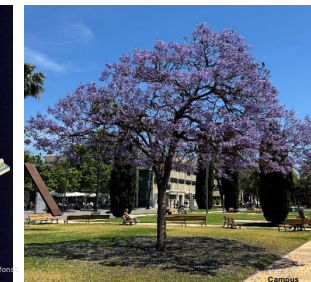


Director: Francisco Galiana (fgaliana@agf.upv.es)



RESEARCH AREAS/ LINES/CAPABILITIES/FACILITIES (ACUMA is a multidisciplinary research centre)

- 1. Aquaculture and Sustainable Development**
Aquaculture systems and technologies. Fish farming and Inland aquaculture
Water quality management. Recirculating aquaculture systems (RAS).
- 2. Energy and Environment**
Carbon footprint, offsetting and CO2 absorption projects.
Strategies for the sustainable use of agricultural and forestry biomass.
Leaching control in agricultural activities. Nitrate and phosphate footprint
- 3. Marketing and Society**
Urban planning law, management and enforcement. Spatial planning
- 4. Landscape and Soil Science**
Landscape characterization, landscape services and landscape planning.
Green infrastructure. Edaphology and soil fertilization





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Applied Microbiology Advanced Research Centre/Centro Avanzado de Microbiología Aplicada (CAMA)

DIRECTOR: Rosa Montes Estellés Contact: rmontes@btc.upv.es



HR EXCELLENCE IN RESEARCH

RESEARCH LINES/CAPABILITIES/FACILITIES

Food Quality Control

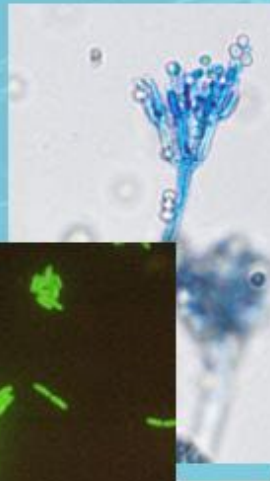
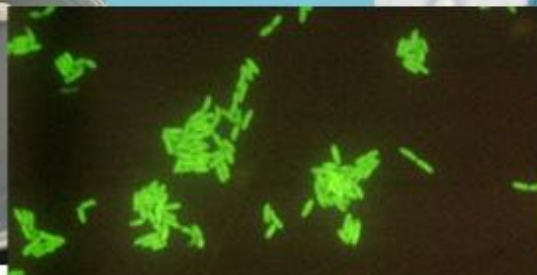
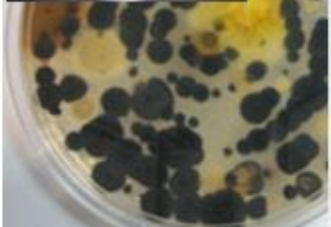
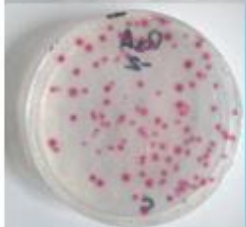
Detection and characterization of pathogenic microorganisms in food, water, air and surfaces

