

Lynda Amichi
R&D Associate
Center for Nanophase Materials Sciences, Oak Ridge National Laboratory
1 Bethel Valley Rd.
Oak Ridge, TN 37831

Education

2018 Grenoble Alpes University, Ph.D., Applied Physics.
2015 Sorbonne University, M.S., Applied Physics major in Materials Science.
2013 Denis Diderot University, B.S., Physics.

Professional Experience

Oct. 2024 - Present R&D Associate, Center for Nanophase Materials Sciences, ORNL, Oak Ridge, TN (USA).
Jan. 2023 - Sep. 2024 Postdoctoral Research Associate, Center for Nanophase Materials Sciences, ORNL, Oak Ridge, TN (USA).
Oct. 2020 - Sep. 2022 Science Diplomat, Office for Science and Technology, Embassy of France, Houston, TX (USA).
Oct. 2015 - Dec. 2018 PhD Research Scientist, French commission of nuclear and alternative energies (CEA), Grenoble (France).
Jan.-Jul 2015 Master's 2 Research Internship, Mineralogy, Materials Science and Cosmo-Chemistry Institute (IMPMC), Paris (France), and Earth Life Science Institute (ELSI), Tokyo (Japan).
Apr.-Jul. 2014 Master's 1 Research internship, Materials and Quantum Phenomena Laboratory (MPQ), Paris (France).

Research Expertise

- Transmission Electron Microscopy (TEM):
 - (Cryo) Electron tomography, 3D reconstruction, and visualization.
 - High-Resolution on Aberration-Corrected Scanning TEM imaging (*ac*-HRSTEM).
 - Off-axis electron holography using a single biprism for electrical field mapping.
 - *In-situ* heating experiments.
 - Energy Dispersive X-Ray Spectroscopy (EDX).
- Laser-Assisted Atom Probe Tomography (LA-APT).
- Focused Ion Beam and Scanning Electron Microscopy (FIB and SEM)
- Raman Spectroscopy.
- *In-situ* X-Ray absorption of the near edge structure (XANES) and extended fine structure (EXAFS) at high-pressure at synchrotron (ESRF, Grenoble).
- Analysis of the III-V semiconductors and beam sensitive materials: fuel cell and electrolyzer catalysts for hydrogen energy applications.
- Study of geological materials under extreme high-temperature and high-pressure conditions in a diamond anvil cell.

Main Scientific Communications

- 2024 Oral presentation at the Microscopy and Microanalysis Conference, Cleveland (OH), USA.
- 2024 Oral presentation at the Materials Research Society Spring meeting, Seattle, USA.
- 2023 Oral presentation at the Microscopy and Microanalysis Conference, Minneapolis, USA.
- 2018 Two oral presentations at the International Microscopy Conference, Sydney, Australia.
- 2017 Oral presentation at the Microscopy of Semiconducting Materials, Oxford, UK.
- 2016 Poster presentation at the European Microscopy Congress, Lyon, France.

Professional Memberships

- Microscopy Society of America (MSA)
- Microanalysis Society (MAS)
- The Electrochemical Society (ECS)

Languages

- French, Mother language.
- English, Fluent.
- Spanish, Intermediate. Certification from the Pellissippi Community College, Knoxville, USA.

References

- David Cullen, Senior R&D Scientist, ORNL. Postdoctoral advisor.
Email: cullenda@ornl.gov.
- David Cooper, Senior Staff Scientist, CEA Grenoble. Ph.D. Supervisor.
Email: david.cooper@cea.fr.
- Bettina Gardelles, Cultural Diplomat, Embassy of France. Co-worker.
Email: bettina.gardelles@frenchculture.org.