Seeking interested candidates with a B.S. or M.S. in Fire Protection Engineering to join the Battery Certification and Integration Branch (Code 636) at Naval Surface Warfare Center, Carderock Division in West Bethesda, MD. Code 636 is responsible for safety testing and analysis of lithium batteries and their associated systems for characterization of the hazards and risks to personnel and to the ships and submarines where these batteries will be deployed. This abusive testing ultimately leads to battery failure (thermal runaway, explosion, and fire). Prior work experience is not a requirement, but candidates with knowledge and/or experience related to Heat Release Rate (HRR) and gas analysis is preferred. Specifically, the candidate will be capturing Heat Release Rate (HRR) data through Oxygen Consumption Calorimetry (OCC) in accordance with ASTM E2067-08. Additionally, Gas analysis (GA) data would be captured for Total Hydrocarbons (THC), Volatile Organic Compounds (VOCs), hydrogen (H2), oxygen (O2), carbon dioxide (CO2), carbon monoxide (CO), hydrogen cyanide (HCN), sulfur dioxide (SO2), hydrogen chloride (HCl), hydrogen sulfide (H2S), and hydrogen fluoride (HF) for all battery chemistries; and sulfuric acid (H2SO4) and carbon tetrachloride (CCl4) for primary chemistries. This data will be used to characterize the fire and smoke risk to Navy platforms and personnel. Familiarity and/or experience with OCC hoods (1MW, 2MW, and 5MW) to capture HRR Data, gas analysis equipment (e.g. Fourier Transform Infrared Spectroscopy (FTIR), Hydrocarbon Flame Ionization Detectors (HFID), and Continuous Emissions Monitoring Systems (CEMS)) and Lower Explosive Limit (LEL) and toxicity measurements are all beneficial but not required, as training will be provided.

A new employee with a B.S. degree would start at approximately $72K a year and an employee with a M.S. would start at approximately $76K a year. After that, they would be eligible for annual promotions based on performance. Interested candidates can apply by sending a resume to Toby Cole. His contact info is:

Toby Cole
Branch Head, Code 636 Battery Certification & Integration (Acting)
Naval Surface Warfare Center, Carderock Division
9500 MacArthur Blvd., West Bethesda, MD 20817
(301) 227-0413
toby.p.cole.civ@us.navy.mil

Interested individuals would be invited to Carderock for an interview and to tour the battery test facilities.