Dr. Natalia Macauley, Ph.D., Senior Project Scientist, has worked on materials development for multiple electrochemical devices over the past 10 years, including fuel cells, electrolyzers, gas conversion reactors (CO, CO_2, NOX) and biosensors. At Giner she manages multiple government and commercial programs and is active in novel catalyst/electrode, membrane/ionomer, membrane electrode assembly, and bipolar plate design; materials synthesis, testing and characterization. Prior to joining Giner, Dr. Macauley was a postdoctoral research associate at Los Alamos National Laboratory, where she developed and patented patterned fuel cell electrode for enhanced water management in fuel cell cathodes. During her PhD she was a graduate research assistant with Ballard Power Systems where she developed and implemented a series of heavy-duty fuel cell membrane durability protocols on a 10-cell stack, the results of which were used in her empirical models. Dr. Macauley holds a Ph.D. in Materials Science from Simon Fraser University, and a MS in Alternative Fuel Vehicle Technology from the University of Iceland. She has a strong background in materials science and has authored and co-authored over 50 publications on PEMFCs that have garnered over 680 citations.