sustainable and High-Performance Housing

19:25–19:50

Christian Vallejo

Feasibility of Mauritia flexuosa Fiber-Reinforced Epoxy Biocomposites for Low-Load Orthotic Applications: Experimental and Numerical Study

20:00–22:00

Cóctel de bienvenida

CIMA 2026

MARTES

AGENDA EN ESPAÑOL

27 DE OCTUBRE DE 2026

MAÑANA

09:00–09:40

Joan Manuel Rodriguez Diaz

Continuous-flow amoxicillin degradation under visible light over biomass-assisted Cu-Fe oxides: one-step adsorption/advanced oxidation as the most efficient operating configuration

09:40–10:05

Isabel M. Martínez Alcalá

Engineered Mineral-Based Adsorbents for the Removal of Antibiotic Resistance in Wastewater Treatment Systems

10:05–10:30

Monica Matei & Enache Natalia

Multifunctional zeolite-based hybrid materials for water treatment applications

10:30–10:55

Elena Holban & Enache Natalia

Dual Cross linking Strategy for Enhanced Water Stability of Amino-polysaccharide Used in Water Treatment Applications

10:55–11:20

Pausa para café

11:20–11:45

Luis M. Quishpe Quishpe

Visible-light-activated hierarchical $\text{Bi}_4\text{O}_5\text{I}_2$ microspheres as advanced photocatalytic materials for emerging contaminant removal from wastewater

11:45–12:10

Henry A. Pacheco Gil

Agronomic and spectral evaluation of nanofertilizers based on titanium dioxide, zinc oxide, and zeolite in maize cultivation

12:10–12:35

Jaime E. Cevallos Mendoza

Advanced Nanocomposite Membranes and Hybrid Materials for Pharmaceutical Removal from Contaminated Water

CIMA 2026

MARTES · CONTINUACIÓN

AGENDA EN ESPAÑOL

27 DE OCTUBRE DE 2026

MAÑANA · CONTINUACIÓN

12:35–13:00

Juliana Fedoce Lopes

Dynamics matter: computational and thermodynamic insight into cyclodextrins

TARDE

17:00–17:30

Pausa para café

17:30–18:10

Marisol Koslowski

Simulations of ballistic deformation of polymers: effect of crosslinking on energy absorption

18:10–18:35

Alfredo Valarezo G

Thermal Spray Coating sand their Characterization based on the Curvature Method and Plate Theory

18:35–19:00

Westly Castro Carrión

Residual Stresses Evolution in Cold Spray Coatings: Modeling and Experimental Approach

19:00–19:25

José R. Colmenares

Steep Learning Curves: From Aerospace Coatings to Deformable Mirrors, Workforce Skills for Engineering and Materials Challenges

19:25–19:50

Linker G. Criollo Calderón

Thermo-mechanicalmetamaterials for load-carrying adaptive aerospace structures viametal additive manufacturing and thermal spray.

CIMA 2026

MIÉRCOLES

AGENDA EN ESPAÑOL

28 DE OCTUBRE DE 2026

Sesión de pósteres

Miércoles 28 de octubre · Presentaciones y trabajos de investigación

17:00–17:30 **Pausa para café**

18:35–19:00 **Sesión de pósteres**

TRABAJOS PRESENTADOS

01

György Deák

Heavy metal decontamination of waters using alginate biocapsules with *Bacillus subtilis* and *Pseudomonas aeruginosa*

02

Mădălina Boboc

Multifunctional materials for water purification, based on calcium titanate

03

Juan R. Primera Ferrer

Computational Modeling of Particle Transport in Chitosan–Silica Hybrid Gels: From Normal to Anomalous Diffusion

04

Emilio José Jarre Castro

Materials and Strategies to Enhance Carbon Sequestration in Tropical Dry Forests: Integrating Soil Carbon Dynamics, Future Perspectives, and Innovative Amendments

05

Diego Caproni de Moraes

Electrospun PLGA Biomaterials Incorporating a Supramolecular System for Controlled Sodium Sulfadiazine Delivery and Advanced Wound Healing

06

Ana P. Ortiz Viñán

Incorporación de vidrio reciclado triturado como reemplazo del agregado fino en mezclas asfálticas.

