

EDUCATION

ETH ZURICH

July 2016 | Zurich, Switzerland

PH.D. IN GEOCHEMISTRY

ICELAND SCHOOL OF ENERGY

August 2011 | Reykjavik, Iceland

M.SC. IN SUSTAINABLE ENERGY

PITZER COLLEGE

May 2009 | Claremont, California, USA

B.A. IN EARTH SYSTEM SCIENCES

RESEARCH RECORD

ETH ZURICH | PH.D. | Supervisors: Prof. Dr. Thomas Driesner and Dr. Philipp Weis

- Developed novel model of supercritical geothermal resource formation
- Revealed how primary geologic factors control thermal structure and location of upflow/boiling zones
- Elucidated link between depth, phase separation style and heat transfer dynamics in saline systems

UNIVERSITY OF ICELAND | M.SC. | Supervisors: Dr. Andri Stefánsson and Dr. Stefán Arnórsson

- Reconstructed aquifer fluid compositions of excess-enthalpy wells accounting for phase segregation
- Updated conceptual model of Hellisheidi geothermal field emphasizing geochemistry of reactive gases

PITZER COLLEGE | UNDERGRADUATE | Supervisor: Dr. Robert Gaines

- Found empirical evidence of bacterial-mediated reduction of iron in common clay minerals

HONORS AND AWARDS

2012 Doctoral Research Fellowship

Swiss National Science Foundation

2011 National Geothermal Academy Student Fellowship

U.S. Department of Energy

2010 M.Sc. Project Grant

Reykjavik Energy

WORK EXPERIENCE

late 2016 Post-doctoral Researcher, ETH Zurich

Zurich, Switzerland

2003-2012 Piano Technician, Mark Scott Piano Services

Fairfield, Connecticut

2008-2009 Resident Assistant

Reykjavik Energy

PROFESSIONAL OUTREACH

- Invited reviewer for *Water Resources Research*, *Hydrogeology Journal*, *Journal of Geochemical Exploration*, *Geoscience Frontiers*, *Journal of Marine and Petroleum Geoscience*, and other journals
- Member of American Geophysical Union, Geochemical Society, Geothermal Resources Council

RESEARCH SKILLS

COMPUTING

- Numerical modeling with the CSMP++ platform, including mesh generation and post-processing
- Data analysis with MATLAB and Python
- Reconstruction of aquifer fluid compositions based on surface measurements using WATCH

LABORATORY

- Experience with ion & gas chromatography, UV/Vis- and IR-spectroscopy, XRD, and ICP-AES
- Preparation, treatment and analysis of geothermal fluid samples

FIELD

- Sampling geothermal well discharges using Webre Separators
- Performing/interpreting well measurements (i.e. temperature/pressure, flow, enthalpy, drawdown)

OTHER

- German (Goethe B2) and Spanish; Classically-trained pianist; Experienced outdoorsman