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UNIVERSITAT POLITÈCNICA DE VALÈNCIA

UPV was created 50 years ago

34.000 Students

3.600 Professors

1.500 Technicians and Administratives

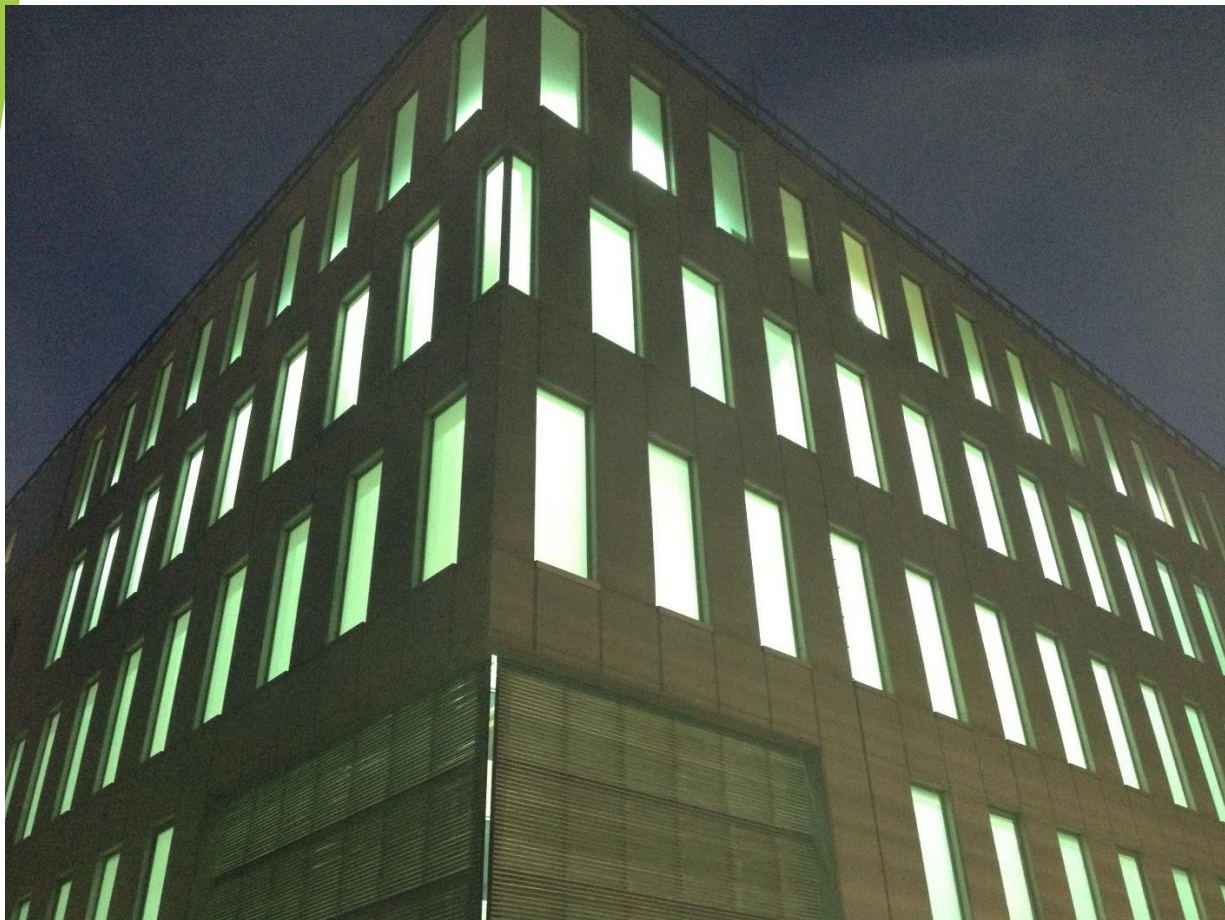




Ciudad Politécnica de la Innovación



Instituto de Ciencia y Tecnología del Hormigón



Created
in 2005



Created
in 1990



Jordi
Payá



José
Monzó



M^a Victoria
Borrachero



Ana
Mellado



Lourdes
Soriano

Research focus




- New inorganic binders: reuse of wastes
(Low cost: economic/environmental)

Pozzolans in OPC or hydrated lime binders
Geopolymers (alkali activation)
Cellular concrete

- Non-destructive testing NDT
(Durability)