Analysis of fungi in foods and environmental samples

Antimicrobial resistance in foods and environmental samples

Biological cleaning of mural painting, using live bacteria

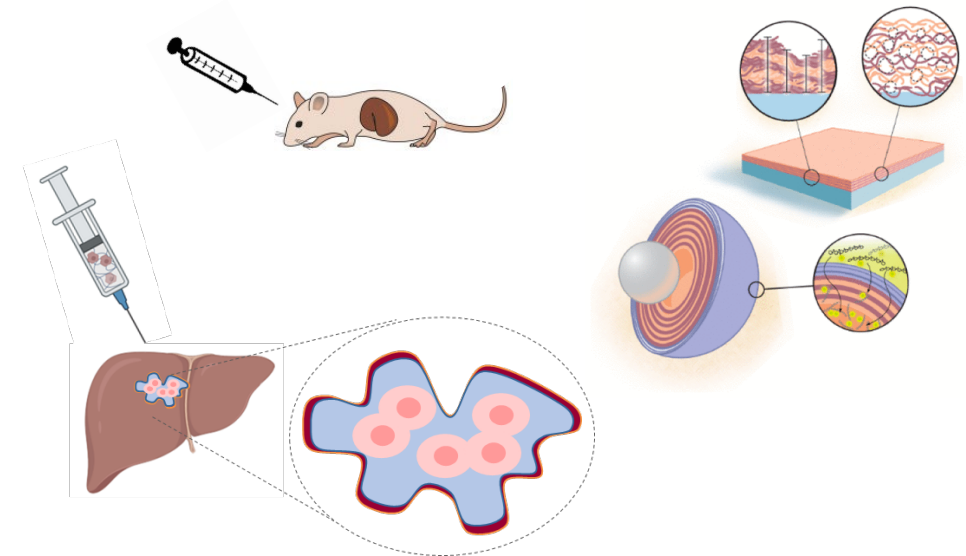
Biodeterioration in works of art





RESEARCH LINES / CAPABILITIES / FACILITIES

- **Material-based cell culture systems, in vitro models of healthy and pathological tissues.** Hydrogels, microgels, 3D bioprinting, LbL.
- **Materials for tissue engineering and controlled drug release.** Articular cartilage, end-stage liver disease, dental materials, muscle regeneration, spinal cord injury and neural regeneration, chronic skin wounds, gastrointestinal disorders, osteosarcoma.
- **Study of the cell-material interface.** Cell adhesion, mechanotransduction, growth factor receptors, ion channels.
- **Development and characterization of materials.** Membranes, hydrogels, scaffolds, nanoparticles, microgels. Surfaces with functional biological properties (proteins and other macromolecules grafting).
- **Development of functional, biologically relevant systems.** For tissue engineering, targeted drug delivery, in vitro modelling, study of cell biology.
- **Access to human primary cells or tissues.**
- **Development of animal experimental models.**
- **Histomorphometric characterization of samples.** From in vivo and in vitro models. Confocal and electron microscopy.





RESEARCH LINES/CAPABILITIES/FACILITIES

- Agricultural Economics and Cooperativism
- Accounting, Auditing, Taxation, and Public Sector
- Law and Business
- Entrepreneurship, Innovation, and Social Responsibility

MASTER-PHD PROGRAMS

- Master in Agrifood Business Management and Marketing – MBA
- Master in Agrifood Cooperative Management – MBA
- Master in Business Management and Digital Transformation
- Master in Business Management and Strategic Planning – MBA



- **ESTABLISHMENT:** The Center for Specialization in Agri-Food Business Management was established in 1979. In 1999, it was consolidated as its own Research Structure, acquiring its current name.
- **VISION:** To be a leading university research center in the field of business management.
- **MISSION:** Research in all disciplines of business management, especially those of the social economy, and its transfer to the productive sector, helping to resolve legal, commercial, accounting, and financial problems.
- **VALUES:** maintain a strong commitment to a well done job, the UPV, and the society.



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Art and Environment (CIAE)

www.upv.es/ciae - ciae.webs.upv.es

Director: Antonio Alcaraz Mira (aalcaram@dib.upv.es)

Secretary: Amparo Galbis (amgajua@upv.es)

Contact: ciae@upvnet.upv.es

Technical staff: Silvia Molinero (silmodo@upv.es)



