WSS Research Centre catalaix

RWTH AACHEN UNIVERSITY

WSS Research Centre catalaix | RWTH Aachen University | Worringerweg 2 | 52074 Aachen GERMANY

catalaix-Junior Principal Investigator position (f/m/d) in WSS Research Centre catalaix

The **WSS Research Centre catalaix** aims to transform the chemical industry into a multidimensional circular economy with a focus on plastic materials. In an interdisciplinary approach with a focus on catalysis, methods are being developed to transform established linear value chains into circular recycling technologies.

We aim to strengthen the catalaix team by creating a **catalaix-Junior Principal Investigator (JPI) position in the field of process engineering for chemical recycling of polymers.** Our goal is to support young researchers on their path to an academic career. To this end, we offer excellent researchers the opportunity to establish their own research group.

The funding amounts to up to 1.5 million euros over a period of up to five years, with an evaluation after four years.

Research Focus: Polymer recycling processes as well as integrated product & process design is a focus within catalaix, combining both model-based optimization and experimental investigation of chemical and biological unit operations. A catalaix-JPI shall lead world-class research on process engineering complementing these efforts, e.g., focusing on process intensification, process optimization, integrated process/molecular design, or innovative unit operations, The overarching goal is to increase the efficiency of the different process steps in the open loop regarding energy and material consumption as well as residence time. In that way, the catalaix-JPI will contribute to the overall goal of intensified and integrated processes for innovative polymer value chains.

Research Environment: The catalaix-JPI will be embedded in the AVT of RWTH Aachen University and be mentored by the four AVT PIs in catalaix. Close collaboration within the catalaix team and especially with the catalaix groups of AVT is expected. Laboratory and office facilities and access to relevant infrastructures will be made available. We are excited to offer close cooperation in a collegial environment. The envisioned catalaix-JPI is expected to greatly benefit from the comprehensive expertise of the catalaix consortium, their guidance while establishing themself as an independent young researcher with perspective to a future professorship.

Desired Profile: The successful applicant has demonstrated excellence in research through a university degree and a doctoral degree in a related field (e.g., chemical engineering, process engineering, polymer engineering, biotechnology). A competitive track record of scientific publications is expected. Post-doctoral experience is desired but not required. Willingness and ability to lead a group and cooperate in interdisciplinary teams is essential.

Application: Please submit the required documents according to the provided templates at **www.catalaix.com/en/catalaix-JPI until 01.09.2025 to application@catalaix.rwth-aachen.de**. The selection of funding recipients takes place on a competitive basis. In case of success, a start latest Q1 2026 is expected.

We are excited to offer close cooperation in a collegial environment. The envisioned catalaix-JPI is expected to greatly benefit from the expertise of the catalaix team and their guidance while establishing themselves as an independent young researcher.

Sincerely
Prof. Dr. rer. nat. Regina Palkovits
Prof. Dr. rer. nat. Jürgen Klankermayer

Project Leaders of the WSS Research Centre catalaix,
on behalf of the catalaix PIs within AVT

Project Leaders
Prof. Dr. rer. nat.
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Jürgen Klankermayer

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TEMPLATES FOR APPLICATION
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APPLICATION E-MAIL
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Aachen, July 2025

Host of the catalaix-JPI
Process Systems Engineering Prof. Alexander Mitsos, Ph.D.

catalaix AVT Department
Biochemical Engineering
Prof. Dr.-Ing. Jørgen Magnus

Chemical Process Engineering
Prof. Dr.-Ing. Matthias Wessling

Fluid Process Engineering
Prof. Dr.-Ing. Andreas Jupke