

## **SUMMARY OF QUALIFICATIONS**

- Environmental scientist with 3 years of experience in water science programs.
- Versed in current analytical instrumentation for water investigations in field and laboratory.
- Experienced using python and R for statistics, and graphical analysis, also familiar with Java, HTML, CSS, Javascript, SQL.

## **EDUCATION**

**M.Sc.** specializing in isotope geochemistry, Department of Earth Sciences, University of Toronto, 2015-2016

- Thesis Supervisor: Dr. Barbara Sherwood Lollar

**B.Sc. Honours**, Environmental Geoscience, University of Toronto, 2011-2015

- Thesis Supervisor: Dr. Grant Ferris

## **PROFESSIONAL EXPERIENCE**

**Chemist-2**, Natural Resources Canada, Québec, QC, Dec. 2018 to present.

- Planned, organized and prepared various environmental samples for isotopic analysis using IC, and GC-IRMS systems.
- Processed data using computer software, increasing the efficiency of data analysis.
- Demonstrated and enforced procedures for laboratory health and safety, including the handling of hazardous products.

**Staff Scientist**, SLR Consulting, Nov. 2016-May. 2018

- Planned and carried out field investigations, requiring effective decision making and troubleshooting skills.
- Analyzed environmental data using quality assurance and quality control procedures.
- Collected and prepared geological samples for laboratory analysis of organic and inorganic geochemistry.
- Ensured health and safety principles were followed by team of staff and contractors.
- Communicated ideas with clarity to clients, orally and in writing.

**Graduate Researcher**, Stable Isotope Laboratory, University of Toronto, May 2015-Sept. 2016

- Analyzed geological samples using gas chromatograph isotope ratio mass spectrometry (GC-IR-MS).
- Used software to perform statistical analyses ensuring reliability and reproducibility.
- Collaborated with a multidisciplinary lab group to solve analytical challenges.
- Coordinated purchases of lab supplies and equipment.
- Utilized knowledge of organic and inorganic chemistry to solve unique characterization problems.

## **PROFESSIONAL EXPERIENCE CONTINUED:**

### **Industry Research Intern**, Nuclear Waste Management Organization, May 2015-Sept. 2015

- Contributed to a collaborative international experiment through chemical and microbiological analyses.
- Planned and organized a sampling expedition at the Grimsel Test Site, Switzerland.
- Ensured quality control of data from contracted laboratories to meet stringent quality standards.

### **Teaching Assistant**, Structural Geology/ Paleontology/ Hydrogeochemistry, 2015-2016

- Designed and presented lessons for laboratory practical sessions.
- Provided constructive feedback on student reports and presentations.
- Facilitated discussion on the social implications of environmental science.

### **Undergrad Researcher**, Microbial Geochemistry Laboratory, University of Toronto, 2014-2015

- Characterized the geochemistry of surface water and groundwater.
- Modelled redox reaction rates using geochemical modelling software.
- Presented thesis research to the Department of Earth Sciences and public audience.

### **Student Lab Technician**, Jack Satterly Geochronology Lab, University of Toronto, 2014-2015

- Extracted zircon crystals from rock samples for isotopic age dating analysis.
- Ensured quality control by applying clean lab techniques vital for age dating.
- Demonstrated ability to work efficiently during periods of high demand.
- Operated rock crushing machinery using proper practices and procedures to prioritize health and safety in the laboratory.

### **Wilderness Guide/ Leadership Trainer**, YMCA Camp Pinecrest, 2010-2014

- Planned and guided extended canoe trips in Ontario and Quebec.
- Taught high school students about teamwork, interpersonal relations, and leadership.
- Visited northern communities and participated in community activities.

## **RELEVANT COURSEWORK**

**Physics and the Environment**, ENV235, University of Toronto, 2013

**Environmental Biology**, ENV234, University of Toronto, 2013

**Practice of Statistics for Scientists**, STA220, University of Toronto, 2013

**Introduction to Computer Science for Scientists**, CSC148, University of Toronto, 2014

**Analytical Techniques**, ESS425, University of Toronto, 2015

**Environmental Chemistry**, CHM210, University of Toronto, 2015

**Isotope Geochemistry, ESS2704, University of Toronto, 2016**

**Hydrogeological Field School, EARTH 671, University of Waterloo, 2016**

### **SOFTWARE PROFICIENCIES**

- Experienced in Python, R
- Familiar with Java, HTML, CSS, Javascript, SQL
- Microsoft Office Suite

### **INSTRUMENT PROFICIENCIES**

- High degree of expertise in Gas Chromatography (GC) and Mass Spectrometry.
- Experience using Inductively Coupled Plasma Spectrometry (ICPMS), High Performance Liquid Chromatography (HPLC), Ion Chromatography (IC), and Atomic Emission Spectroscopy (AES).
- Fiddle player.

### **CERTIFICATIONS**

- Standard First Aid and CPR-C (2017)
- Ontario G Driver's License

### **REFERENCES**

Barbara Sherwood Lollar  
University Professor  
Stable Isotope Laboratory, University of Toronto  
Relationship: Master's thesis supervisor  
Email: [bs.lollar@chem.utoronto.ca](mailto:bs.lollar@chem.utoronto.ca)  
Telephone: 416-978-0770

Lisa Tomlinson  
Senior Project Manager  
SLR Consulting  
Relationship: Supervisor of staff scientist position  
Email: [ltomlinson@slrconsulting.com](mailto:ltomlinson@slrconsulting.com)  
Telephone: 416-720-5556

Sandra Kamo  
Director & Assistant Professor  
Jack Satterly Geochronology Laboratory  
Relationship: Work study supervisor, Master's thesis committee member  
Email: [skamo@es.utoronto.ca](mailto:skamo@es.utoronto.ca)  
Telephone: 416-946-0364