HR EXCELLENCE IN RESEARCH

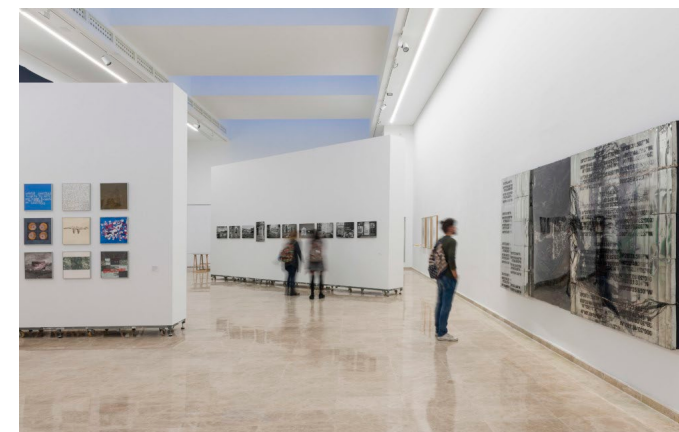


RESEARCH LINES/CAPABILITIES/FACILITIES

Mural painting / Languages, techniques and pictorial processes / Graphic work, creation and communication / Cultural criticism, ethics of care and exhibition management / Art and ecology: project development to increase environmental sustainability / Creative design and graphic illustration / Augmented reality: New tools to improve the visitor experience in museums and exhibitions / Pictorial production and dissemination / Art, ethics of care and integral health: information, advice and documentation / Landscape, territory and city in the visual arts

MASTER-PHD PROGRAMS

- **Master's Degree in Ecological Humanities, Sustainability, and Ecosocial Transition**
- **Master's Degree in Art Therapy: Educational, Social, and Therapeutic Aspects of Art as an Accompanied Creative Experience**
- **Participate in the Doctoral Program in Art: Production and Research**



Director: Eduardo Vicens (evicens@cigip.upv.es)

Contact: info@cigip.org



RESEARCH LINES/CAPABILITIES/FACILITIES

Analytics, Optimisation & Intelligent Algorithms

- Algorithms for Finance and Insurance
- Algorithms for Transportation and Logistics
- Artificial Intelligence
- Data Analytics
- Intelligent Algorithms
- Machine Learning

Collaborative Supply Chains

- Collaborative Forecasting and Production Planning
- Data Sharing Systems and Data-driven Manufacturing
- Supply Chain Digital Twin
- Supply Chain Operations Internationalisation
- Supply Chain Optimisation and Simulation
- Supply Chain Resilience and Sustainability

Engineering and Performance Management Systems

- Sustainability Performance Management
- Collaborative Performance Management Systems
- Multicriteria Techniques for Performance Management Systems
- Performance and Knowledge Management
- Performance Management Systems under Uncertainty
- Quantitative Performance Measurement Systems

Smart and Sustainable Production and Logistics

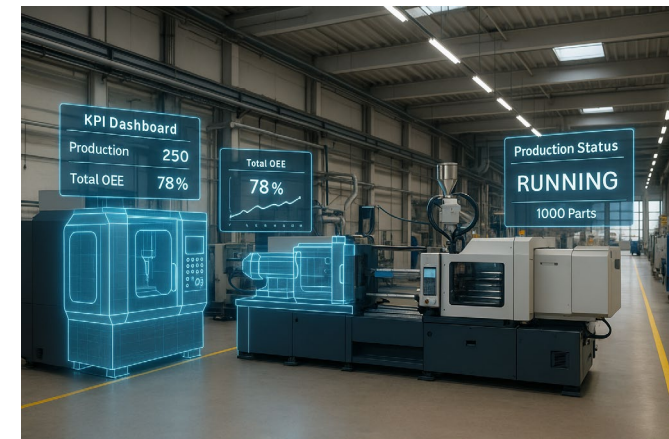
- Business Process Modelling, Management and Reengineering
- IT-enabled for Smart Supply Chain Management
- Modelling, Simulation and Optimisation for Decision Making
- Production Planning and Order Management
- Supply Chain Design & Management 4.0
- Sustainable Direct and Reverse Logistics

Supply Chain Strategy and Engineering

- Digital Platforms for Supply Chain Operations
- Maturity Models for Supply Chain
- Reference Models for Supply Chain
- Supply Chain Digitalisation
- Supply Chain Strategy
- Zero Defects Manufacturing Strategies

Workplaces and Distributed Environments Engineering

- Decision Support Systems
- Distributed Environment Lean Production Indicators
- Lean Technologies for Flow Production Redesign
- Standardisation of Manufacturing Operations
- Workforce Training Systems
- Workplace and Workforce Optimisation





