



Bulk Carbon Materials: processing conditions, structure & properties

A satellite workshop of the
2025 World Conference
on Carbon



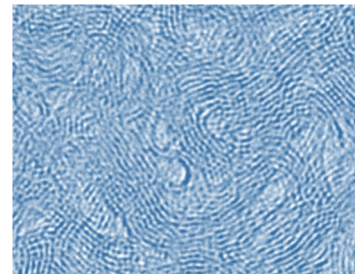
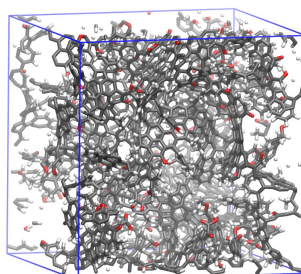
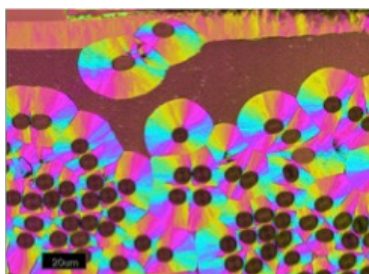
University of Rennes
June 27-28, 2025

While a large body of contemporary research focuses on crystalline/ordered nanoforms of carbon (graphene, nanotubes, etc.), most current applications – as structural materials in aeronautics/space or nuclear applications, as electrodes for energy storage or catalysis, as adsorbents for gas/pollutants separation and storage, etc. – still rely on bulk and disordered solids.

Describing accurately and unambiguously the inner “structure” - with this word taken in all the possible meanings and length scales - of bulk carbon materials, and relating the very details of this structure to the materials’ processing conditions and properties remains extremely challenging.

Nowadays, the ever growing capacity of structural determination and imaging tools, down to atomic scale, as well as the advent of machine learning, brings a new momentum to this topic. More accurate description and modeling of carbon materials structure and properties are at hand. Meanwhile, the processing methods have undergone significant advances, in terms of diversity and of process control efficiency, thanks in particular to in-situ diagnostics.

We therefore invite you to join us and our set of invited speakers for this 2-day workshop located on the campus of the University of Rennes - 50 minutes train ride from Saint Malo where Carbon 2025 will start on June 29. As with the former editions in Madrid (2018), Dresden (2015) and Kraków (2012), we expect to gather an interesting mix of academics and engineers, experts in processing, characterization or modeling techniques for carbons, as well as carbon materials users. Participants will be invited to present and discuss recent advances, tell us about their current needs and limitations, and share their vision of the future in the field.



Invited lectures:

Pr. **Paula Colavita**, Trinity College Dublin (Ireland)
Functional thin film carbon electrodes as a platform for fundamental studies of interfacial reactivity

Ass. Pr. **Dong Liu**, University of Oxford (United Kingdom)
Damage tolerance of nuclear graphite at elevated temperatures

Dr. **Celine Merlet**, CNRS, Toulouse (France),
Multi-scale models to improve the characterisation of porous carbons and the properties of adsorbed electrolytes

Dr. **Marc Oliver Loeh**, Schunk group (Germany),
Specialty graphite materials for high performance applications

Organizing committee:

Scientific committee :

Dr. **Jean-Marc Leyssale**, CNRS, Bordeaux (France)

Pr. **Gérard Vignoles**, Univ. Bordeaux (France)

Dr. **Pascal Puech**, CNRS, Toulouse (France)

Local organizing committee

Dr **Yann Leroux**, CNRS, Rennes (France)



Université
de Rennes



The workshop is funded by the French National Agency for Research (ANR) so there is **no registration fee** for the participants. Yet, **registration is mandatory**. Please visit the workshop web page <https://www.pyroman.cnrs.fr/pyroman/workshop-2025> to download the registration form and the template for abstract submission (oral and poster contributions). **Those have to be sent by E-mail to Dr Jean-Marc Leyssale** (jean-marc.leyssale@u-bordeaux.fr)