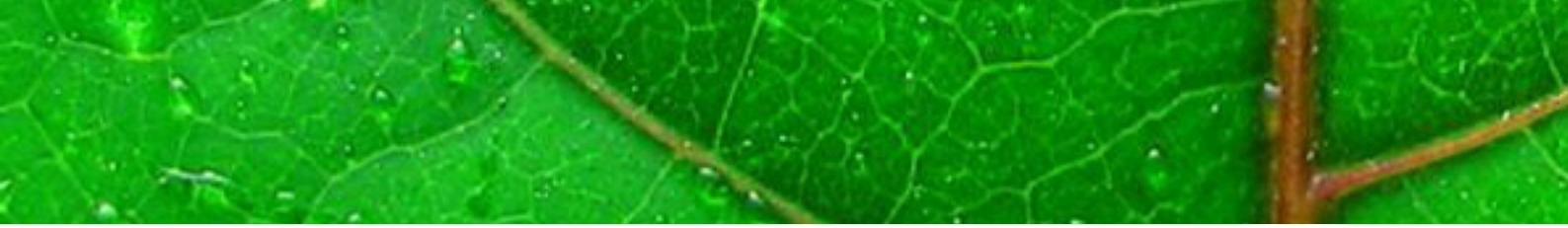


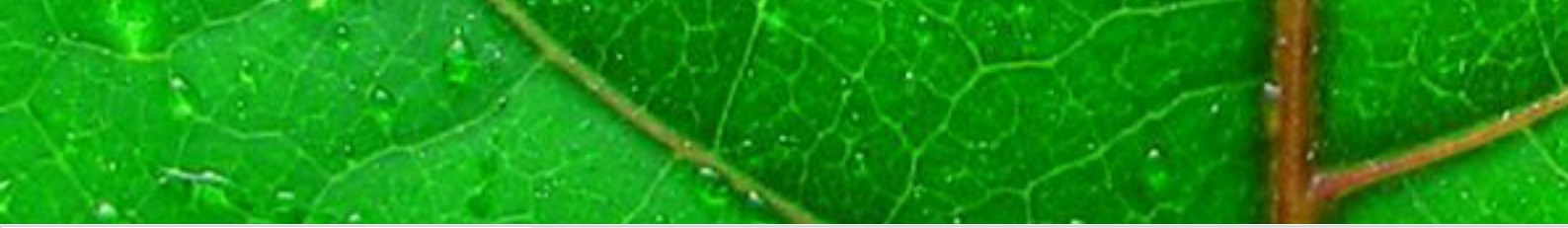
Enhanced Storage - CO#ES

Global warming is one of the major concerns of humankind and scientists are alerting the community to the need of actions to limit the greenhouse gas emissions to the atmosphere. Carbon capture, utilization and storage (CCUS) is aiming at reducing CO# concentration in the atmosphere and CO# storage is a promising action towards this goal. Various mechanisms contribute to CO# storage in a reservoir as a function of time.

The CO#ES Industrial Chair focuses on CO# storage by dissolution in deep aquifers to understand how fast and efficient it is in relation to gravitational instability and other unconsidered effects.

CO#ES will improve our understanding of the CO# trapping and transport processes involved in CO# geological storage in order to design more efficient and safer large-scale projects.

Those research activities are developed through 2 postdoctoral and 4 PhD students in close collaboration with the Industrial and institutional partners as well as international researchers.



Fabrizio Croccolo
Professor
Director of the Industrial Chaire CO2ES

Expert in non-equilibrium thermodynamics, optical techniques and microgravity, Fabrizio Croccolo obtained his PhD in Milano (IT) in 2006 and arrived in Anglet in 2009. In the same year, he obtained a Marie-Curie scholarship.

After completing his Marie-Curie fellowship in Fribourg (CH) in 2012, he came back to the UPPA where he developed innovative optical techniques for the study of transport phenomena in complex fluids.

He participated in four space experiments, two of which as coordinator with the European Space Agency and the CNES. These space projects are the result of international collaborations between Europe, the United States and China.

Fabrizio Croccolo is co-author of more than 60 articles (h-index = 18) and has participated in many international conferences. He has written 2 book chapters and is Chief Editor of "the European Physical Journal E".