

Instituto Universitario de Investigación en Ciencias Ambientales de Aragón (IUCA)

Environmental Sciences Institute of the
University of Zaragoza

Universidad de Zaragoza

iuca@unizar.es
<http://iuca.unizar.es>



Universidad
Zaragoza

1542



Instituto Universitario de Investigación
en Ciencias Ambientales
de Aragón
Universidad Zaragoza

GENERAL OBJECTIVES OF THE IUCA

Promote the quality research in strategic areas of Environmental Sciences

Take advantage of the multidisciplinary collaboration

Coordinate and organize the Research Groups of the Gobierno de Aragón belonging to the IUCA

Coordinate and organize multidisciplinary postgraduate specialized courses within the framework of Environmental Sciences



BIOMEDICINE



CHEMICAL
SCIENCE AND
TECHNOLOGY



ENVIRONMENTAL
LAWS AND
ECONOMY



HERITAGE



LAND STUDIES

About us

Structure of the
Institute

Research topics

Scientific Activity

Technology Transfer

Organized Activities,
Training and Teaching

Photo Gallery

Intranet

Documentación

Blogs



ENVIRO
NANO

IUCA (Environmental Sciences Institute of the University of Zaragoza)



BIOMEDICINE - CHEMICAL SCIENCE AND TECHNOLOGY - ENVIRONMENTAL LAWS AND ECONOMY - HERITAGE - LAND STUDIES

The Environmental Sciences Institute of the University of Zaragoza was founded in September 2008 with the primary aim to promote new research initiatives of excellence to the best knowledge and progress of Environmental Sciences.



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Biomedicine



Coordinator: Dr. José Alfonso Abecia
(alf@unizar.es)

Chemical Science and Technology. Coordinator Dr. Gemma Cepriá. Analytical Spectroscopy and Sensors Group (GEAS)



Technological Offer/Services:

- Development of Analytical Methodology.
- Analytical instrumental techniques advising.
- Development of sensors.
- Characterisation of materials.
- Training of technical staff of Analytical Laboratories.

