

## ICRERA 2025

# 14th INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS



### **Simeon Kremzow-Tennie, M.Sc.**

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**Paper ID** : 173

**Paper Title** : Can Crowdsourced SOH Data Reveal the Effects of Fast Charging on EV Battery Degradation?

#### **Bio :**

Simeon Kremzow-Tennie is a PhD student at the University of Wuppertal researching at the Institute for Electric Mobility at Bochum University of Applied Sciences. His research focuses on battery technology, battery simulation, and lithium-ion battery systems.

Mr. Kremzow-Tennie specializes in battery technology, fast charging algorithms, state-of-health (SOH) estimation, and battery aging behavior. His work bridges theoretical battery modeling with practical applications in electric vehicle traction batteries, examining real-world charging scenarios and their impact on battery performance and longevity.

His academic contributions include 13 peer-reviewed publications. His most recent research focuses on convergence of electric mobility and energy systems, fast-charging performance analysis through data-driven approaches, and accelerated life cycle analysis under different charging algorithms.

His paper published at ICRERA 2025 examines crowdsourced consumer-reported SOH data from electric vehicles to investigate the influence of fast charging on battery aging behavior, representing an approach to understanding real-world battery performance using community-generated data.