

Press release**Technische Universität Dresden****Nicole Gierig**

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<http://idw-online.de/en/news827136>Contests / awards, Research projects
Chemistry
transregional, national**ERC Proof of Concept Grant: New measuring instrument for the industrialisation of porous filter materials**

Prof Stefan Kaskel from Dresden University of Technology has been awarded a Proof of Concept Grant from the European Research Council for his "DYNALIP" project. His aim is to develop a novel measuring device and bring it to market maturity, enabling the simplified discovery and analysis of novel porous materials for the highly selective purification of liquids.

With his Inorganic Chemistry I research group at Dresden University of Technology, Prof. Stefan Kaskel specialises in the development of innovative inorganic materials for the energy transition and environmental technologies. He is particularly known for his work in the field of metal-organic frameworks (MOFs). Some of the MOFs he has developed, so-called dynamic porous materials, are already recognised as highly selective molecular filters that bind toxic substances from water and other liquids. This technology has enormous potential for industries involved in the separation, purification or extraction of liquids or dissolved substances, such as petrochemical, water treatment, and pharmacologic industries. The porous materials can be developed so specifically that they only filter certain substances from the liquid.

Until now, the characterisation and analysis of such materials has been very tedious and time-consuming due to the lack of standardised procedures and the absence of specialized instrumentation to automatize the measurements.

"With our project, we want to develop an advanced device for laboratory use that enables the discovery and analysis of novel porous materials for highly selective liquid phase separation applications for a broader market, from small and medium-sized companies to large development departments in industry. In this way, we want to make a contribution to counteracting the increasing environmental pollution in waters, but also the scarcity of resources," says Stefan Kaskel, explaining his project.

ERC Proof of Concept Grants (POC)

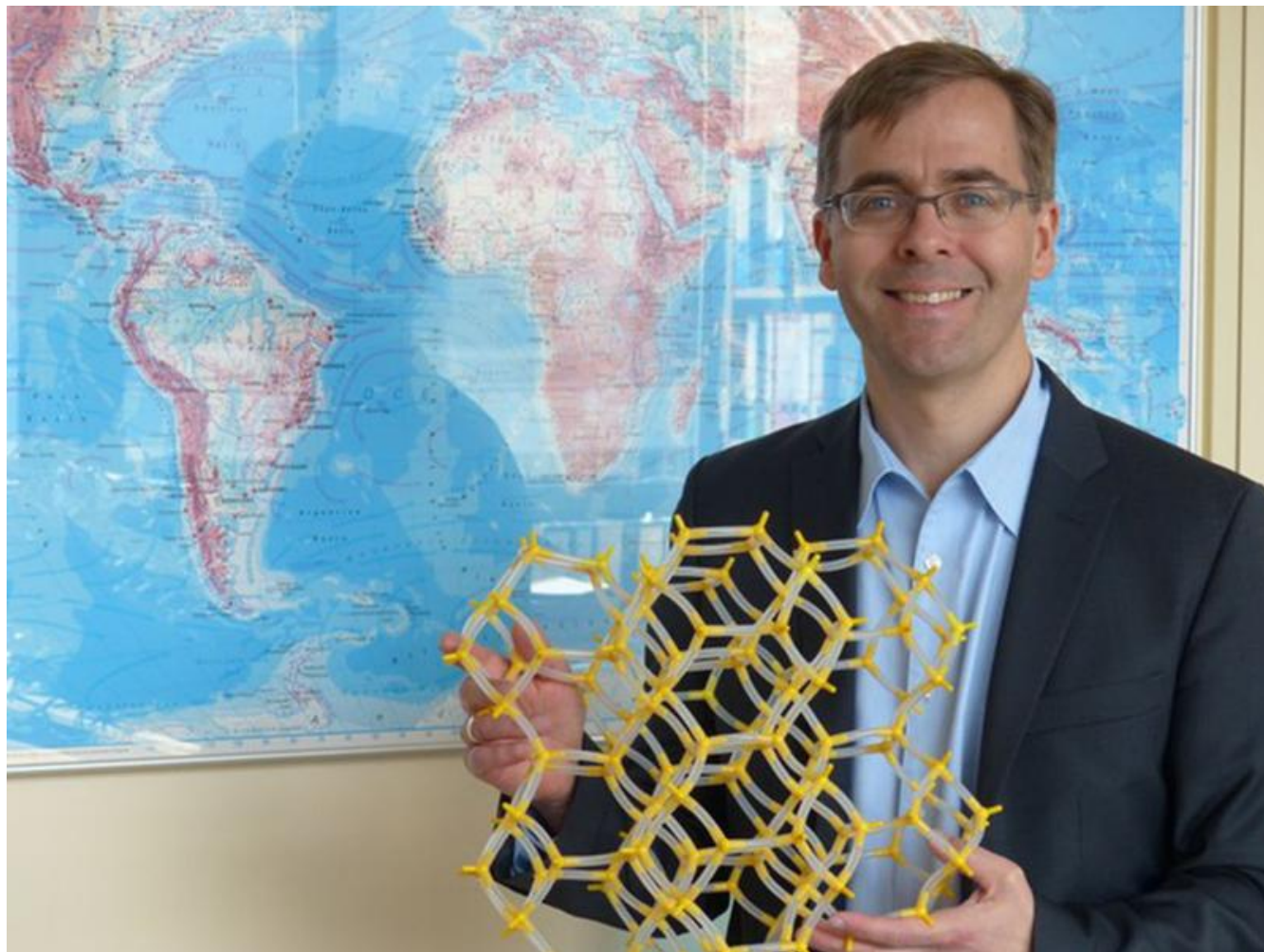
The Proof of Concept (PoC) Grant is a funding line of the European Research Council (ERC) that can be awarded in addition to the main funding lines (Starting, Consolidator, Advanced and Synergy Grant). It is aimed exclusively at researchers who already hold an ERC grant and now wish to explore the commercial or societal potential of their pioneering research projects. PoC grants are endowed with 150,000 euros for a maximum of 18 months.

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