



**Job announcement: seeking a Postdoctoral Fellow and several M.Sc. and PhD students for work on energy storage and water desalination (100% fellowships available)**

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 10 members, we develop high performance flow batteries, capacitive deionization cells, and study flow, transport and electrochemistry in porous media.

We have recently begun two well-funded projects to develop: 1) novel and high performance flow batteries for grid-scale energy storage and 2) fluidized bed electrodes with applications in energy storage and water desalination. We are looking to add to our dynamic team and hire several highly motivated and qualified candidates. Interested candidates should submit their complete application including a CV, and a 1-page motivation letter **before January 30<sup>th</sup>, 2017 to Prof. Suss at [mesuss@technion.ac.il](mailto:mesuss@technion.ac.il)**

**Major Duties/Responsibilities include:**

- Developing novel flow battery or capacitive deionization prototypes using CAD software, in-lab rapid prototyping equipment, and additive manufacturing (3D printing).
- Leading battery or desalination cell characterization experiments (such as charge/discharge, polarization curve experiments, cyclic voltammetry, electrochemical impedance spectroscopy, effluent conductivity)
- Leading fluidized bed electrode development experiments (such as pressure-velocity characterization, electric conductivity characterization, cyclic voltammetry)
- Developing transport and flow theory to describe battery or desalination cell performance, and solving models using in-lab high-performance computers.
- Presenting results of the research at national and international conferences.
- Publishing findings regularly in well-respected scientific journals.

**Minimum requirements**

1. Bachelor’s of 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 25 scientific publications, 7 patent applications, and delivered 6 plenary, keynote, or invited lectures at international conferences. Matthew is currently an Assistant Professor in Mechanical Engineering at Technion and member of the Israel National Research Center for Electrochemical Propulsion (INREP). Matthew has been awarded (in the past two years) the prestigious Alon Fellowship, the Uzi & Michal Halevy Award for Innovative Engineering, and an ARCHES award for research cooperation and high excellence in science.

\*Shanghai University ranking