RESEARCH LINES / CAPABILITIES / FACILITIES

- Archaeology of architecture.
- Architectural acoustics.
- Architectural heritage technology and sensors.
- Building reuse.
- Concrete, mechanical properties, durability, monitoring and intervention.
- Design and construction of emergency spaces.
- Hbim. Modeling, maintenance in heritage buildings.
- Heritage studies.
- Hybrid structures.
- Lighting in buildings.
- Material characterization.
- Non-destructive testing of wood and concrete.
- Traditional architecture.

CITE

CENTRO DE INVESTIGACIÓN DE
TECNOLOGÍA DE LA EDIFICACIÓN





Director: Beatriz Defez García

Contact: bdefez@upv.es

We are a multidisciplinary group specialized in identifying synergies between processes, areas, and domains of knowledge



RESEARCH LINES

- Concept Design and Prototype Development
- Computer-Aided Design (CAD) and digital prototyping
- Graphic engineering and digital design innovation, 3D modelling, and virtual reality environments
- Assistive technologies for people with disabilities (visual, mobility, and cognitive)
- Color science, perception, and psychophysics for digital imaging
- Manufacturing process analysis for improvements
- Tille Industry & Printing Industry. Image processing and computer vision in medical imaging

CAPABILITIES

- Development of CAD/CAM solutions for design and engineering
- Quantitative analysis of medical images and diagnostic support systems
- Design and prototyping of low-cost assistive devices
- Virtual and augmented reality applications for cultural heritage and education
- Simulation and evaluation of accessibility in digital platforms and physical products
- Knowledge transfer to industry in design, health, and sustainable technologies

FACILITIES

- Advanced laboratories for digital imaging and graphic technologies
- Virtual reality and 3D visualization rooms
- Prototyping workshops equipped with CAD/CAM tools
- Acoustic testing facilities for assistive technology devices
- Computational resources for image processing and environmental modelling



**Centro de Investigación
en Tecnologías Gráficas**

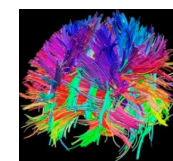
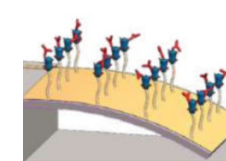
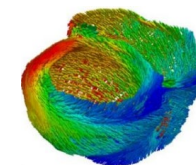
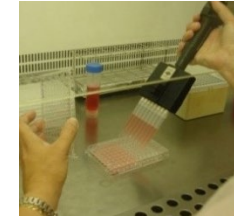
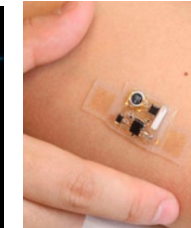


RESEARCH LINES/CAPABILITIES/FACILITIES

- Biomedical Instrumentation/Sensors
- Immunology/Biosensors
- Biomedical Signal Processing
- Modeling and Simulation of Bioelectric systems
- Mechanobiology

MASTER-PHD PROGRAMS

- MASTER in Biomedical Engineering
- PHD PROGRAM: Technologies for Health and Wellbeing





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Centre for Quality and Change Management (CQ)

Director: Andrés Carrión García

Contact: acarrion@cq.upv.es



HR EXCELLENCE IN RESEARCH



RESEARCH LINES

- Statistical Quality Control
- Quality Management
- Quality Improvement
- Applied Statistics
- Innovation Management
- Innovation in Craftsmanship
- Change Management
- Digital Divide and Functional Diversity
- Excellence in Sports Management

