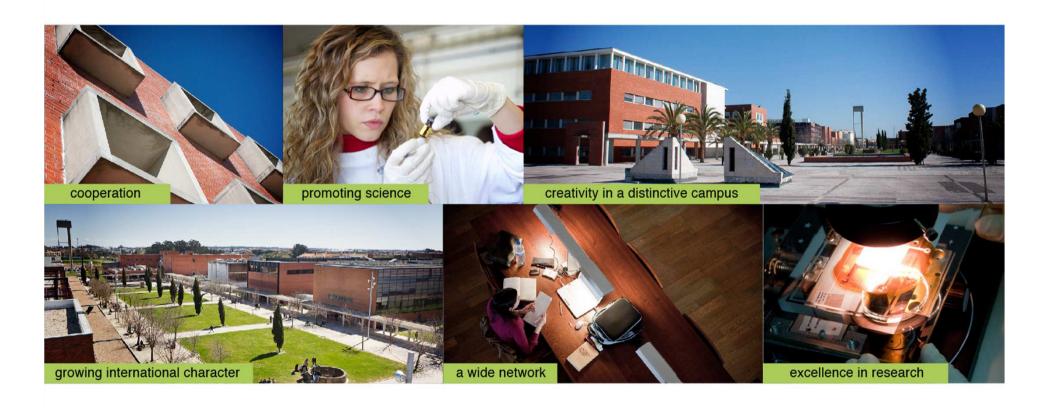


## University of Aveiro

portugal



# a campus with ideas portugal

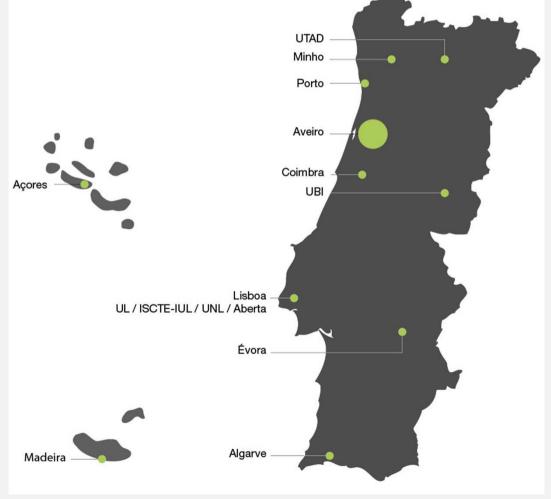






### located in Portugal's Central Region









- ✓ young (1973) Institution, innovative education, research, cooperation, tech transfer
- ✓ **binary system about** 15 000 students, 900 teaching staff, 120 researchers, 300 pos-docs
  - University (16 Departments)
  - Polytechnic schools (since 1997, 4 schools)
- ✓ Public foundation with private law
- ✓ Yearly budget ~ 130 M€

https://www.ua.pt/





### University of Aveiro: rankings



amongst the Top 100 best young universities (under 50) in the world Times Higher Education

amongst the Top 500 best world universities (several rankings)

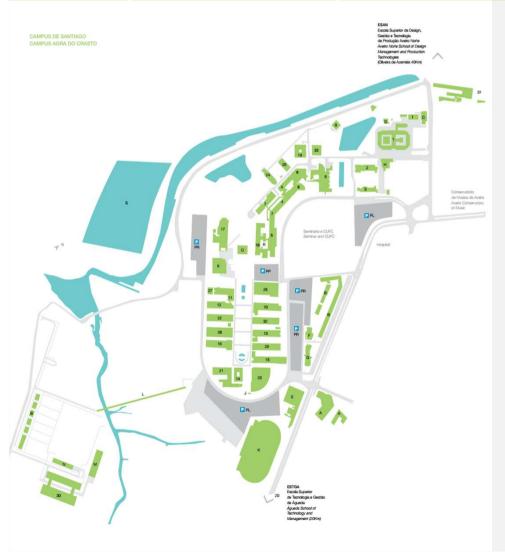
positions in NTU world ranking:

Engineering (173), Mechanical Engineering (131), Materials (114, 20 in Europe), Maths (144), Chemical Engineering (161), Environment/ Ecology (233), Chemistry (194), Agriculture (247) and Civil Engineering (260)





## University of Aveiro: 16 departments



#### engineering

- > Electronics and Telecommunications
- > Environment and Planning
- > Ceramics and Glass Engineering
- Mechanical Engineering
- > Civil Engineering

#### education

> Sciences of Education

#### science

- > Chemistry
- → Biology
- > Physics
- Mathematics
- > Earth Sciences

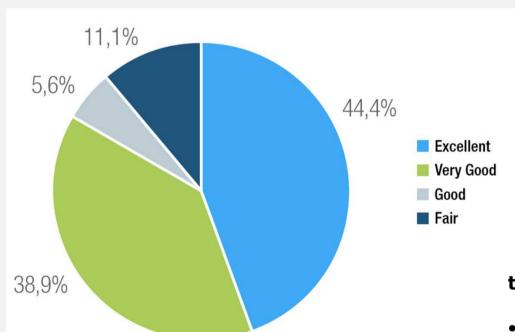
#### others

- > Languages and Cultures
- Media and Arts
- > Social and Political Sciences
- > Health Sciences
- Economics, Management and Industrial Engineering





