

# Interdisciplinary research centres and facilities





The University of Aveiro hosts 20 research units, acting in many different scientific areas. 95% of these research centres have been classified as very good or excellent in the last evaluation process promoted by the National Foundation for Science and Technology.

Our research matrix character is the basis of an interdisciplinary and transdisciplinary research, based on the sharing of experiences, the exchange of information, the improvement of practices and the promotion of joint projects among researchers from the different scientific areas at the campi. This integrated structure permits the articulation and harmonization of the teaching and research environments, as well as the association with innovative science outreach activities.

Furthermore, our continuous capacity-building effort in terms of infrastructure (buildings and scientific equipment) and lines of research, including human resources and people, has been essential to improve its competitiveness and thus ensure a better future and a greater and more effective contribution to regional development.



# Research centres



## **CESAM** **Centre for Environmental and Marine Studies**

*CESAM's interdisciplinary expertise on environmental and marine sciences enables an active contribution to science-based knowledge supporting socio-ecological systems sustainable management and smart specialization.*

Unit coordinator: Ana Lillebø



Research areas: Atmospheric Processes and Modelling, Environment Processes and Pollutants, Functional Biodiversity, Ecotoxicology, Stress Biology, Adaptation Biology and Ecological Processes, Marine and Estuarine Ecology, Oceanography and Marine Geology, Coastal Zone Planning and Management.  
<http://www.cesam.ua.pt>

## **CIC.DIGITAL** **Center for Research in Communication, Information and Digital Culture\***

*Interdisciplinary research centre focusing on innovation in the design of new interaction approaches for human-centered digital media applications.*

Pole coordinator: Fernando Ramos



Media and Technology, Society, Culture and Arts, Information and Communication  
<http://www.cicdigital.org>

\*Terminated in December 2019.  
Replaced by DigiMedia from January 2020 onwards.

**CICECO**  
**Aveiro Institute of Materials**

*Its mission is to develop the scientific and technological knowledge necessary for the innovative production and transformation of materials for a sustainable development and the benefit of society (from ceramics to soft matter and hybrids).*

Unit coordinator: João Rocha



Research areas: Inorganic Functional Nanomaterials and Organic-Inorganic Hybrids, Multifunctional Ferroic Ceramics and Nanostructures, Carbon Materials, Composites and Functional Coatings, Biorefineries, Biobased Materials and Recycling, Biomedical and Biomimetic Materials and Computer Simulation and Multiscale Modeling.

<http://www.ciceco.ua.pt>

**CIDMA**  
**Center for Research and Development in Mathematics and Applications**

*CIDMA is a R&D unit hosted at DMat-UA with the main goal of carrying out fundamental and applied research in Mathematics and to prepare new researchers through postgraduate and advanced education.*

Unit coordinator: Delfim Torres



Research areas: Algebra and Geometry, Complex and Hypercomplex Analysis, Functional Analysis and Applications, Gravitational Geometry and Dynamics, History of Mathematics and Mathematical Education, Optimization, Graph Theory and Combinatorics, Probability and Statistics, and Systems and Control.

<http://cidma.ua.pt>

**CIDTFF**  
**Research Centre on Didactics and Technology in the Education of Trainers**

*Founded in 1994, CIDTFF has a mission anchored in the responsibility of research in education: to produce knowledge able to contribute to educated, qualified and critical citizens.*

Unit coordinator: Helena Araújo e Sá



Research areas: Education; Multiliteracies and Sustainability; Diversities and Curriculum; Professional and Human Development; Educational Policies, Quality and Evaluation; Multimodal Educational Resources; Professional and Organizational Practices.

<https://www.ua.pt/cidtff>

**CLLC**  
**Centre for Languages, Literatures and Cultures**

*The Centre for Languages, Literatures and Cultures, based in the Department of Languages and Cultures, is an intercultural research unit in the Humanities, with an inter and transdisciplinary orientation.*

Unit coordinator: Anthony David Barker



Research areas: Between Texts – Literary Hermeneutics; Between Cultural – Cultural Hermeneutics; Between Languages – Variation, Translation, Learning.

<https://www.ua.pt/cllc>

**CINTESIS**  
**Center for Health Technology and Services Research**

*CINTESIS.UA is a multidisciplinary research unit mostly focused on Ageing Issues and Health Care Provision. It includes researchers from the Department of Education and Psychology and Health School.*

Pole coordinator: Óscar Ribeiro



Research areas: Clinical & Health Services Research, Ageing & Neurosciences Research, Diagnosis, Disease & Therapeutics Research and Data & Methods Research.

<http://www.cintesis.eu>

**CIPES**  
**Center for Research in Higher Education Policies**

*CIPES's mission is to engage in scholarly research in order to advance critical thought and promote informed understanding about the vital policy issues confronting higher education at both the national and international arenas.*

Pole coordinator: Teresa Carvalho



Research areas: Higher Education, System Level Policies, Institutional and Organisational Analysis and Resources, Performance and Human Capital.

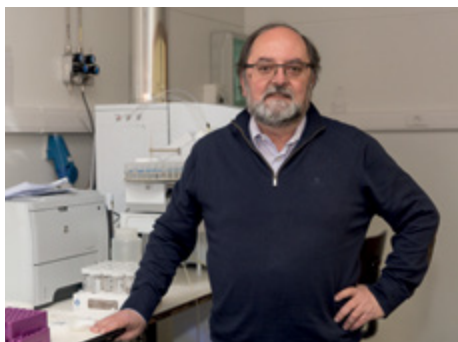
<http://www.ua.pt/cipes/>



**GEOBIOTEC**  
**GeoBioSciences, GeoTechnologies**  
**and GeoEngineering**

*Focusing on Geo-Resources/Geo-Environment, Geobiotec works with the most important national mining projects, with skills and resources on industrial minerals, geostatistics, geochemistry, geophysics, mineralogy, medical geology and geomaterials.*

Unit coordinator: Fernando Rocha



Research areas: Lithospheric Evolution, Complex Environmental Systems, Georesources, Geotechnics and Geomaterials.