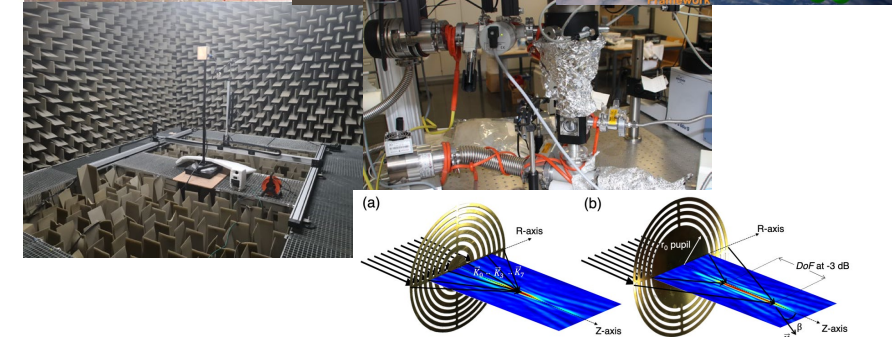
CQ | Centro de Gestión
de la Calidad y del Cambio

CQ | CENTRO DE GESTIÓN
DE LA CALIDAD Y
LA INNOVACIÓN



RESEARCH LINES/CAPABILITIES/FACILITIES

- **Sustainable acoustic materials for the Green Economy.** Numerical modeling in acoustic applications. Prediction of sound insulation and acoustic conditioning. Acoustic testing techniques and applied electroacoustics.
- **Optical Technologies.** Development of new diffractive optical elements for various applications, including ophthalmic lenses (e.g., intracorneal implants) and optical trapping systems, in collaboration with healthcare institutions and companies in the optical sector.
- Application of signal processing techniques to the design of **flat lenses for ultrasonic targeting.**
- **Spin-Crossover (SCO) Compounds** are of significant applied interest for use in micro- and macro-electronic devices for information storage, due to their reversible spin-state transitions. The characterization of these materials is carried out using X-ray diffraction, as well as magnetic, optical (absorption, fluorescence), and calorimetric measurements, among others.
- **Materials Under Extreme Pressure Conditions.** Development of exotic materials based on noble gases -particularly helium- under extreme pressure conditions. Since most matter in the universe exists at high pressures (>1 GPa), studying one of the most abundant elements under such conditions provides insights into a wide range of astrophysical phenomena.
- **Astrophysical Ice Simulation.** The Astrophysics Group synthesizes ices under astrophysical conditions in the laboratory to measure properties such as density, refractive index, porosity, and desorption energy.





TOPICS

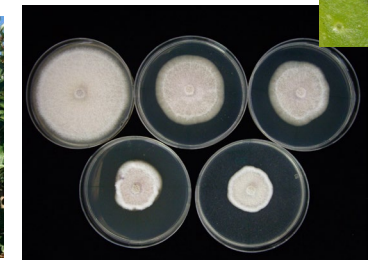
- Institutional analysis of water management in different irrigation systems
- Economy of irrigation water -Water Policy Analysis
 - Effects of irrigation modernisation
- Irrigated agriculture and climate change





RESEARCH LINES/CAPABILITIES/FACILITIES

- **Farming Systems**
Sustainable Agriculture, Agroecology, Regenerative Agriculture
- **R&D&I in Plant Protection and Production**
Integrated Pest Management, Biological and Ecological Pest Control, Agroforestry Entomology, Phytopathology, Research and Development of Bioherbicides and Biostimulants, Isolation and Identification of Semiochemicals, Citriculture, Fruit Crop Production, Horticulture
- **Plant Physiology**
Plant Adaptation to Climate Change and Biotic and Abiotic Stress, Fruit Crop Physiology
- **Ecology and Biodiversity**
Ecological Restoration and Ecosystem Services, Flora and Ecology of Plant Communities
- **National Reference Facilities**
 - National Reference Laboratory for the Identification and Diagnosis of Plant Pathogenic Fungi
 - National Reference Laboratory for the Identification and Diagnosis of Viruses and Phytoplasmas in Non-Woody Plant Species and Plant Products



