Virtual trip to the heart of 400 million year old microfossils

Researchers from the Université de Montpellier II (France), the Institute of Geology of China, and the ESRF have been able to identify enigmatic fossils from Devonian (about 400 million years) as fructification of charophyte algae. Charophytes are land plants living in fresh water that still exist nowadays. This breakthrough allows researchers to better understand the evolution of these very old plants of the Paleozoic era and to have an improved overview of the climate at this period. The use of powerful X-rays beams to perform high resolution microtomography at the ESRF was one of the major keys in helping to understand the internal structure of these fossils. The results of this research are published in the June issue of the American Journal of Botany with the title “New insights into Paleozoic charophyte morphology and phylogeny”.

Watching the birth and death of exotic molecules

Researchers from Korea, Italy, France and the ESRF have just observed how a molecule changes structure after being hit with a short flash of laser light. Thanks to very intense pulses of X-rays from the synchrotron and novel data analysis, they could confirm a long standing hypothesis around the evolution of this molecule. The results were published in Science Express on 14 July.

BEAMLINE INFORMATION

SpLine gets its first scientific data

The multipurpose Spanish Collaborating Research Group (CRG) beamline at the ESRF, SpLine, got its first scientific data in June and welcomed the first user to the experimental station a month later. The beamline focuses on Material Science research. From now on, both Spanish users and also users from other nationalities can apply for beamtime.

THE CARL-IVAR BRÄNDÉN BUILDING IS READY

The construction of the new laboratory complex that will host the Partnership for Structural Biology is finished. The scientists will have moved there by the end of the year.

Have a look at the current job offers at www.esrf.fr or send your CV to recruitment@esrf.fr

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