Exponent®
Engineering & Scientific Consulting

Sam Lawton, Ph.D.

Associate | Materials & Corrosion Engineering
3 Lloyd's Avenue | London EC3N 3DS
+44 (0) 797 1798082 tel | slawton@exponent.com

Professional Profile

Dr. Samuel Lawton specializes in the field of energy storage devices with an emphasis on failure analysis and quality assessment. He has diverse experience in design, testing and failure mode analysis of both commercial lithium-ion batteries and prototype secondary batteries that utilize a variety of cathode and anode materials (including lithium metal). Additionally, he has an extensive knowledge in the synthesis and characterization of polymers and materials for commercial research applications.

Prior to joining Exponent Dr. Lawton conducted research in the development of Li metal anodes in secondary cell devices which utilized a variety of cathode chemistries and technologies. He worked on the development of novel Li metal anode polymer protections for the prolongment of cycle life whilst maintaining a high energy density. Further work included the development and processing of composites for solid state cathodes and testing in protype devices. He has also work on the characterization of complex polymeric materials utilizing a wide variety of materials characterization techniques.

Samuel's Ph.D. was focused on polymer and materials chemistry, developing and characterizing semiconducting copolymers for application in next generation photovoltaic devise with extensive experience on thin film formation and surface characterization.

Academic Credentials & Professional Honors

Ph.D., Chemistry, University of Warwick, UK, 2018

MChem., Chemistry, University of Warwick, UK, 2014

IOM3 UK Young Lecturer of the Year, 2018

Prior Experience

Research Scientist, Oxis Energy, 2018-2021

Research Technician, Polymer Charecterisation Research Technology platform, University of Warwick, 2017-2018

Graduate Research Student, University of Warwick, 2014-2018