#### 18 Research Units (4 Associate Laboratories) evaluated by international panels



#### top research areas

- materials science and engineering
- environment and marine sciences
- electronics and telecommunications
- health sciences



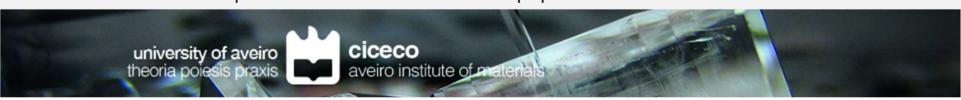
#### **CICECO-Aveiro Institute of Materials**

## CICECO is the largest Portuguese institute in the field of materials science and engineering,

- 48 academic staff, 32 full-time researchers and,
- In December 2013, 91 post-doctoral associates, 119 PhD students, and ca. 77 other students.

## CICECO is one of the most productive research institutes in the country in all scientific areas. Between 2002-13 we have produced:

- an average publication of 4.5 SCI papers per year per academic staff or full-time researcher;
- almost 3808 SCI papers (many in top journals);
- 99 patents;
- 204 PhD theses.
- In 2011 we published more than 450 SCI papers.





## **CICECO** main lines of expertise are:

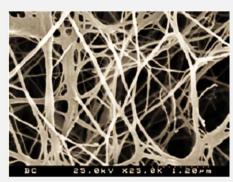
- L1- Information and Communication Technology
- **L2- Energy and Industrial Applications**
- L3- Sustainability and Health
  Biorefineries, Biobased Materials and Recycling
- **L4-Computind and Modelling**



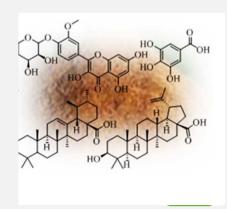


## **Main activities**

- New materials from (nano)cellulose fibers and other polyssacharides
  - (PulpBleach FP6; Sustainpack FP6; Sunpap FP7)
- High value low molecular weight compounds from agroforest residues
   (WaCheUp FP6, ERA-NOEL FP6, Afore FP7)
- New Polymeric materials from renewable resources (e.g. polyesters, polyurethanes, etc.)







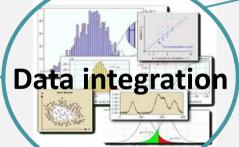


## University of Aveiro: Instrumental facilities



Gas chromatography (GC)







GC-qMS **GCxGC-ToFMS** 





MALDI-TOF/TOF



ESI



**ESI-Q-TOF** 



(Liquid state)

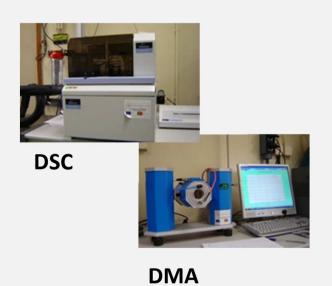


Bruker Avance 400 (Solid state)



## University of Aveiro: Instrumental facilities

### > Compounding and thermal /mechanical analysis











**Polymers processing** 

**Mechanical tester** 





SEM



**TEM** 

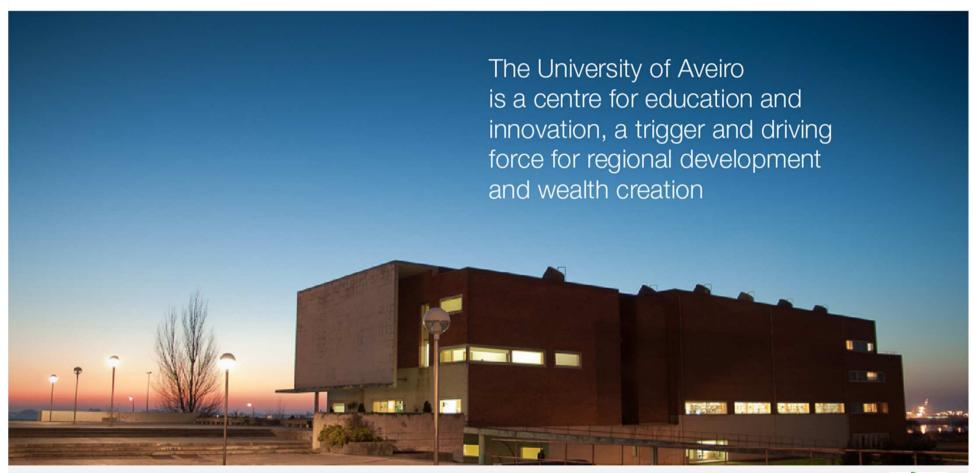


**XRD** 





## a campus with ideas portugal





# COST Action FP1405 Active and intelligent fibre-based packaging – innovation and market introduction (ActInPak)



ActInPak is a pan European (COST) network of the leading experts in active and Intelligent packaging of over 50 institutes and universities of 28 different countries.

The main objective is to develop a knowledge-based network on sustainable, active and intelligent fibre-based packaging in order to overcome current technological, industrial, and social limitations that hinder the wide deployment of existing and newly developed solutions in market applications.

http://www.cost.eu/COST\_Actions/fps/Actions/FP1405

http://www.actinpak.eu

https://www.linkedin.com/groups/COST-FP1405-ActInPak-8254568/about