NANOMATERIALS TODAY

ANTROPOGENIC PARTICLES: By-product, Engineered

ORGANIC

CNT
Fullerenes
Polymeric NP
Nanoglobules
PEG NP
Onion-Shaped NP
EPS-NP

INORGANIC

Pt Group
TiO₂
SiO₂
Ag, Au, Ce
Metal-Phosph
Zeolites
Clays
Ceramics

NATURAL PARTICLES: Biogenic, Geogenic, Atmospheric, Pyrogenic,

INORGANIC

Metals
Ag, Au

Oxides
Sea Salt
Clays

ORGANIC

Colloids

Humic Acids

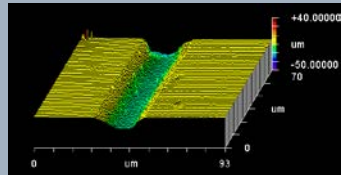
CNT
Fullerenes

BIOCHEMICAL

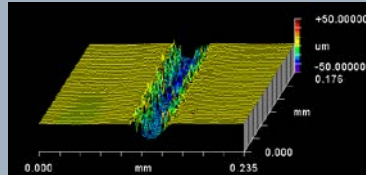
Protein
Virus
Bacteria
Plankton

GEL ELECTROPHORESIS LASER ABLATION TO IDENTIFY METALOPROTEINS

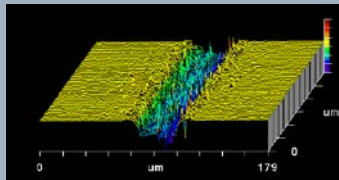
DRY GEL



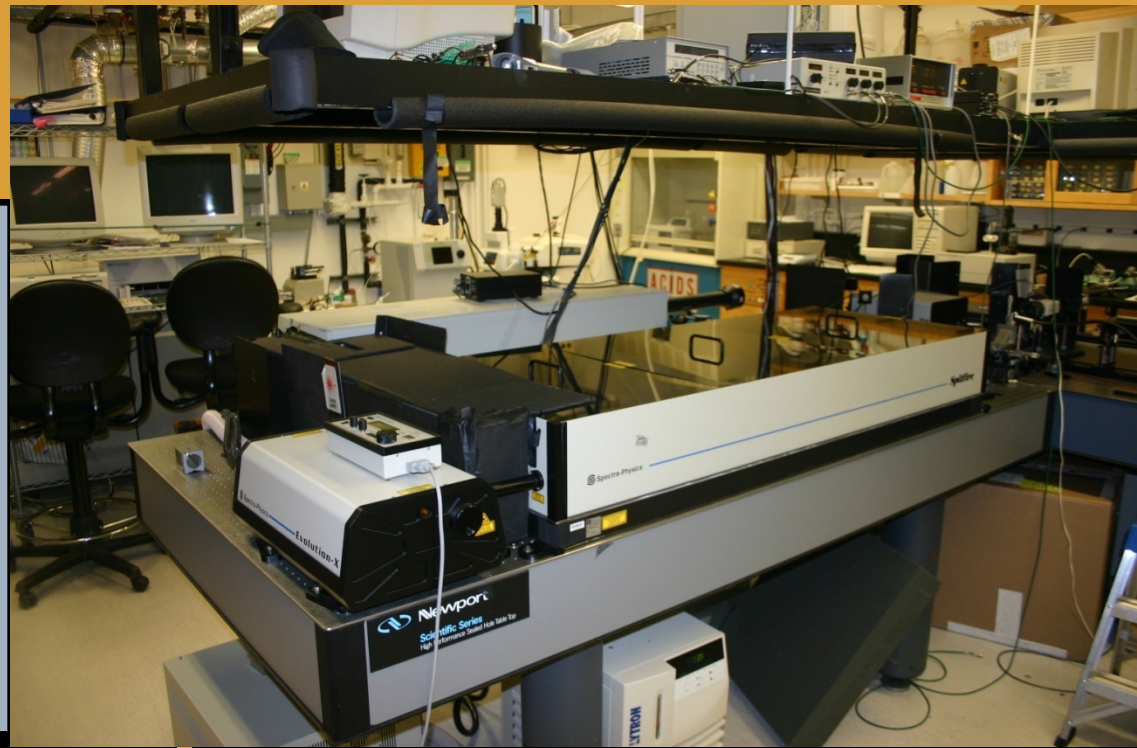
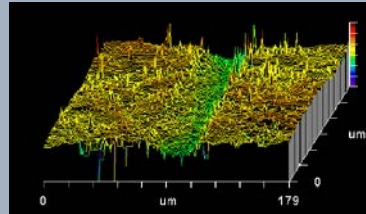
6 HOURS DRYING



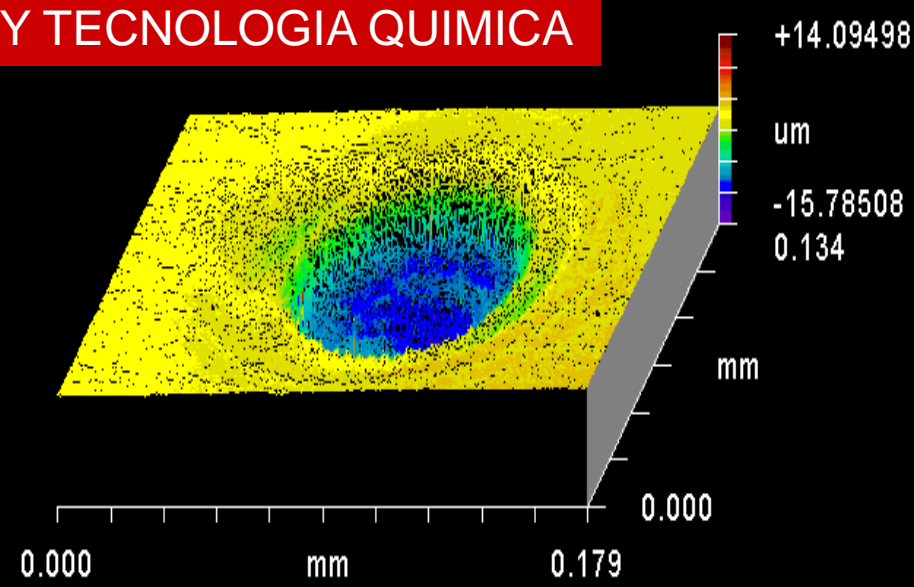
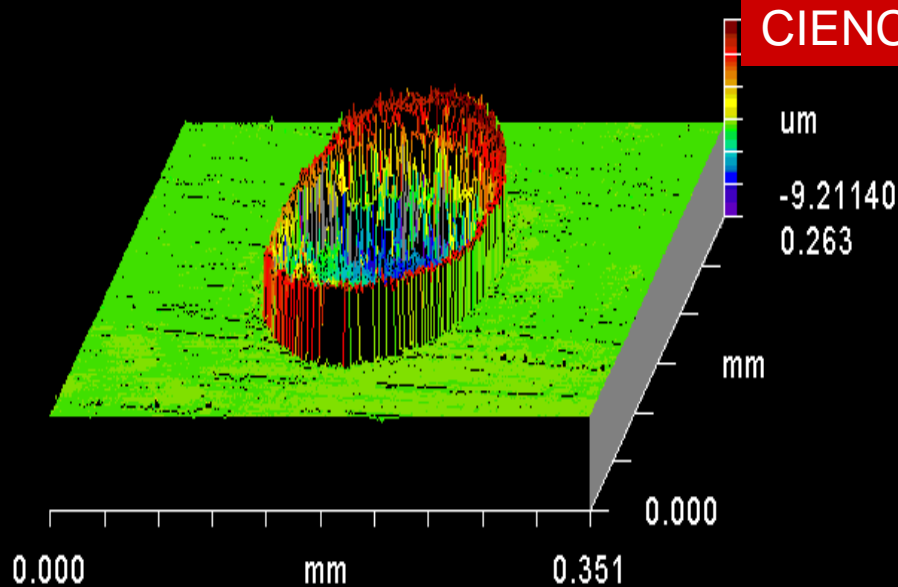
4 HOURS DRYING