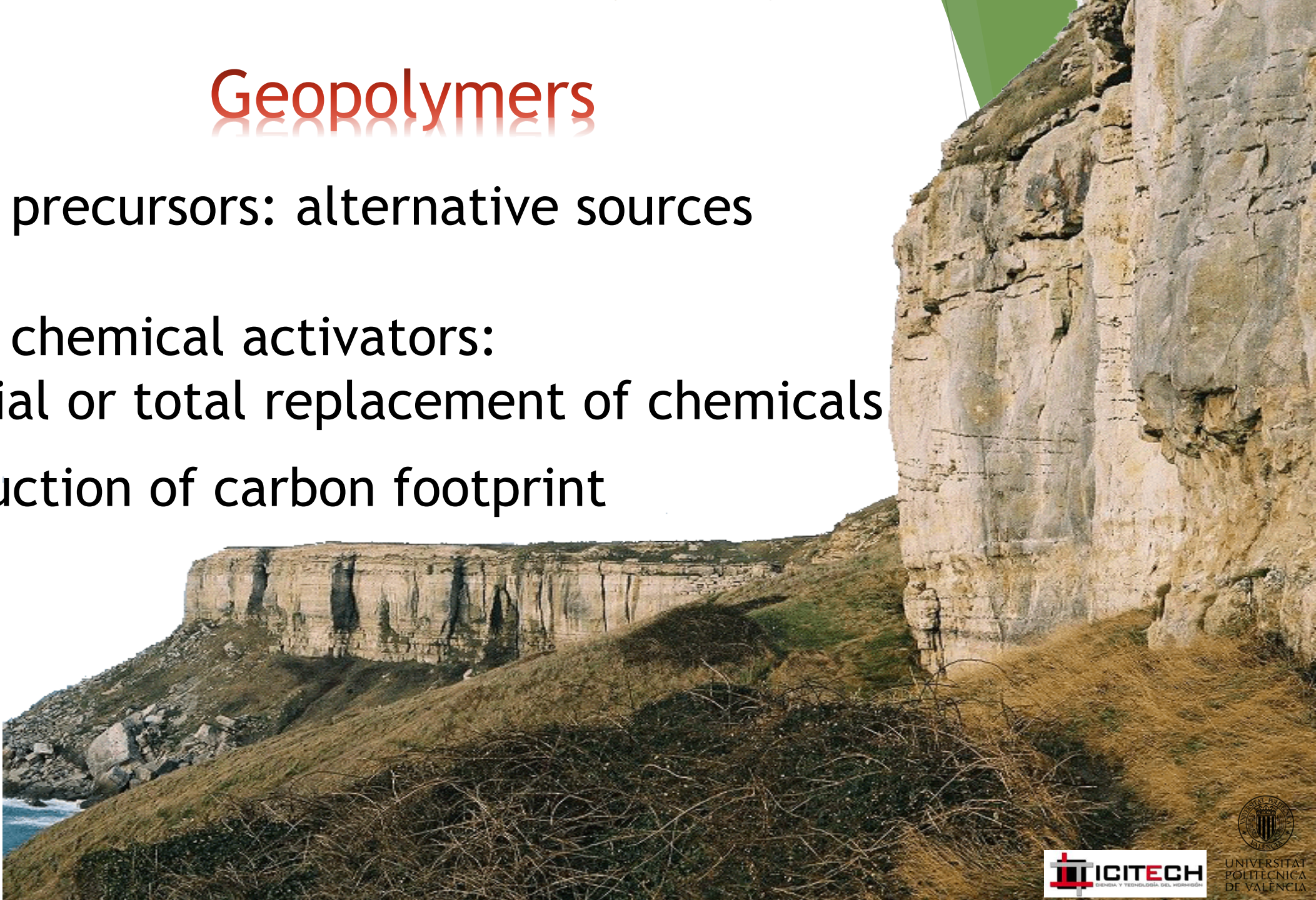
New inorganic binders: reuse of wastes

-  C&D wastes and ceramics
-  Biomass ashes
-  Industrial wastes



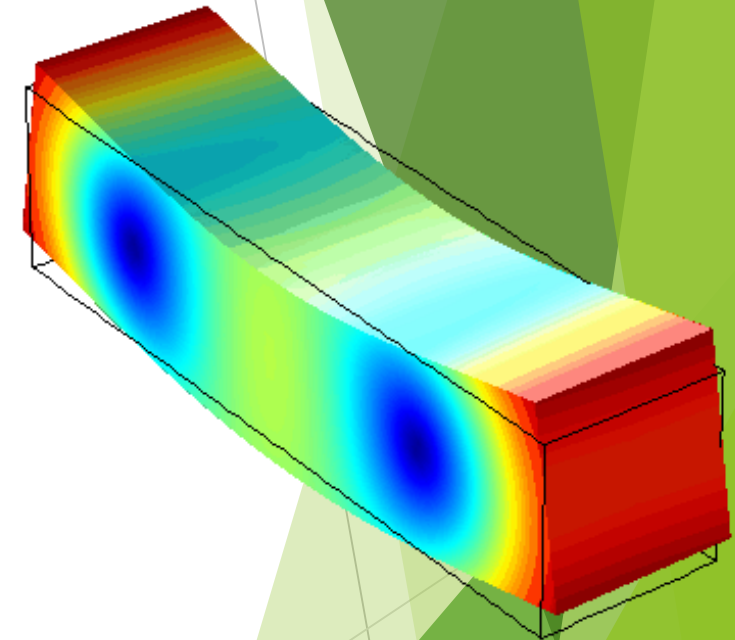
Geopolymers

-  New precursors: alternative sources
-  New chemical activators:
partial or total replacement of chemicals
-  Reduction of carbon footprint