CIMA 2026

JUEVES

AGENDA EN ESPAÑOL

29 DE OCTUBRE DE 2026

MAÑANA

09:00–09:40

Alexander Yarin

Complete Suppression of Aerosolizations in Dentistry and Skin Surgery to Prevent Spreading of Viruses and Bacteria: A Glimpse into Viscoelasticity, Developments during COVID-19 and On

09:40–10:05

Dulexy Solano-Orrala

InVitro Compatibility ofTi–Mo–Nb–Sn Alloys and their Bioactivity Assessed by Simulated Body Fluid (SBF)

10:05–10:30

Eliana Díaz Cruces

From Lab to Law:Regulatory, Liability and Governance Challenges in 3D Bioprinting

10:30–10:55

Patricio Riofrío

Evaluation of thesintering of parts produced via Fused Deposition Modeling-3D printing of two 316L stainless steel filaments

10:55–11:20

Pausa para café

11:20–11:45

Felipe Fernández

Integrated stiffness,strength, and manufacturability optimization of variable stiffness composite laminates

11:45–12:10

Carlos Mena Arciniega

Strategies in non-planaradditive manufacturing

12:10–12:35

Gissele Mosquera

Hydrogen-Induced Crack Initiation and Microstructural Damage Evolution in Overaged AA7040-T7651 under Humid Conditions

12:35–13:00

Christian P. Narváez Muñoz

Toward decentralized monitoring: Electrospun nanofibers coupled with machine learning

CIMA 2026

JUEVES · CONTINUACIÓN

AGENDA EN ESPAÑOL

29 DE OCTUBRE DE 2026

TARDE

17:00–17:30

Pausa para café

17:30–18:10

Alejandro Strachan

Smart Science with AI: Programable Labs, FAIR Data, Digital Twins, and Autonomous Agents

18:10–18:35

Alexander Laikhtman

Transition Metal Dichalcogenide Nanotubes for Renewable Energy Applications: from Electrocatalysis of Hydrogen Evolution to Improvement of Perovskite Solar Cells

18:35–19:00

Nayeli Y. Gómez Castillo

Advanced Biofabrication of Highly tunable Nanofibrous Scaffolds for Mechanotransduction-Driven Tissue Regeneration

19:00–19:25

Jorge I. Peñafiel Alvarado

Impact of Halloysite Nanotubes on Zein Biocomposites Processed by Extrusion and Injection Molding

19:25–19:50

Ana P. Ortiz Viñán

Aprovechamiento de residuos en la fabricación de hormigón para infraestructura vial

CIMA 2026

VIERNES

AGENDA EN ESPAÑOL

30 DE OCTUBRE DE 2026

MAÑANA

09:00–09:40	Vincent Leon Strong When Needed, Reversible When Desired: Debonding-on-Demand Adhesive Tapes for Sustainable Design
09:40–10:05	Diego F. Venegas Vásconez Liquid Metal-Based Thermal Management for High-Power Electronics: A Systematic Review under PRISMA 2020
10:05–10:30	Diego F. Venegas Vásconez Catalytic Upcycling of PlasticWaste:A Technological Roadmap Toward a Sustainable Chemical Industry in Ecuador
10:30–10:55	Santiago Maldonado Characterization of fiber-reinforced mycelium composites derived from tropical agricultural residues for sustainable material applications
10:55–11:20	Pausa para café
11:20–11:45	Javier Jahir Núñez Gutiérrez Effect of SeawaterIons on the Stability and Efficiency of a NiFe-LDH Catalytic Material for Hydrogen Production
11:45–12:10	Danaé Yolanda Guamán Torres Biosensores electroquímicos de grafeno inducido por láser para la detección de pesticidas
12:10–12:35	Dayana Gavilanes Ruiz Determinación demicroplásticos atmosféricos mediante muestreo activo Hi-Vol en dos zonas del Distrito Metropolitano de Quito

CIMA 2026

VIERNES · CONTINUACIÓN

AGENDA EN ESPAÑOL

30 DE OCTUBRE DE 2026

MAÑANA · CONTINUACIÓN

12:35–13:00

Lorena Bejarano López

Microscopic Characterization of Archaeological Metallic Artifacts from the Vuelta Larga Site, Yaguachi Region of Coastal Ecuador

TARDE

17:00–17:30

Pausa para café

17:30–18:10

Christine Froehling

Shaping the Future of EV Batteries: Plastics at the Intersection of Performance and Circularity

18:10–18:35

Christhel Andrade Díaz

Environmental Performance of Agroforestry-Derived Wood Products for Circular Construction

18:35–19:00

Andrés Marcillo Zapata

Nuevo Conglomerante Sostenible Mediante La Activación De Piedra Pómez Y Polvo De Ladrillo

19:00–19:25

Lucia Doyle

ReZinc:Self-Healing as a Pathway to Sustainable Materials

19:25–19:50

Floralba López

Sustainable Functional Materials from Lignin: Challenges, Opportunities and Future Perspectives

20:00–22:00

Cierre