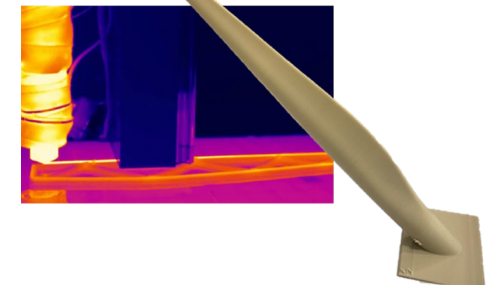
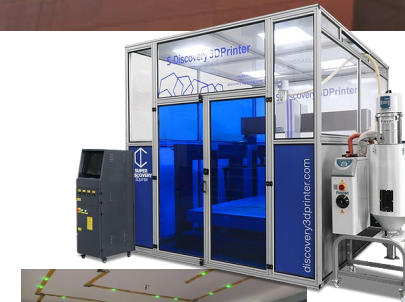


RESEARCH LINES/CAPABILITIES/FACILITIES

- Adapted Vehicles and Transportation (AVT)
- Extended Reality (ER)
- Industrial Automation and Robotics (IAR)
- Information Technologies (CALS)
- Manufacturing (IPF)
- Materials under Extreme Conditions (EXTREMAT)
- Optoelectronics and Semiconductors (GOPS)
- Product Design and Development (PDD)

CAPABILITIES

- Automation of Manufacturing Processes
- Additive Manufacturing
- Processes
- Quality Control by Artificial Vision
- Virtual and Augmented Reality Systems
- Design and Manufacturing with Composites
- Development of Optoelectronic Materials
- Product Development





RESEARCH LINES/CAPABILITIES/FACILITIES

- **Assessment and Environmental Monitoring of Marine and Coastal Ecosystems**
- **Analysis of the effects of Climate Change on the Coast Underwater Acoustics**
- **Technology, sensors and detectors for marine environment**

MASTER-PHD PROGRAMS

- **Master in Assessment and Environmental Monitoring of Coastal and Marine Ecosystems**
- **Doctorate program on Coastal and Marine Science and Technology**



Centro de Ingeniería Económica de la UPV

Economic Engineering Research Centre, UPV

INECO

DAVID VIVAS CONSUELO

Director de INECO / dvivas@upv.es

NATIVIDAD GUADALAJARA OLMEDA

Secretaria de INECO

UPV



INVESTIGACIÓN Y FORMACIÓN

- **Área salud:**
Economía y gestión de servicios de salud.
Análisis de Big Data e IA para
modelización predictiva.
- **Área medioambiente:**
Sostenibilidad empresarial y económica.
- **Área valoración de activos:**
Inmobiliarios, financieros e intangibles.

RESEARCH AND TEACHING

- **Health area:**
Economic and management of
health services. Big Data and AI
analysis for predictive modeling.
- **Environmental area:**
Business and economic
sustainability.
- **Asset valuation area:**
Real estate, financial and intangible
assets.



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INGENIO

<https://www.ingenio.upv.es/> - [LINKEDIN](#) - [BlueSky](#)

Director: Davide Consoli

Contact: davide.consoli@csic.es



HR EXCELLENCE IN RESEARCH



RESEARCH LINES/CAPABILITIES/FACILITIES

- Sustainability Transformations
- Science, Technology and Innovation (STI) Governance
- Collaborative generation and application of knowledge
- Science, Technology and Human Capital
- Cultural dimensions of Science & Innovation

MASTER-PHD PROGRAMS

- Master in Project Management
- Master en Cooperación al Desarrollo
- Máster de Formación Permanente en Gestión de la Ciencia y la Innovación
- Doctorado en Desarrollo Local y Cooperación Internacional
- Doctorado en Diseño, Fabricación y Gestión de Proyectos Industriales





Joint Research Center UPV – Energy Technology Institute Association

RESEARCH LINES

- Monitoring and diagnosis of high-voltage power networks
- Insulating materials
- Industrial electrostatics /
- Advanced techniques for fault detection in electric motors
- Monitoring of electric motors for diagnostics and efficiency estimation

FACILITIES

- High Voltage Laboratory
- Materials Laboratory for Electrical Installations
- Industrial Electrostatics Laboratory
- Electric Motor Testing Laboratory