Non-destructive testing (durability)

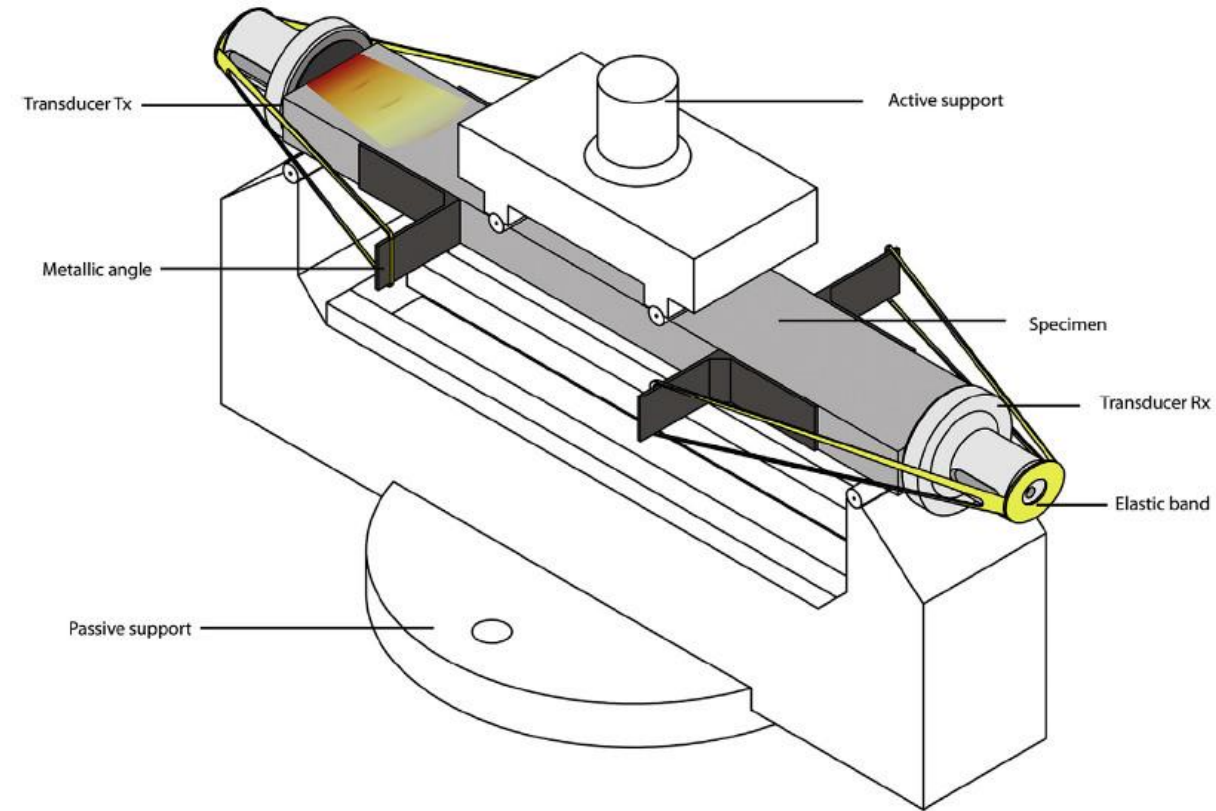
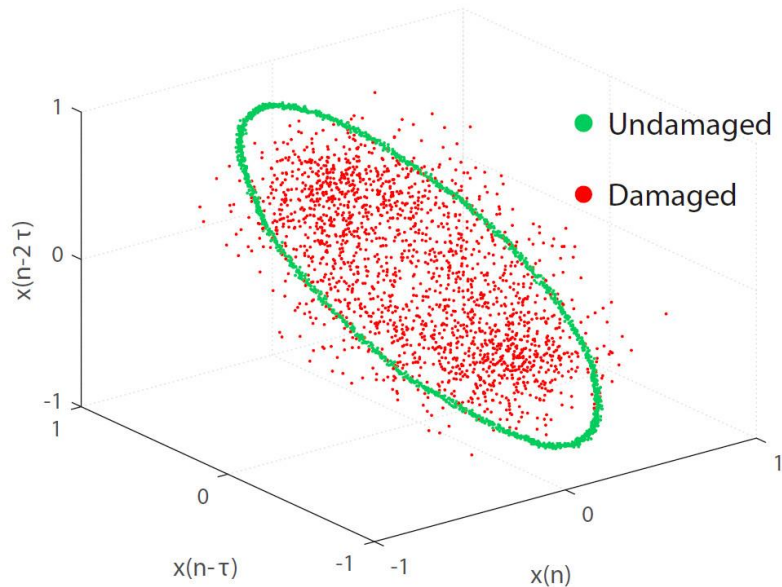
- Non linear impact resonant acoustic spectroscopy (NIRAS)
- NSIRAS and FANSIRAS (single impact):
New signal processing for obtaining non-linear parameters