<http://www.ua.pt/geo/PageText.aspx?id=17534>

**GOVCOPP**  
**Governance, Competitiveness and**  
**Public Policies**

*GOVCOPP's mission is to produce research and knowledge that contribute to economic efficiency and good governance practices in specific territorial contexts, with a particular focus on the Centro region.*

Unit coordinator: Anabela Botelho



Research areas: Competitiveness, Innovation, Sustainability, Public Policy, Institutions, Decision Support Systems, Territory, Development and Tourism.

<http://www.ua.pt/govcopp>

**IBIMED**  
**Institute of Biomedicine**

*IBiMED's mission is to improve life quality and reduce health care costs through advanced biomedical and clinical research focused on personalized medicine and biomarkers of healthy aging.*

Unit coordinator: Manuel Santos



Research areas: Human ageing, protein aggregation, epigenome, ageing related diseases, systems biomedicine, clinical studies.

<http://www.ua.pt/ibimed>

**Research Institute for Design,**  
**Media and Culture [ID+]**

*ID+ is a multidisciplinary R&D consortium that aims to develop, legitimise and communicate design and artistic research and practices in academic, social, cultural and economic contexts.*

Unit coordinator: Vasco Branco



Research areas: Design, Art, Media and Culture.

<http://www.idmais.org/pt-pt/>

**IEETA**  
**Institute of Electronics and**  
**Informatics Engineering of Aveiro**

*IEETA is mainly a Computer Science and Engineering RU, with a strong multidisciplinary character, organized in three groups: Biomedical Informatics and Technologies; Intelligent Robotics and Systems; Information Systems and Processing.*

Unit coordinator: Armando Pinho



Research areas: Information Processing, Information Systems, Biomedical Informatics, Biomedical Technologies, Intelligent Robotics, Intelligent Systems.

<http://wiki.ieeta.pt/wiki/index.php/Research>

**INET-Md**  
**Institute of Ethnomusicology**  
**Research Centre on Music and Dance**

*INET-Md is a transdisciplinary center that carries out research on music and dance by using current perspectives from ethnomusicology, historical musicology, cultural studies, popular music studies, dance studies, education, performance studies, composition, artistic research, music acoustics and sound studies.*

Pole coordinator: Susana Sardo



Research areas: Ethnomusicology and Popular Music Studies; Historical and Cultural Studies in Music; Dance Studies; Creation, Performance and Artistic Research; Education and Music in Community; Musical Acoustics and Sound Studies.

<http://www.inetmd.pt/>

## **IT** **Instituto de Telecomunicações**

*Instituto de Telecomunicações (IT) is a research unit that is in the front line fostering (nurturing) new ideas and emerging technologies for increasingly agile and easy ways to access ubiquitous information.*

Pole coordinator: José Neves



Research areas: Wireless Communications, Optical Communications, Networks and Multimedia and Basic Sciences and Enabling Technologies.

<https://www.it.pt>

## **i3N – FSCOSD** **Institute for Nanostructures,** **Nanomodelling and** **Nanofabrication – Physics of** **Semiconductors, Optoelectronics** **and Disordered Systems**

*The i3N/Aveiro develops top quality science and innovation in advanced micro/nano materials and nanotechnologies, and exploits, supported by computer modelling, their multi-functionalities integration in (opto)electronics and photonics devices and systems.*

Pole coordinator: João Veloso



Research areas: Modelling of materials behaviour, Nanofabrication and micro-technologies and exploit of their multi-functionalities, Physical characterization of self-assembled nanostructures, Development of (opto)electronics and photonics devices and systems.

<https://www.i3n.org>

## **QOPNA** **Organic Chemistry, Natural** **Products and Agro-food Stuffs**

*Founded in 1992, its mission consists in the development of scientific and technological knowledge for the discovery, preparation, transformation, structural and functional characterization and valorization of functional molecules and materials in a sustainable way.*

Unit coordinator: Francisco Amado



Research areas: Organic Chemistry, Natural Products, Food Science /Biochemistry and Mass Spectrometry.

<https://www.ua.pt/qopna>

\*Terminated in December 2019.

Replaced by LAQV- REQUIMTE from January 2020 onwards.

## **RISCO** **Aveiro Research Centre of Risks** **and Sustainability in Construction**

*RISCO aims to promote the development of sustainable and resilient cities through safe, environmentally friendly, efficient and durable constructions, and through built heritage conservation.*

Unit coordinator: Paulo Cachim



Research areas: mitigation of risks in the built environment; efficiency of the use of resources in the built environment; built heritage conservation.

<http://www.ua.pt/risco>

## **TEMA** **Centre for Mechanical Technology** **and Automation**

*TEMA follows the natural evolution of the mechanical engineering for the future, developing research on two mobilizing domains: sustainable manufacturing solutions and technologies for the wellbeing.*

Unit coordinator: António Bastos



Research areas: Advanced Mechanical Engineering and Fracture Mechanics, Applied Energy, Biomechanics, Nanoengineering, Transportation Technology and Simulation Software Research and Development.

<https://www.ua.pt/tema>

Note from the editor:

From January 2020 onwards, the creation or integration in the following research units were approved by FCT:

DigiMedia  
LAQV-Requimte  
William James Research Center