

Information for Applicants for the Talent Factory

The CTC

The Center for the Transformation of Chemistry (CTC), a newly-founded national research hub in Germany supported by €1.25 billion in funding (until 2038), is dedicated to redefining the role of chemistry in tackling global challenges. Led by founding director Prof. Dr. Dr. h. c. Peter H. Seeberger, the CTC brings together researchers from chemistry, physics, engineering, data science, and the social sciences to develop sustainable materials, processes, and technologies that support a circular economy. A combination of basic research, applied research, and technology transfer projects, united by the overarching vision of “moonshots in chemistry” and grounded in interdisciplinary collaboration and the transformation of the chemical industry, underpins the CTC’s mission.

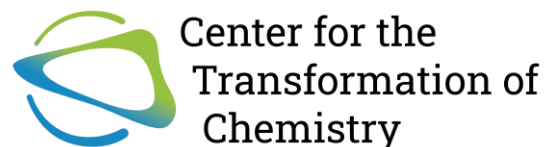
The CTC is structured around collaborative, mission-driven [research groups](#) and state-of-the-art facilities, fostering open science, innovation, and industry partnerships. Its core mission is not only to advance cutting-edge chemistry but also to train the next generation of scientists and entrepreneurs who will drive the transformation of chemistry for a sustainable society. Researchers at the CTC benefit from access to advanced research infrastructure and close collaboration with the CTC Science Team (>20 members), who provide support and coordinate key operational activities to ensure efficient progress of research programs. The CTC science team currently operates from Leuna and plans to move to a new office site in the Leipzig area, which will provide laboratory and office facilities. The new site will offer fully equipped analytical and experimental facilities designed to accelerate discovery. Permanent locations in Delitzsch and Merseburg, Germany are planned and will be gradually put into operation starting in 2030, replacing the temporary site.

The Talent Factory

Concept of the Talent Factory

The Talent Factory serves as an integral component of the CTC's research and transfer strategy, aligning with the overarching mission to foster an ecosystem for innovation and excellence in chemical research and enabling technologies. Ultimately, comprising up to 40 independent research groups, the Talent Factory operates as a dynamic hub for nurturing novel and ambitious ideas and promoting creative exploration within the [thematic areas](#) of the CTC (Automation and Standardization, Data-driven Chemistry, Renewable Feedstocks, Recycling, and Societal, Environmental, and Economic Metrics). Embodying principles of openness and inclusivity, the Talent Factory acquires talent through both open and thematic calls, inviting scientists to embark on transformative research endeavors as an independent researcher. Group Leaders within the Talent Factory benefit from a research stay of up to seven years (four years guaranteed, Phase I, with three additional years, Phase II, after a positive evaluation of the first phase), serving as a launchpad for the long-term exploration of their own ideas. In addition, the Talent Factory provides access to research infrastructure and close collaboration opportunities with members of the CTC Science Team, who will support and coordinate key operational tasks to ensure the smooth and efficient progression of research activities. In parallel, the CTC Service Hub supports the realization of your research ideas through dedicated infrastructure and expertise.

Through its commitment to fostering emerging talent and cultivating groundbreaking research, the Talent Factory stands as a cornerstone of the CTC's vision for advancing scientific discovery and driving transformative change within the chemical industry. The CTC supports research across the full spectrum from fundamental science to applied innovation and technology transfer, ensuring that novel ideas can mature into impactful solutions for society and the economy.



Talent Factory Principal Investigator Profile

The CTC seeks to recruit exceptional Group Leaders for the Talent Factory to lead research groups within an interdisciplinary ecosystem alongside like-minded peers. The ideal candidate should demonstrate scholarly excellence as well as the ability and willingness to foster interdisciplinary collaboration and to mentor junior scientists and students. Candidates must hold a PhD and post-doctoral experience is greatly preferred. In addition to presenting project ideas for advancing a circular chemical economy and implementing state-of-the-art techniques, Group Leaders are expected to articulate how their proposed research contributes to the mission-driven framework of the [two CTC "moonshots"](#): the Autonomous Laboratory (fully digitized, AI-driven chemical experimentation) and the Completely Recyclable Car (transforming chemistry towards a circular economy by designing new materials and processes for the automotive sector). Each Group Leader will have full responsibility for selecting their team members and defining the structure of their group. We encourage interdisciplinary applicants, including but not limited to biochemists, physicists, computer scientists, engineers, computer scientists, engineers or mathematicians.

