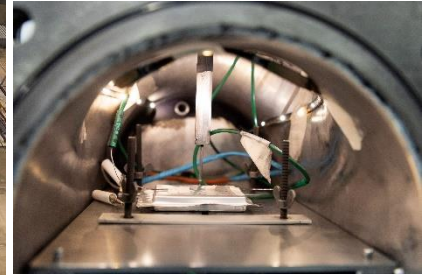




Technische  
Universität  
Braunschweig

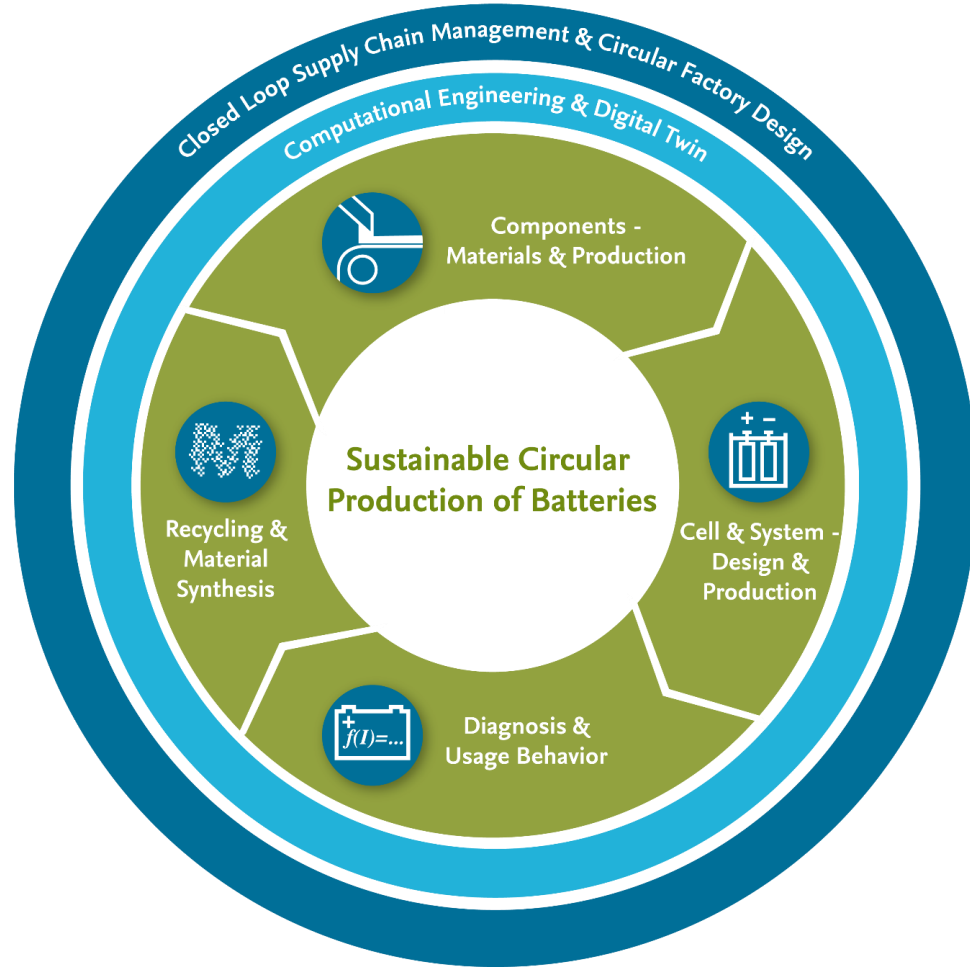
**BLB<sup>+</sup>** Braunschweig  
Labfactories for  
Batteries and more