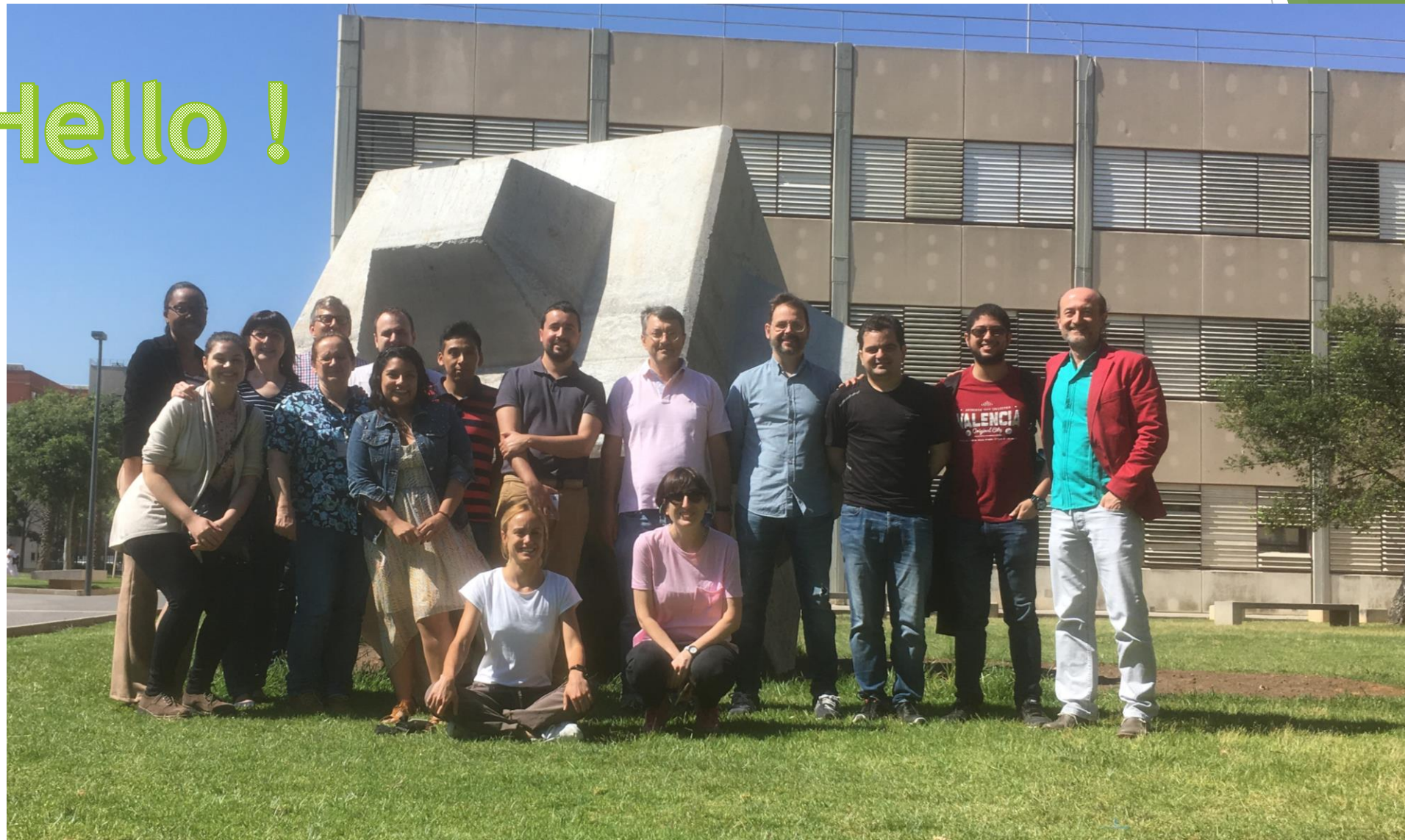
Non-destructive testing (durability)

● Ultrasonic attenuation

● Determinism



Hello !



Thank you for your attention



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