

Fredrick Lisili Mufoyongo
2320 South Brook Street, Louisville, KY, 40208
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EDUCATION

University of Louisville

KY, USA

- Graduate student- Analytical Chemistry

January. 2023 - Present

- [The Wilson Lab](#)
 - Electoreduction of nitrate to ammonia in a magnetic field

University of Nairobi

Nairobi, Kenya

Bachelor of Education (Science)

Jan 2014 – Sept.2018

- Mathematics and Chemistry

WORK AND PROFESSIONAL EXPERIENCE

University of Louisville, Chemistry Department

KY, USA

- Graduate Teacher Assistant-CHEM 209/210

January. 2023 - Present

Averroes Tuition Centre, Chemistry Department

Nairobi, Kenya

- Mathematics and Chemistry Tutor, Head of Department

Feb. 2018 – Dec 2022

GOOGLE SCHOLAR

- [Fredrick Lisili Mufoyongo](#)

SERVICE & OUTREACH

- Volunteered as a judge for the Louisville Regional Science and Engineering Fair, University of Louisville, KY, March 1st, 2025
- Presented a research poster titled Enhancing Ammonium Synthesis from Nitrate with Electrocatalysis in a Magnetic Field as a way to, to encourage students to pursue STEM courses. Fairdale High School, KY, January 24th, 2025
- Guided students through the synthesis of gold and silver nanoparticles. Fairdale High School, KY, October 30th, 2024
- Volunteered as a judge at Fairdale High School's Science Fair, Fairdale High School, KY, May 30th, 2024
- Volunteered as a judge for the Undergraduate Arts & Research Showcase, University of Louisville, April. 23, 2024
- High School Outreach: Volunteered on July 17th, 2025, to help assemble chemistry experimental kits for distribution to high schools in Kentucky during the Fall semester

LEADERSHIP SKILLS

- Treasurer of the Chemistry Graduate Student Association (CGSA), University of Louisville, KY, 2024 – 2025
- Head of Chemistry department, Averroes Tuition Center, Kenya, 2018 - 2022

MEMBERSHIP

- American Chemical Society (ACS), August 2025 – Current
- ACS Technical Division Energy & Fuels (ENFL), August 2025 – Current
- The Electrochemical Society, August 2025 - Current

PRESENTATIONS

- Enhancing Ammonium Synthesis from Nitrate with Electrocatalysis in a Magnetic Field, Fairdale High School, January 24th, 2025
- Magneto-electrocatalysis of nitrate reduction reaction to ammonium product. The 17th Annual Graduate Students Regional Research Conference, KY, March 28th, 2024

PUBLICATION(S)

- N. Karki, F.L. Mufoyoongo, A.J. Wilson*. "[Utilizing the magnetic properties of electrodes and magnetic fields in electrocatalysis](#)," *Inorg. Chem.Front.* **2024**, *11*, 5414-5434

REFERENCES

Dr. Andrew J. Wilson, Ph.D.

Research Advisor - PI

Department of Chemistry

University of Louisville

Louisville, KY 40292

Lab: <https://www.ajwilsonlab.org>

Dr. Francis P. Zamborini

Associate Professor

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