**Technical University of Braunschweig**  
Braunschweig Labfactories for Batteries and more (BLB+)  
Jan-Linus Popien

# Braunschweig Labfactories for Batteries and more

## Value Creation and Research Priorities

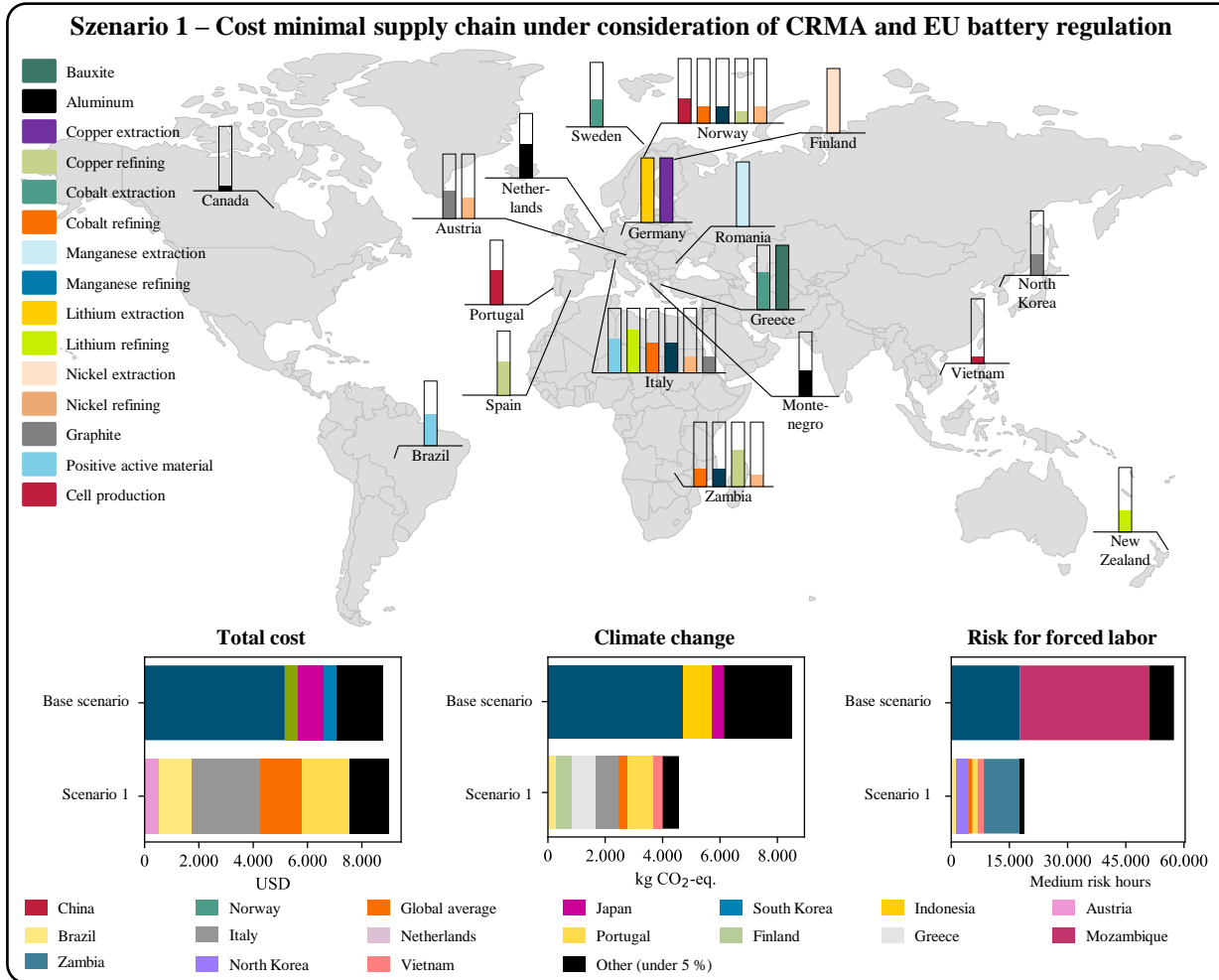


Development and use of innovative methods:

- New production processes
- In-line process sensors
- Non-invasive and post-mortem cell diagnosis
- Interlinked cell production and performance simulation
- Technology based life cycle simulations
- Sustainability assessments
- Mathematical optimization

# Braunschweig Labfactories for Batteries and more

## Research group: Circular Factory Systems and Supply Chains



## Challenges

- Current databases primarily contain processes for the extraction and refinement of raw materials outside Europe
- The data sets focus on the country level and not on the location level
- Identifying potentials and recommendations for action for the design of a resilient and sustainable value chain is thus more difficult

# BEPA Batt4EU Calls

## Collaborations: Areas of Interest

### Calls of interest:

- HORIZON-CL5-2025-02-D2-03: Sustainable processing and refining of raw materials to produce battery grade Li-ion battery materials

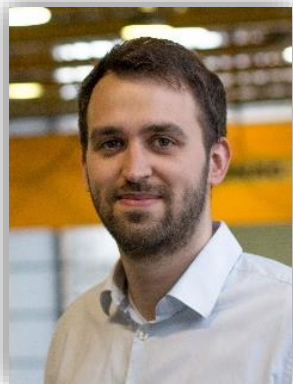
**Environmental, economic and social assessment** of processes and resulting supply chains to produce LFP and NCx battery materials

**Optimal design of supply chains** against the background of legal requirements and the environmental, economic and social impacts



# Contact Details

Feel free to contact us!



**Nicolas v. Drachenfels**

BLB CEO, Coordination

Research Associate “Sustainable  
Manufacturing and LCE”

Institute of Machine Tools and Production  
Technology

[n.drachenfels@tu-braunschweig.de](mailto:n.drachenfels@tu-braunschweig.de)



**Dr. rer. nat. Peter Michalowski**

BLB CEO, Projects

Head of Division “ Battery Process  
Engineering”

Institute for Particle Technology

[p.michalowski@tu-braunschweig.de](mailto:p.michalowski@tu-braunschweig.de)



**Jan-Linus Popien**

Group Leader “Circular Factory Systems  
and Supply Chains”

Institute of Automotive Management and  
Industrial Production

[j.popien@tu-braunschweig.de](mailto:j.popien@tu-braunschweig.de)