NSF-DFG: Förderung der Forschungskooperation zwischen Deutschland und den USA im Bereich Elektrosynthese und -katalyse (NSF-DFG EChem)

http://www.dfg.de/foerderung/info_wissenschaft/internationaler_bezug/info_wissenschaft_20_27/index.html

Stichtag: 01.07.2020 | Programmausschreibungen

Die Deutsche Forschungsgemeinschaft (DFG) und die National Science Foundation (NSF) unterstützen die Zusammenarbeit zwischen deutschen und US-Forschenden zur Entdeckung und Entwicklung neuer chemischer Synthesemethoden, die sowohl energieeffizient als auch mit nicht fossilen Energieträgern kompatibel sind.

NSF-DFG Lead Agency Activity in Electrosynthesis and Electrocatalysis (NSF-DFG EChem)

Recognising the importance of international collaborations in promoting scientific discoveries, the US National Science Foundation (NSF) and the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) have signed a Memorandum of Understanding (MoU) on research cooperation. To facilitate the support of collaborative work between US researchers and their German counterparts, the Division of Chemistry (CHE) and the Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET) at the NSF and the Divisions of Physics and Chemistry (PC) and Engineering Sciences (ING 1) at the DFG are pleased to announce a lead agency activity in the areas of electrosynthesis and electrocatalysis.

Both the NSF and DFG recognise an urgent need to support research focused on discovering and developing new chemical synthesis methods that are both energy efficient and compatible with non-fossil fuel energy sources. We are particularly interested in novel and fundamental electrochemical reactions and studies addressing transformations in organic and polymer synthesis, water splitting reactions (hydrogen/oxygen evolution), and nitrogen reduction (ammonia production). Relevant activities include: mechanistic studies; catalyst design, synthesis, and characterisation; computational modelling, theory, and simulation; and experimental tool development. For fundamental engineering science projects, we are interested in studies involving reaction engineering, reactor system design, and component or device scale studies as examples that provide fundamental knowledge supporting scale-up of systems. In addition, fundamental engineering science projects involving alternative (to thermal) activation mechanisms such as microwaves (e.g. microwave assisted catalysis) and low temperature plasmas (e.g. plasma-assisted catalysis) are welcomed.

Proposals will be reviewed by either NSF or DFG as the lead agency, depending on where the largest proportion of research lies. Proposals must provide a clear rationale for the need for a US-German collaboration, including the unique expertise and synergy that the collaborating groups will bring to the project. For applicants to be invited to submit a formal proposal, an Expression of Interest (EOI) is required and should be submitted to the prospective lead agency no later than 1 July 2020, 5pm local time.

Upon confirmation from both funding organisations that the collaborative research proposal is appropriate for the NSF-DFG EChem solicitation, the lead agency will contact the researchers to inform them that they may submit a full research proposal. All full research proposals must be submitted by 30 September 2020, 5pm local time (for first-time users of the DFG's online submission system "elan" pre-registration is necessary by September 22, 2020).

Quelle: Deutsche Forschungsgemeinschaft DFG (Ausschreibungen mit internationalem Bezug)

Redaktion: 26.05.2020 von Miguel Krux, VDI Technologiezentrum GmbH

Länder / Organisationen: USA

Themen: Energie, Förderung, Physik. u. chem. Techn.

Zurück

Weitere Informationen