Micro-CT Lab

Since the beginning of 2022, researchers from Graz University of Technology, Graz University and MedUni Graz have been able to look deep into material structures in the new, highly innovative Micro-CT Lab. The new lab was initiated by the inter-university Graz-µCT consortium. “With these two devices, we can look deep into the material structure without destroying the sample,” explains Eduardo Machado Charry, Senior Scientist in the Micro-CT Lab. The method is used, for example, as a supplement to investigations with electron microscopes.

Looking deeply into material structures.

Currently, the two micro-CTs are mainly used by the 13 partner institutes of the consortium. “But we also have a time allotment for experiments with external partners and are happy to look at new research questions,” says Robert Schennach, inviting other research institutions and companies to collaborate.

1 The micro-CT chambers are inconspicuous, but highly innovative and powerful. Robert Schennach heads the lab, Eduardo Machado Charry is Senior Scientist.

2 Depending on the sample structure, the sample chamber can be adapted individually.

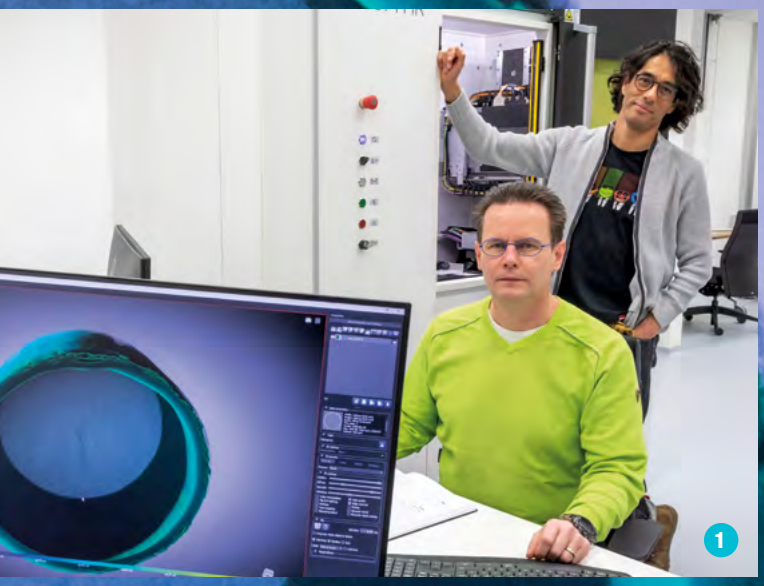
3 A carbonised Kapton sample that is bombarded with X-rays in a few minutes.

4 The sample is illuminated in small sections and layer by layer. The data obtained in this way is then used to create a 3D image of the sample.

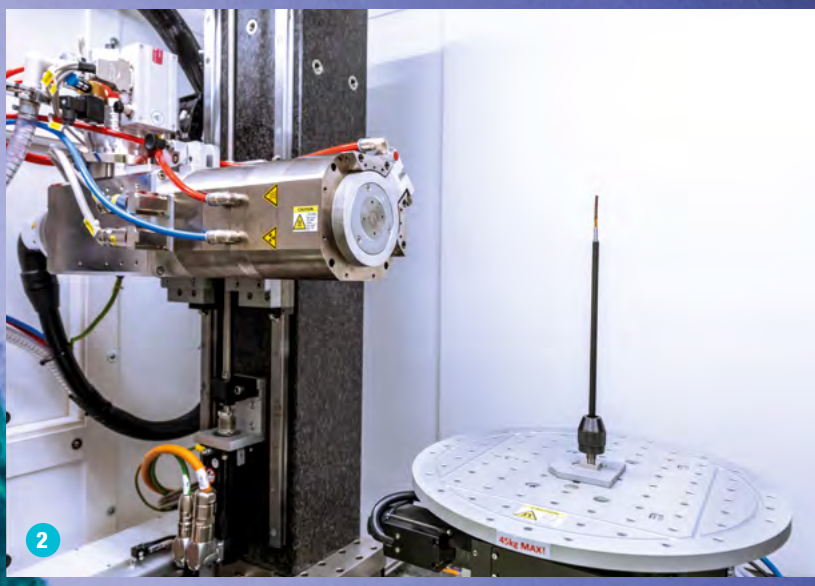
5 Together with the FELMI-ZFE, volcanic rock is examined.

Pictures: Lunghammer – TU Graz

Graz-µCT consortium.

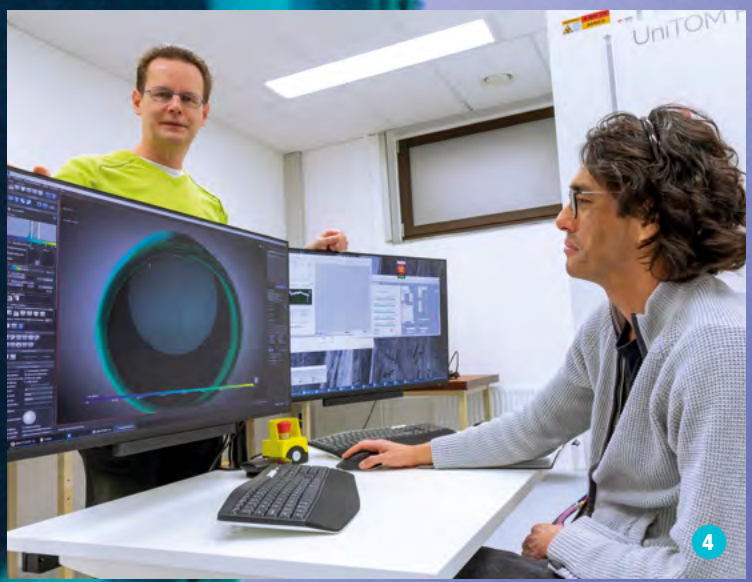


1



2

3



4

1