# JÚLÍA KATRÍN BJÖRRKE

Geochemist, MSc Geochemý Ltd - Geology office Hlíðarvegi 6, IS-660 Mývatn, Iceland.



ORIGIN Born 3<sup>rd</sup> of April 1984, Bærum, Norway
RELATIONSHIP Married to Helgi A. Alfreðsson
CHILDREN Halldór, b. 2007, Alfreð, b. 2014 and Viktoría, b. 2017.

#### EDUCATION

2010 MSc degree in geochemistry at the University of Iceland2007 B.Sc. degree in geology at the University of Iceland.

### CAREER

2020-PRES. Board member of the Employment and Construction committee of Skútustaðahreppur community, Mývatn.
2013-PRES. Consultant in geochemistry and co-owner at Geochemý Ltd. at Mývatn.
2011-13 Researcher at GNS Science, New Zealand. Experiments on Al-rich silica solubility.
2010 Associate researcher in field sampling and lab analysis.
2005-06 Researcher at the laboratory at ALCAN in Iceland.

## FIELD WORK EXPERIENCE

2017 Monitoring the water chemistry and dissolved nutrients in Lake Mývatn, Iceland.

2014 Geothermal borehole production measurements (enthalpy and flow).

2013 Hight temperature borehole sampling for gases, steam and brine chemistry.

2013 High temperature well monitoring for tracers, including PFTs, NDS and methanol.

**2008-10** Sampling natural steam vents and springs at Torfajökull, high temperature geothermal field, Iceland.

# LABORATORY EXPERIENCE

- X-ray Diffraction analysis
- SEM analysis
- Microprobe analysis
- Ion chromatography (preparation and analysis)
- Gas chromatography (sampling, preparation and analysis)
- Inductively Coupled Plasma analysis
- Spectrophotometer analysis
- Experimental setup and maintenance.

### COMPUTER SKILLS

- Word processing: Microsoft Word, -Excel, -PowerPoint, Open Office, etc.
- Aqueous geochemical modelling: USGS PhreeqC program, the WATCH program and the Geochemical Workbench.
- Adobe Photoshop

### TEACHING

2010 Assistant teacher in Thermodynamics for graduated students, Uni. Iceland
2009 Assistant teacher during a field sampling short course in aqueous geochemistry as part of the International conference on CO<sub>2</sub> sequestration processes in Reykjavik, Iceland.
2007-08 Assistant teacher in Geology 1A, undergraduate geology course, Uni. Iceland.

#### OTHER

- 2011 Four-wheel drive course by New Zealand CARNZ TRAINING.
- 2011 First Aid course training by New Zealand Red Cross.
- 2008 Board member of FOLDA, Society of Grad. Students in Earth Sciences, Uni. of Iceland.

2001 Iceland Driving license, category B.