



Research to Business (R2B)

Deep-Tech Venture Track Job Advertisement

Research and Development Scientist (m/f/d) – Chemical Engineering, Process Scale-Up & Battery Design

with the opportunity to pursue a PhD at the University of Bremen

About Matena innovate! Center

The Matena innovate! Center is a company and an affiliated institute of the University of Bremen founded to accelerate the translation of excellent materials science into societal and industrial impact. Supported by the Joachim Herz Foundation with funding of up to €30 million over a maximum period of ten years, Matena combines scientific excellence with entrepreneurial thinking. Our vision is a world in which scientific breakthroughs directly contribute to solving the challenges of our time. Matena aims to become the leading destination for technology transfer in materials science – enabling outstanding research to create measurable impact for society, industry, and future generations through innovative transfer structures and entrepreneurial thinking.

Our mission is to shorten the path from laboratory research to market-ready innovation. We create an environment where researchers can develop breakthrough technologies while receiving professional support in intellectual property, business development, industrial collaboration, market validation and venture creation.

Through our Research-to-Business (R2B) Track, we combine Technology Readiness Levels (TRL) with Business Readiness Levels (BRL), enabling research teams not only to develop technologies, but also to understand markets, customers, business models and commercialization pathways.

Position rationale & commercial intent

The R&D position will be embedded in an ongoing research project focused on the development of aqueous zinc-ion batteries for stationary energy storage, with the goal of providing a safer, more sustainable, and more cost-effective alternative to lithium-ion technology for applications such as renewable-energy buffering, grid support, and industrial backup power. The project has already reached TRL 4, with validated component-level results including PBA-based cathode development and high-mass-loading electrode processing as well as promising cell-level concepts relevant to future battery design that combine improved manufacturability with significantly reduced projected processing costs.

The current team is mainly driving the electrochemical and materials-science aspects of the project, and the next major step is to translate these validated laboratory results into scalable, pilot-relevant production routes while also developing battery designs that are compatible with practical cell assembly, component integration, and

demonstrator requirements. Because this technology is being developed with clear commercial intents, the candidate will gain deep insights into deep-tech patenting strategies, IP-transfer, business case formulation, and spinoff mechanics.

Unlike a traditional university research position, this role combines scientific excellence with technology transfer in a transfer technology company. The successful candidate is expected to actively contribute to the commercial development of the technology, working together with scientists, innovation managers and industrial partners to assess technical feasibility, market potential and future commercialization opportunities.

Proposed role & key focus areas

- Development of scalable synthesis routes for battery materials
- Optimization of process reproducibility and throughput
- Contribution to battery design, including electrode architecture, cell configuration, electrolyte compatibility, and component integration
- Translation of material-level advances into practically relevant cell designs
- Design and modelling of pilot-relevant reactor(s) and workflows
- Support of manufacturing-oriented process design for future demonstrator and industrial implementation
- Support technology transfer activities and interact with industrial partners
- Contribute to IP generation and patent-oriented technology development
- Participate in customer discovery and business model discussions
- Collaboration on techno-economic assessments (TEA) and commercial validation parameters to support the future spinoff pathway

Candidate profile & entrepreneurial mindset

- A Master's degree in chemical engineering, process engineering, industrial chemistry, battery engineering, materials engineering, or related disciplines
- Interest or experience in scale-up, reactor design, flow chemistry, battery design, or process optimization
- Ability to work at the interface of materials science, electrochemistry, and engineering
- Interest in translating laboratory-scale materials and processes into practical battery components and cell architectures
- Strong motivation to contribute to safe, scalable, and sustainable battery technologies
- A highly welcoming attitude towards entrepreneurship and technology transfer, with an interest in potentially transitioning into a co-founder role in a future venture-backed deep-tech startup
- Open transfer mindset with enthusiasm for translating research into real-world impact
- Interest in working with industry, customers and investors
- Motivation to contribute not only scientifically but also strategically to future commercialization
- Interest in entrepreneurship and the possibility of joining a future spin-off team

POSITION CONDITIONS

- Scope: 75% researcher (29.4 h/week)
- Attractive working conditions and a salary in line with market standards
- PhD at University of Bremen possible
- Duration: until 29 February 2028
- Preferred start: 01.12.2026
- Application deadline: 30.08.2026

STARTUP POTENTIAL

- Agile venture-backed eco-system
- Direct access to Matena R2B track
- Potential co-founder onboarding
- Connect directly with project leads

Ready to bridge the gap between science and business? Get in touch by DM or [Email!](#)