

**Postdoctoral Researcher**

***Particle interactions and dynamics in slurry flow batteries***

**Start Date:** June 1<sup>st</sup>, 2021

**Term:** 1-year contract with potential of renewal (maximum of 3 years)

**Description:** The Wirth Lab at Case Western Reserve University (CWRU) has an open postdoctoral research position in the area of fluid mechanics, flow visualization, and physiochemical properties of colloidal suspensions. This project focuses on how surface chemistry, particle size, and fluid formulation of a slurry electrode impacts performance of a flow battery with either iron or zinc electrochemical couples. The postdoctoral researcher will lead efforts on computational and experimental flow field studies in technologically relevant battery geometries. In addition, fundamental studies measuring the interfacial properties of these materials will be conducted. The project lead is PI Jesse Wainright with Co-PIs Wirth, Akolkar, and Savinell and is funded by the Pacific Northwest National Laboratory (PNNL) via the Department of Energy.

**Qualifications:** The applicant must have a PhD in Chemical Engineering, Physics, Materials Science, or related discipline before the start date and eligible to work in the US. Applicants with experience in computational fluid dynamics (CFD), particle imaging velocimetry (PIV), and interfacial measurements are preferred. Applicants must be willing to mentor graduate students and work in a highly collaborative environment.

**How do apply:** Email Prof. Chris Wirth ([wirth@case.edu](mailto:wirth@case.edu)). Please attach a complete CV and contact information for 3 references. BIPOC and women are strongly encouraged to apply.

**Deadline:** Applicants will be evaluated on a rolling basis until the position is filled. Promising applicants will be contacted via email for a Zoom interview. If you have any questions about the position, do not hesitate to contact Prof. Wirth.