

# AP @ Radical Dot: Building the Future of Experimental Data Management

Application Project | 16.09.2025

Radical Dot is developing the next generation of **chemical plastics recycling technologies**, powered by a novel low-temperature oxidation process. Spun out of **TUM Venture Labs ChemSPACE**, our impact-driven team is advancing the technology in close collaboration with the **Catalysis Research Center at the Technical University of Munich**.

To better understand the chemistry at the heart of our process, we run numerous experiments and collect both online and offline datasets. We recently introduced a first version of programmatic data processing and dashboard-based visualization. However, as our experimental activities scale, our current setup will soon reach performance limits.

This project offers a student team the opportunity to design and implement a **robust, scalable, and secure foundation for Radical Dot's experimental data infrastructure**—enabling cutting-edge R&D in chemical recycling.

---


## Project: Enhanced Data Analysis & Visualization

*Objective: Unlock deeper insights from experimental data*

- Integrate **new data streams**, including continuous pilot plant output and advanced time-trace datasets
  - Build more sophisticated **API connections** with our electronic lab book provider
  - Improve the **resilience and maintainability** of the Python codebase (e.g. via testing and modularization)
- 

## Key Facts

- **Start:** Winter semester 25/26
  - **Duration:** 6 months
  - **Supervision:** ERI (tbd)
- 

 **Apply via email:** [careers@radicaldot.com](mailto:careers@radicaldot.com)

Please include your CV, current transcript of records and a short motivation statement