

Dr. Suhail Saleh S. Alhejji

Assistant Professor of Geochemistry | King Saud University, Riyadh.

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EDUCATION:

1- Bachelor of Science in Geology (B.S.)

- **Specialization:** General Geology
- **Institution:** College of Science - King Saud University
- **Year of Graduation:** June 2014
- **Grade:** Excellent – honor graduate

2- Master of Science in Geology (M.S.)

- **Specialization:** Geochemistry, Igneous petrology, and Volcanology
- **Institution:** College of Earth, Oceanic, and Atmospheric Sciences (CEOAS) at Oregon State University
- **Year of Graduation:** June 2019
- **Thesis Title:** “Timing and Composition of Volcanism at Harrat Ithnayn, Western Saudi Arabia”

3- Doctoral Philosophy in Geology (Ph.D.):

- **Specialization:** Geochemistry, Igneous petrology, and Volcanology
 - **Institution:** College of Earth, Oceanic, and Atmospheric Sciences (CEOAS) at Oregon State University
 - **Thesis Title:** “The Origin of Younger Volcanism in Western Saudi Arabia: Insights from Geochronology, Isotope Geochemistry, and Mineral Chemistry.”
 - **Year of Graduation:** June 2024
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POSITION HELD:

- **Assistant Professor of Geochemistry**
King Saud University | Riyadh, Saudi Arabia | <http://ksu.edu.sa/en/>
2024 – *Until Now*
- **Lecturer**
King Saud University | Riyadh, Saudi Arabia | <http://ksu.edu.sa/en/>
2023 – 2024

- **Graduate Research Assistant**
W.M. Keck Collaboratory at CEOAS OSU | Corvallis, OR, USA | <https://plasmalab.ceoas.oregonstate.edu/>
2021 – 2023
- **Teaching Assistant**
King Saud University | Riyadh, Saudi Arabia | <http://ksu.edu.sa/en/>
2014 – 2016
- **Geologist**
Saudi Aramco | Dharan, Saudi Arabia | <https://www.aramco.com/>
Summer of 2014 (internship)

PROFESSIONAL AND ACADEMIC AWARDS:

- Scholarly Presentation Award from the Graduate School of Oregon State University (2023); Results of successfully presenting my research orally at the American Geophysical Union (AGU) annual meeting in San Francisco, CA, USA.
- G&G field work/travel/analytical award from the College of Earth, Ocean, and Atmospheric Sciences (CEOAS) at Oregon State University (2023)
- Graduate Certificate in College and University Teaching (GCCUT) from the graduate school, Oregon State University (18 credits – Two years) (2023)
- G&G field work/travel/analytical award from the College of Earth, Ocean, and Atmospheric Sciences (CEOAS) at Oregon State University (2022)
- Graduate Student Research Grant Award from the Geological Society of America (GSA) (2022)
- Maurice Mundorff Memorial Fellowship Award from the College of Earth, Oceanic, and Atmospheric Sciences (CEOAS) at Oregon State University (2018)
- Completion of the Academic English program at INTO Oregon State University (2016)
- Student of the Year at the Department of Geology and Geophysics KSU (2014).
- Dean's List for Academic Excellence Award – King Saud University (2013).
- Training course in Geographic Information Systems (GIS) (2012).

ANALYTICAL EXPERIENCE

- **Electron Microprobe (EMP):**
Skilled in analyzing melt inclusions and mineral chemistry to determine elemental distributions and crystallization processes. Proficient in sample preparation, including embedding, sectioning, and polishing thin sections to ensure optimal surface quality for quantitative spot analysis and precision mapping.
- **Multi-Collector Inductively Coupled Plasma Mass Spectrometry (MC-ICP-MS):**

I specialize in high-precision isotope ratio analysis for diverse geoscientific applications, including mantle processes and crustal evolution studies. Skilled in various sample preparation methods, including acid digestion and ion exchange chromatography, to isolate and purify isotopes such as Sr, Nd, and Pb. Proficient in operating the multi-collector system, optimizing instrument settings (e.g., mass bias correction, ion beam alignment), and ensuring accurate isotope ratio measurements.

- **Laser-Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS):**

Extensive experience within situ major and trace element analyses of whole rocks and minerals to investigate geochemical variability and processes. Proficient in operating the instrument, including configuring laser parameters (e.g., spot size, pulse rate) and monitoring plasma stability for reliable data acquisition. Adept at calibrating against standards, processing raw data, and interpreting geochemical trends to assess magmatic differentiation, crustal contributions, and petrogenetic histories.

- **³⁹Ar-⁴⁰Ar Geochronology:**

Trained in age dating technique using ³⁹Ar/⁴⁰Ar incremental heating methods to constrain crystallization and eruption histories of volcanic materials. Skilled in sample preparation steps such as mineral separation (using heavy liquids and magnetic separators), grain picking under a binocular microscope, and encapsulation in irradiation capsules for neutron activation.

PUBLICATION:

- **Alhejji, Suhail**, "Timing and Composition of Volcanism at Harrat Ithnayn, Western Saudi Arabia". Open Access Master's Thesis, Oregon State University, 2019.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vx021m30m
- **Alhejji, S.**, Kent, A. J., Duncan, R. A., Graham, D. W., Al-Amri, A. M., & Alshaltoni, S. A. (2019, December). Geochronology and Geochemistry of Volcanism at Harrat Ithnayn, Western Saudi Arabia. In *AGU Fall Meeting Abstracts* (Vol. 2019, pp. V11E-0135). (Poster)
- **Alhejji, S.**, Kent, A. J., Duncan, R. A., Graham, D. W., & Al-Amri, A. M. The Origin of Younger Harrats in Western Saudi Arabia. *Geological Society of America Abstracts with Programs*. Vol. 54, No. 5, 2022 doi: 10.1130/abs/2022AM-382485

TEACHING EXPERIENCE:

- **The main Lecturer of the "Physical Geology – GEO 100" Course (2024) -** King Saud University
- **The main Lecturer of the "Volcanology – GEO 421" Course (2024) -** King Saud University

- **Lecturer of Part of the Course “Geochemistry – GEO 430” (2023)** - Oregon State University
- **Teaching Assistant of E-course “Field Geology” (2015)** – King Saud University
- **Teaching Assistant in the Lecture and Lab of “Petrology” (2014 - 2015)** – King Saud University
- **Teaching Assistant in the Lecture and Lab of “Physical Geology” (2014 - 2015)** – King Saud University

ADMINISTRATIVE ROLES:

- **Chair of the Media Committee** in the Geology and Geophysics Department, King Saud University.
- **Member of the Initiatives Unit** in the College of Science, King Saud University.
- **Member of the Partnership Unit** in the College of Science, King Saud University.
- **Member of the Museums and Galleries Unit** in the College of Science, King Saud University.

PROFESSIONAL MEMBERSHIPS:

- American Geophysical Union (AGU) from 2017 – Now
- Geological Society of America (GSA) from 2016 – Now
- Saudi Society for Geoscience (SSG) from 2013 – Now
- The Student Council in Science Collage at King Saud University (KSU) 2012 – 2014

OUTREACH AND ENGAGEMENT:

- ✓ Co-founder of the College of Science Newsletter at King Saud University (2012).
- ✓ Co-founder of the Social and Cultural Club of the College of Science at KSU (2013).
- ✓ Vice president of the Saudi Arabian Student Association at OSU (SASA) (2017 - 2018).
- ✓ An active member of Volcanology Students of Oregon (2018) (VOLC-OR)