

Abdoulie A Jallow

Chemistry Building | 3255 TAMU | 580 Ross Street | College Station | TX 77843 | USA
(979) 344-8250 | aa.jallow@tamu.edu | [Google Scholar](#) | [LinkedIn](#)

EDUCATION

- Texas A&M University, College Station, Texas, USA** Aug 2022 – Current
PhD in Chemistry (Analytical)
Supervisor: Professor Lane A. Baker
- Indian Institute of Technology Bombay, Mumbai, India** Jul 2017 – Aug 2019
MTech in Biomedical Engineering
Supervisor: Professor Debjani Paul
- University of The Gambia, Brikama, The Gambia** Sep 2011 – June 2016
BSc in Chemistry (Honours)

SKILLS

Electrodeposition | Cyclic voltammetry | Soft Lithography | Scanning Electron Microscopy (SEM) | Gas Chromatography (GC) | Fourier Transform Infrared Resonance (FTIR) Spectroscopy | High Performance Liquid Chromatography (HPLC) | Capillary Electrophoresis (CE) | Atomic Absorption Spectroscopy (AAS) | UV-vis Spectroscopy | DC/AC Voltammetry | Potentiometry | Amperometry | Coulometry | Electrodeposition | Spectroelectrochemistry | Organic Electrosynthesis | Data Analytics

PUBLICATIONS

- Zhang, L.; Wahab, O. J.; **Jallow, A. A.**; O'Dell, Z. J.; Pungsrissai, T.; Sridhar, S.; Vernon, K. L.; Willets, K. A.; Baker, L. A. **Recent Developments in Single-Entity Electrochemistry.** *Anal. Chem.* **2024**, *acs.analchem.4c01406*.
- Personick, M. L.; **Jallow, A. A.**; Halford, G. C.; Baker, L. A. **Nanomaterials Synthesis Discovery via Parallel Electrochemical Deposition.** *Chem. Mater.* **2024**, *36* (6), 3034–3041.
- Dutta, G.; **Jallow, A. A.**; Paul, D.; Moschou, D. **Label-Free Electrochemical Detection of S. Mutans Exploiting Commercially Fabricated Printed Circuit Board Sensing Electrodes.** *Micromachines* **2019**, *10* (9), 575.

PROFESSIONAL AFFILIATIONS

- American Chemical Society (ACS), ID 33882686
- Student Member, Electrochemical Society (ECS), ID 536707
- Student Member, National Association for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), ID 4985
- Student Member, The Society of Electroanalytical Chemistry (SEAC), ID 1473
- Student Member, Royal Society of Chemistry (RSC), ID 771346
- Biomedical Engineering Society (BMES), ID
- Advisory Board Member, Chemical Society of The Gambia (CSG)

PROFESSIONAL EXPERIENCE

- Department of Chemistry, Texas A&M University** Aug 2023 – Current
Graduate Teaching Assistant (Analytical Instrumentation Laboratory – CHEM434)
- Taught standard instrumental analysis techniques (GC, FTIR, CE, CV, AAS, and HPLC) to 15 senior undergraduate students.
 - Developed methods for the instruments and troubleshoot problems during lab sessions.
 - Grade student laboratory reports and provide feedback.
- Department of Chemistry, Texas A&M University** May 2023 – Aug 2023
Graduate Research Assistant
- Project Title:** Nanomaterials Discovery via Parallel Electrochemical Deposition
- Designed experiments and conducted high throughput electrochemical deposition of high-indexed Pd nanoparticles with Legion.

- SEM imaged the deposited nanoparticles and data analysis.
- Prepared reports and project updates for both my PI and our collaborator.
- Participated in reviewing the first draft of the manuscript and adjusting text and figures.

Department of Biomedical Engineering, Texas A&M University Jan 2023 – May 2023

Graduate Teaching Assistant (Biomolecular & Cellular Engineering – BMEN 433)

- Taught standard cellular and biomolecular engineering assays to 30 senior undergraduate students.
- Trained and supervised 30 students on laboratory safety procedures.
- Held two hours weekly office hours to address students' issues and offer feedback.
- Managed laboratory inventory to ensure consumables are always in stock.

MRC Unit The Gambia at LSHTM, Fajara, The Gambia Jun 2020 – Aug 2022

Health and Safety Advisor – Biological

- Conduct quarterly health and safety assessments and inspections in 8 field sites and field stations across The Gambia.
- Author and train staff on standard operating procedures for safe handling and use of biological materials and equipment, chemical procurement, chemical waste management, and other Unit processes.
- Review risk assessments and ensure that they are adequate in scope and content.
- Maintained a database of projects and microorganisms used in the Unit.
- Reviewed and categorized over 2000 legacy chemicals and determined appropriate destruction mechanisms.

SBEC International School, Salaji, The Gambia Oct 2019 – Jun 2020

Chemistry Teacher

- Develop teaching aids and materials for Form 6 & 7 A and AS level chemistry.
- Teach Inorganic Chemistry to 5 A-level Chemistry and 2 AS-level Chemistry students.
- Reviewed and improved the Chemistry, Biology, and Science curricula for all school levels.

University of The Gambia, Brikama, The Gambia Sep 2019 – Dec 2019

Assistant Adjunct Lecturer (Analytical Chemistry)

- Teach Principles of Analytical Chemistry, Instrumentation in Analytical Chemistry, and Principles of Genetics to undergraduate students.
- Supervise students' laboratory sessions.
- Participate in department activities including curricular review.

AWARDS

- 2023: Graduate Teaching Assistant, Department of Chemistry, TAMU (\$52,169 / year)
- 2023: Graduate Teaching Assistant, Department of Biomedical Eng., TAMU (\$52,169 / year)
- 2022: Graduate Research Assistant, Department of Biomedical Eng., TAMU (\$52,169 / year)
- 2017: ICCR Scholarship Award – African Scholarship Scheme, IIT Bombay (\$10,000 / year)
- 2014: Excellence in Science Education Scholarship, Gambia Ports Authority (\$500 / year)
- 2011: Semi-finalist – Fanta Science and Math Quiz Competition
- 2011: Champion (Regional) and Quarterfinalist (National) – Qcell Spelling Competition

REFERENCES

Available upon request