2 HOURS DRYING



CIENCIA Y TECNOLOGIA QUIMICA



Environmental Laws and Economy

Coordinator: Dr. Antonio Embid Irujo

(aembid@unizar.es)

Water, Law and Environment (AGUDEMA)

Strategic Area: [Environmental Laws and Economy](#)

The Group AGUDEMA (Water, Law and Environment), integrates a total of 11 researchers. It was founded in 2002, when it was recognized as Consolidated Research Group (Quality Research Group) by the Regional Government of Aragón. From the eighties, the team was structured as the Permanent Seminar of Water Law. The group aims at studying the water, the public properties and the environment from a legal multidisciplinary perspective. This general objective also includes the various uses of water. In particular, the energy, the expropriations in the energetic sector and transport of the electricity produced.

Public Economics

Strategic Area: [Environmental Laws and Economy](#)

The research group on Public Economics, located in Economy and Business Faculty, is a consolidated group qualified by the Aragon Government and it is formed by 15 researchers, including 11 permanent members of staff. In the context of environmental economy, the research activity focuses on the analysis of environmental tax, on the economic impact of environmental public policies and on the decentralized process of the provision of public service utilities in the environmental field.

Land Studies

Coordinator: Dr. Juan de la Riva (delariva@unizar.es)



Heritage

Coordinator: Dr. Lourdes Montes



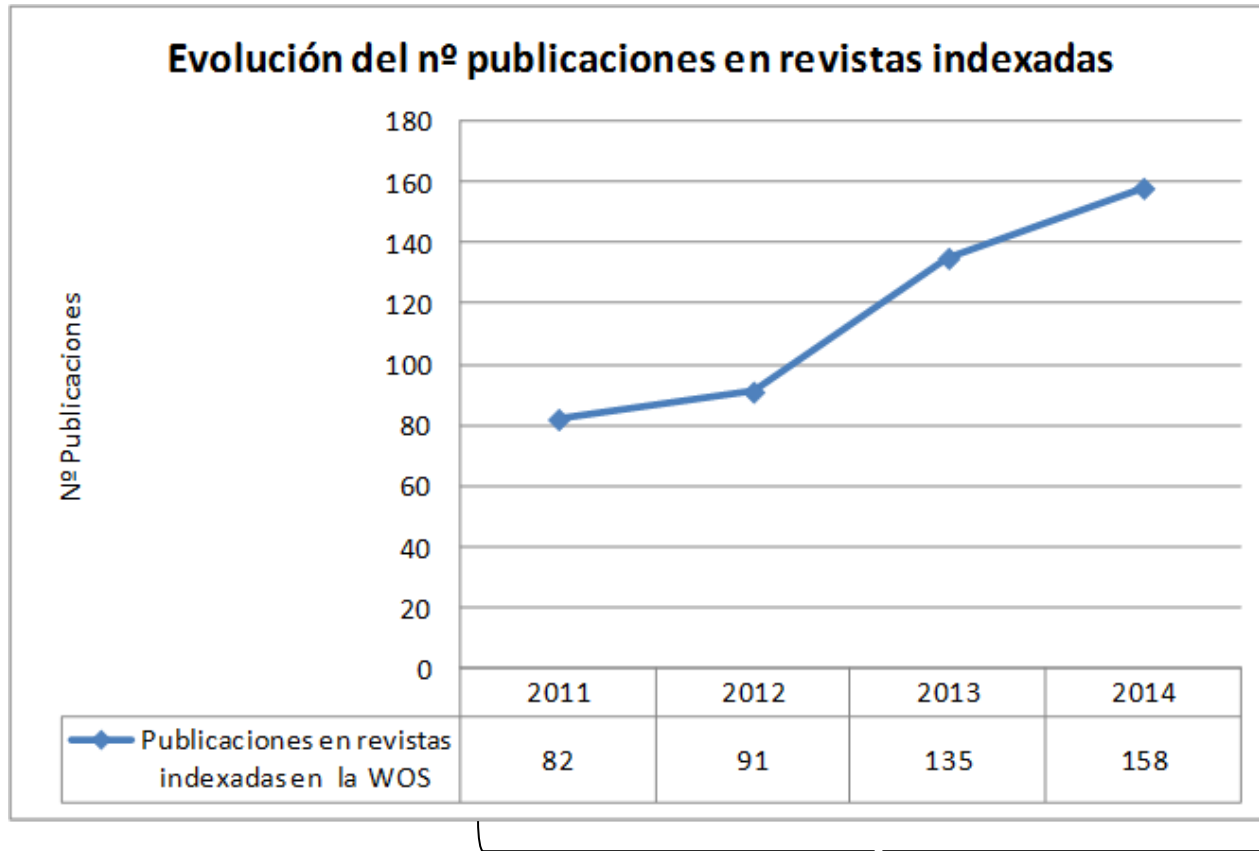
J. Gurney in Brusatte & Luo, 2016



Members of the IUCA

| Tipo miembro | Doctor | No Doctor | Total |
|-------------------------|------------|-----------|------------|
| PDI | 139 | 7 | 146 |
| Investigador contratado | 3 | 49 | 52 |
| Personal Técnico | 3 | 2 | 5 |
| Personal Administración | - | 2 | 2 |
| TOTAL | 145 | 60 | 205 |

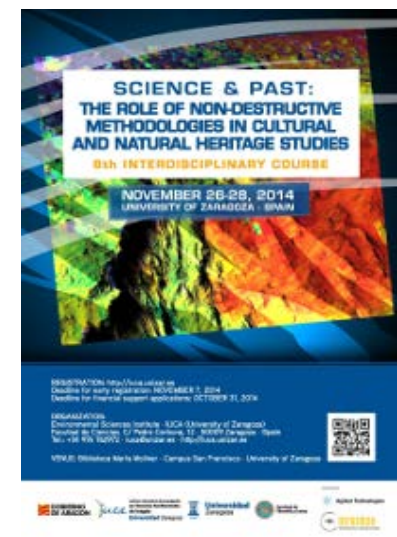
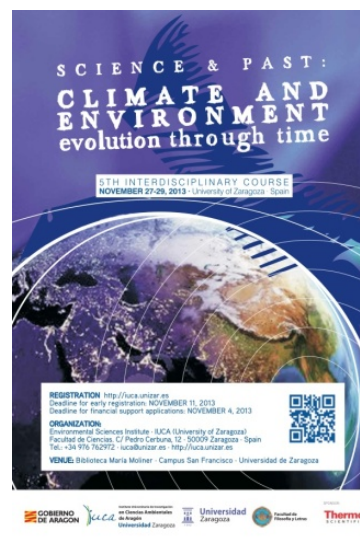
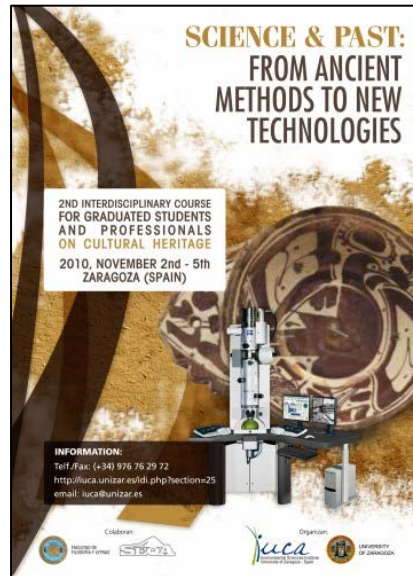
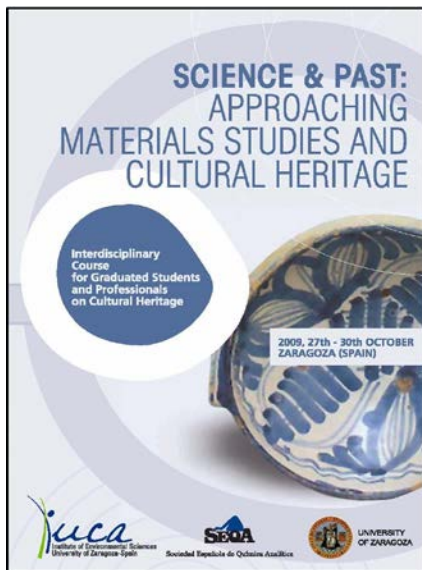
Publications



↑ 93%

Research and Transfer

INTERDISCIPLINARY COURSE SCIENCE & PAST 2009-2017



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Thanks for your attention



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