

The ongoing call for projects focuses on :

Functional Porous Materials

In recent years, the degree of freedom in designing and controlling the composition and structure of substances and materials has increased dramatically, and with it the promise for vital new functions to help solve major problems in society and industry.

Technology applications now stand to benefit from a conceptual shift from historical concepts of “interfaces” and “surfaces”, to encompass phenomena related to pore structure and dimensions. In this era of functional porous materials, referred to as nanospace materials in some research, innovation is particularly expected from the cross-collaboration over diverse fields from materials to life science.

The ever-growing need for advances in material research has been recently accelerated by the demand for countermeasures for climate change. Many ideas for harnessing developing technology are required from a global pool of academic and industry stakeholders particularly towards sustainable and low-carbon solutions.

Porous material technology holds much potential to contribute to these and other causes through improvements to high energy conversion, superconductors, high ionic conductors, heat-resistance, mechanical strength, lightweight materials, bioactivity and medicine.

The overall advancement of functional porous material technology is hence a global priority area, motivating this Call for Proposals to address material and application research in a combined holistic setting.