



Job announcement: seeking a Postdoctoral Fellow for work on redox flow batteries for energy storage

The Technion – Israel Institute of Technology, located along the Mediterranean in Haifa, Israel, is a top 100 university*, houses 3 Nobel laureates, and is a world leader in scientific research and technology development. Technion is recognized as the engine of Israel’s “start-up nation”, as Technion graduates lead 59 of the 121 Israeli companies listed on NASDAQ. The laboratory of Professor Matthew Suss at the Technion is focused on developing novel **flow electrochemical systems** to push the boundaries in energy storage and water desalination. Currently 12 members, we develop high performance flow batteries, capacitive deionization cells, and study flow, transport and electrochemistry in porous media.

We have recently begun a European-level project with several academic and industrial partners towards developing membraneless hydrogen-bromine redox flow batteries. We are looking for an experienced researcher to lead this effort through a two-year postdoctoral position starting January 1st. Experimental experience with electrochemical systems is a plus. Interested candidates should submit their complete application including a CV, and a 1-page motivation letter **as soon as possible to Prof. Suss at mesuss@technion.ac.il**

Major Duties/Responsibilities include:

- Designing out-of-the-box membraneless flow batteries towards achieving world-record performance using CAD software, and in-lab rapid prototyping equipment.
- Leading battery characterization experiments and analysis (such as charge/discharge, polarization curve experiments, cyclic voltammetry, electrochemical impedance spectroscopy)
- Developing transport and flow theory to describe battery performance, or collaborating with theoreticians to validate models.
- Presenting results of the research at national and international conferences, and at yearly project status update meetings in the Netherlands
- Publishing findings regularly in well-respected scientific journals.

Minimum requirements

1. PhD in engineering or science (mechanical, chemical engineering, or chemistry preferred).
2. Ability to excel in a fast-paced team environment and high-level English skills (oral and written)

Information on the Principal Investigator

Prof. Matthew Suss obtained his PhD in Mechanical Engineering in 2013 from Stanford University. From 2010-2013, he was a Lawrence Scholar at Lawrence Livermore National Laboratory, and from 2013 to 2014 a Postdoctoral Associate in Chemical Engineering at MIT. Matthew has co-authored 37 scientific publications, 10 patent applications, and delivered over a dozen plenary, keynote, or invited lectures at international conferences. Matthew is currently an Assistant Professor in Mechanical Engineering at Technion and affiliated with the Grand Technion Energy Program (GTEP). Matthew has been awarded (in the past five years) the prestigious Alon Fellowship, the Uzi & Michal Halevy Award for Innovative Applied Engineering, and an ARCHES award for research cooperation and high excellence in science.

*Shanghai University ranking