Talent Factory Promotion Structure

Group Leaders will be granted a fixed-term contract of four years in accordance with the CTC funding structure. During Phase I, Group Leaders will undergo annual reviews, with a comprehensive evaluation after three years. Upon a positive review Group Leaders will be promoted to Phase II, allowing them to continue their research for an additional period of three years.

Funding

Your group will have full funding of your own position, and up to 3 PhD students (or 2.3 full-time equivalent positions) depending on the project. These positions will be recruited progressively according to the project timeline and CTC's implementation schedule. These co-workers will be selected by the Group Leader based on the needs and focus of the research group. The starting and operating budget depends on the type of research pursued. Details are further discussed during the interview process.

The Selection Process

Suitable applicants will be invited to an online interview, followed by in-person interviews for shortlisted candidates. These interviews will include a presentation of the candidates' previous work and future research plans, as well as discussions with selected members of the CTC. In addition to scientific achievements, demonstrated inventiveness and contributions to technology development, including patents or other forms of innovation output, will be valued in the assessment of candidates. The recommended candidate will then be submitted to the Research Committee for endorsement. An official offer letter will be issued in writing to the successful candidate.

Completing an Application

CV

To ensure all research outputs are considered during assessment, candidates are asked to include a variety of research outputs in their CVs. As well as listing publications, research outputs can include open data sets, databases, code, software, pre-prints, patents, commercial products, instruments, educational products, policy publications, and any other relevant outputs to which you have contributed.

The Applicants are expected to report their publications, patents and any other research outputs correctly, including all authors in the same order as published. Joint authorships (e.g. co-first author, multiple corresponding author) must be properly indicated.

Eligibility

All applications must be comprehensive, clear, and understandable. They have to be submitted by eligible scientists before the relevant call deadlines. Proposals failing to meet these criteria may be excluded from review. CTC calls, even when targeted, are open to all research fields in chemical research. Proposals that are deemed novel and aligning well with targeted calls will, however, be prioritized in the selection process.

All applications and associated supporting documentation undergo a thorough review to ensure compliance with admissibility and eligibility criteria. It is important to note that the evaluation of a proposal under such circumstances does not serve as confirmation of its admissibility or eligibility.

If it becomes apparent, at any stage, prior to, during, or after the peer review evaluation, that one or more admissibility or eligibility criteria have not been met (e.g., due to inaccurate or misleading information), the proposal will be rejected.

There are no nationality, gender, or age restrictions.

Leadership, Entrepreneurship, and Further Training

Group leaders of the CTC are expected to attend a workshop for “Leadership” and “Basics of Entrepreneurship” in the first year of their research stay. Both courses will be offered by the CTC. They will ensure that all Group Leaders will be provided with the tools to have a successful research stay within the structures of the CTC and have the chance of validating whether their research can be transferred to market applications.

Research Data Management

The CTC, and the Talent Factory operate with a steadfast commitment to effective data management and the promotion of FAIR (Findable, Accessible, Interoperable, and Reusable) principles within its research endeavors. Recognizing the significance of data transparency and accessibility, Talent Factory scientists will be **obligated** to agree to good data management practices set and continuously developed by the CTC and its network partners. Group Leaders and their teams will be equipped with the necessary tools and resources to adhere to these requirements, from onboarding about standards for collection and processing to storage, dissemination, and archival.

In addition, the CTC emphasizes the importance of open access to research data and outcomes, including chemical data, computer code, algorithms, software, and workflows. By promoting open science principles, the CTC aims to enhance scientific collaboration, foster innovation, and maximize the impact of its research outcomes on the broader scientific community and society at large. Data dissemination shall undergo internal evaluation and approval in line with the CTC’s transfer strategy.

Research Integrity

The CTC maintains rigorous standards of research integrity, emphasizing honesty, objectivity, and accountability. Instances of misconduct, including fabrication, falsification, or plagiarism, will be thoroughly investigated and addressed. Training and support on ethical practices are provided to ensure responsible conduct of research. Through open dialogue and peer review, researchers uphold principles of integrity, fostering public trust and advancing scientific knowledge.