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Research Institute of Transportation and Territory (ITRAT)

<https://www.upv.es/entidades/ITT/>

Director: Jorge Molines Llodrà (jormollo@upv.es)

Secretary: Alfredo García García

Contact: jormollo@upv.es



HR EXCELLENCE IN RESEARCH



RESEARCH LINES/CAPABILITIES

- **Port and Coastal Engineering**
(Port planning and management; design, construction, maintenance, and small-scale tests of coastal structures (Cubipod®); coastal processes; smart ports)
- **Road Engineering**
(Road planning and management; road safety; sustainable pavements; design, construction, and maintenance of roads; smart roads)
- **Railway Engineering**
(Railway planning and management; design, construction, and maintenance of railway infrastructure and superstructure)
- **Logistics, Mobility, and Transports**
(Sustainable mobility planning and management; economic evaluation of transportation services; modal shift studies; smart mobility)

FACILITIES

- **Laboratory of Ports and Coasts**
(Tsunami, wind, and wave 2D flume)
- **Laboratory of Road and Traffic Engineering**

PHD IN TRANSPORTATION INFRASTRUCTURES AND TERRITORY



RESEARCH LINES/CAPABILITIES/FACILITIES

The Research Center for Architecture, Heritage, and Sustainable Development Management (PEGASO) at the Universitat Politècnica de València is recognized as a center of excellence and national and international prestige in research, knowledge transfer, education, outreach, and cooperation in the fields of architecture, architectural heritage, and cultural management, all from the shared perspective of sustainable development. The center brings together researchers from diverse disciplines related to architecture and architectural heritage (including architectural conservation, surveys and preliminary studies, historical structures, development cooperation, public use and tourism management, traditional materials and techniques, and sustainable development, among others).

Research Areas

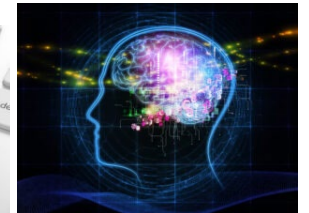
- Architectural and Cultural Heritage
- Methodologies for Knowledge and Understanding
- Restoration, Conservation, and Heritage Management
- Contemporary Architecture and Sustainability





RESEARCH LINES

- Big Data / Deep Learning
- Pattern Recognition
- Multimodal Interaction
- Image Processing (Image Analysis, Computer Vision, Handwritten Text Recognition, Document Analysis)
- Language Processing (Speech Recognition and Understanding, Machine Translation, Information Retrieval).





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Project Management, Innovation and Sustainability Research Center (PRINS)

prins.upv.es/ <https://www.linkedin.com/company/prins-upv/>

Director: Miguel Ángel Artacho Ramírez (miarra@dpi.upv.es)

Secretary: José Luis Fuentes Bargues (jofuebar@dpi.upv.es)



HR EXCELLENCE IN RESEARCH



RESEARCH LINES/CAPABILITIES/FACILITIES

Applied research in Project Management, Engineering, and Innovation Focus on urban sustainability, circular economy, and energy transition Participation in European projects.

Key research areas:

- Project Management Office & Innovation Management Office
- Sustainability & Project Management for urban transformation
- Decision support tools (MCDM & AI-based decision-making)
- Stakeholder Analysis
- Lean Business Design
- Tech Mining & Future Scenario Design
- Social Innovation & Entrepreneurship
- Ecodesign & Circular Product Design
- Life Cycle Analysis (LCA) & Ecolabels
- Twin Transition & Waste Valorisation
- Smart Cities & Smart Rural Development

Certified training in:

- Sustainable development and innovation leadership

Flagship projects:

- Energy & Environmental Performance Analysis of the Valencian Ports.
- Circularity Indicators to Guide Consumers on Repairing Electronic Devices.
- LCA & Eco-efficiency analysis of the Baleària Port Terminals
- Carbon Footprint and Lean & Green Program in the Logistics Sector



PRINS