

Mehmet Nurullah ATEŞ

Assistant Professor, Department of Chemistry, Boğaziçi University
Principal Researcher, Energy Storage Group,
TÜBİTAK-RUTE Board Member,
ASPILSAN Enerji Inc. Board of Trustees Member,
Boğaziçi University Foundation (BÜVAK)

Eğitim:

- University of Illinois at Urbana-Champaign, USA, Postdoctoral Research Scientist, September 2015 - February 2017
- Northeastern University, Boston, MA, USA, PhD in Materials and Physical Chemistry
- Northeastern University, Boston, MA, USA, Master's in Physical Chemistry, April 2012
- Erciyes University, Faculty of Science, Kayseri, Bachelor's in Chemistry, January 2009

Work Experience:

- Assistant Professor, Department of Chemistry, Boğaziçi University, December 2022 - Present
- Board Member, Aspilsan Energy Inc., May 2022 - Present
- Principal Researcher, Energy Storage Systems, TÜBİTAK-RUTE, Gebze, Kocaeli, March 2020 - Present
- Technology Development Manager, Xerion Advanced Battery Corp., Kettering, Ohio, USA, June 2018 - March 2020
- Team Leader - Cathode Materials, Xerion Advanced Battery Corp., Kettering, Ohio, USA, February 2017 - May 2018
- Research Scientist, Xerion Advanced Battery Corp., University of Illinois at Urbana-Champaign, USA, September 2015 - February 2017
- Research Assistant, College of Engineering, Northeastern University, 2012 - 2014
- Research Assistant, Faculty of Science, Northeastern University, January 2014 - August 2015

Summary

Dr. Ateş has over 12 years of international experience in lithium-based batteries, working on both cathode and anode active materials. He completed his PhD under the supervision of Prof. K.M. Abraham, the inventor of lithium-air batteries and the first polymer-based solid-state lithium-ion battery prototype. His PhD research focused on next-generation lithium-ion battery cathode active materials and catalysts used in lithium-oxygen batteries. During his doctoral studies, he utilized both synthesis and conventional characterization techniques (XRD, HRTEM, SEM, EDS) as well as advanced characterization techniques such as X-ray Absorption and Electron Diffraction (XAS, SAED) at Brookhaven National Laboratory. He participated as a researcher in an interdisciplinary microbattery project funded by Lockheed Martin and the U.S. National Reconnaissance Office (NRO).

Between 2015 and 2020, Dr. Ateş filed four first-author patent applications at Xerion Advanced Battery Corp., focusing on enhancing the lifespan and performance of Li batteries. He demonstrated the applicability of his techniques to other battery chemistries, proving the versatility of his patents. At Xerion, he played significant roles in federal projects, acting as Technical Liaison Personnel in projects supported by the U.S. Department of Defense, such as DARPA and ONR. He received a prestigious award in 2018 for a DARPA project titled "Development of Li-ion batteries for Short-Range Autonomous Micro-Robotic Platforms," a collaborative effort with UPENN and UIUC universities, securing \$2 million in funding for the company. He also technically coordinated large interdisciplinary team producing prototype lithium-ion cells for various international firms.

In March 2020, Dr. Ateş left Xerion to continue his research at the Battery Research Laboratory at TÜBİTAK Gebze campus under the TÜBİTAK 2232 International Leading Researchers Program. He continues his work there and also serves as a faculty member in the Department of Chemistry at Boğaziçi University. On May 10, 2022, he was elected as a Board Member of ASPILSAN Enerji at the Ordinary General Assembly meeting. Dr. Ateş is married and has three children: Talha Afif, Hanan Berira, and Tesnim Revan.