



School of Geography & Sustainable Development

01/03/2024

Dr Miros Charidemou
Core Scanning Specialist,
National Oceanography Centre,
European Way,
Southampton,
SO14 3ZH

Dear Miros,

EPSRC proposal for the development a new X-ray Computed Tomography (XCT) system for geological core analysis at BOSCORF.

Thank you for providing me, through my role as chair of the British Ocean Sediment Core Research Facility's (BOSCORF) advisory group, with the opportunity of providing you with this letter of support on behalf of the wider user community; I am absolutely delighted to support this ambitious and important initiative and would like to wish you well with the application.

3D and 4D imaging using X-ray Computed Tomography (XCT) is becoming an increasingly important tool in the Earth and Environmental Sciences. There is a clear demand from the BOSCORF user base to use XCT tools in their research, but many are still prevented from doing so by the limited access to suitable equipment and the cost of access, as well as access to computing facilities, and lack of expertise.

As the BOSCORF Advisory Group we act as representatives of the facility's user base and help steer strategic developments that ensure the facility continues to deliver national capabilities to its users. The proposed XCT equipment will provide a capability that is not currently available and openly accessible elsewhere, therefore, we fully support the proposed development of this equipment as a step-change in CT capability to support several projects ranging from assessing volcanic hazards, quantifying carbon fluxes, and tracking pollution into the deep sea.

Members of the Advisory group have been keen to highlight the value of such capabilities to the wider user community and this example from Professor Sue Dawson (University of Dundee) highlights the enthusiastic support from our broad-based user community: *"The use of XCT has revolutionised the study of both onshore and now offshore tsunami studies and will be a fabulous facility for the use of the BOSCORF user community."*

Yours sincerely

Professor William E.N. Austin
Chair BOSCORF Advisory Group/Chair NERC PRC

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