Consortium "NFDI for Catalysis-Related Sciences (NFDI4Cat)" receives funding as part of the new National Research Data Infrastructure (NFDI)

As one among nine consortia, the NFDI4Cat consortium will receive funding for establishing a National Research Data Infrastructure (NFDI) within the period October 2020 - September 2025. NFDI4Cat will focus on the field of catalysis related sciences. The final decision on funding was made on 26 June 2020 by the Gemeinsame Wissenschaftskonferenz (GWK), based on the recommendation of the Expert Panel of the Deutsche Forschungsgemeinschaft (DFG). In the first round of calls for the new NFDI, providing funding for an initial period of 5 years, 22 consortia applied in a competitive process for funding in various scientific areas.

Catalysis is an interdisciplinary field of science and technology, and catalysis related sciences have great importance for economy and society as a whole. Catalysis is one of the core technologies for simultaneously solving the pressing challenges of climate change, the supply of sustainable energy and sustainable materials. Concrete examples for the benefits of applied catalysis are the reduction or complete avoidance of CO2 emissions in chemical or petrochemical processes, the recycling of plastic waste and CO2 in chemical production, sustainable hydrogen production, fuel cell technology or enabling the sustainable supply of food for more than 7 billion people on earth. All of these topics require groundbreaking advances in catalysis related sciences and technology.

NFDI4Cat focuses on a fundamental change of approaches in research and development in the fields of catalysis, chemical engineering and process technology. A key challenge is to bring together the different disciplines in catalysis research and technology with the support of data science and mathematics. The goal of NFDI4Cat is to redefine catalysis research and development in the digital age and to set the stage for "Digital Catalysis". This is oriented along the data value chain along the direction "from molecule to chemical process".

The NFDI4Cat consortium coordinated by DECHEMA consists of experts from the fields of homogeneous, heterogeneous, photo-, bio- and electrocatalysis. This core expertise is supplemented by experts from reaction and process engineering, data and mathematical sciences. Partner institutions are:

- LIKAT - Leibniz Institute for Catalysis e.V.
- Friedrich-Alexander-Universität Erlangen
- RWTH Aachen
- University Greifswald
- University Leipzig
- University Rostock
- TU Berlin
- TU Braunschweig
- TU Dortmund
- TU München
- Fraunhofer Institute for Open Communication Systems FOKUS
• High Performance Computing Center Stuttgart (HLRS)
• KIT-Karlsruhe Institute of Technology
• Max Planck Institute for Chemical Energy Conversion
• Max Planck Institute for Dynamics of Complex Technical Systems

The consortium is complemented by the TU Darmstadt as an associated partner. A unique setup within NFDI4Cat is an industrial advisory consortium, which supports NFDI4Cat in a consulting role. In addition to hte GmbH, which will serve as spokesman organization, the advisory consortium includes the companies BASF SE, Clariant Produkte GmbH (Catalysts), Covestro Deutschland AG, Evonik Industries AG, Linde AG (Engineering Division) and thyssenkrupp Industrial Solutions AG.

In order to achieve the overall objectives of the NFDI, NFDI4Cat will cooperate particularly closely with other funded and emerging consortia such as NFDI4Ing and NFDI4Chem, where thematic synergies through interdisciplinarity are foreseen.

Contact: info@nfdi4cat.org
Further information:
http://gecats.org/NFDI4Cat.html
https://www.dfg.de/foerderung/programme/nfdi/ (in German)

About the National Research Data Infrastructure:
The National Research Data Infrastructure (NFDI) is intended to systematically develop, sustainably secure and make accessible the data sets of science and research and to connect them (inter)nationally. The NFDI will be established in a process driven by science as an interlinked structure of consortia acting on their own initiative. The NFDI will be established as a cooperative network of consortia in three stages over a period of three years (2019 to 2021). In each of the three stages, new consortia are invited to join the NFDI in a science-led process. The national and state governments intend to fund up to 30 consortia in total. In the final stage, up to EUR 85 million per year will be available for funding.
https://www.dfg.de/foerderung/programme/nfdi/ (in German)

Anhang NFDI4Cat-Logo http://idw-online.de/de/attachment80293