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Wanida received her B.S. in Materials Science and Engineering in 2001 from Case Western Reserve University and Ph.D. in Materials Science and Engineering in 2006 from Massachusetts Institute of Technology. Through her 15 years in corrosion research at NSTDA, she has been involved in sensor-based corrosion monitoring in field exposure test, manufacturing plants, and a coastal railway line. Wanida's team studied chloride distribution pattern in Thailand to construct a more accurate corrosion map. Online web application of Thailand corrosion map is available for engineers to better select suitable construction materials as well as coating system and to be able to calculate life cycle cost. Due to expansion of sensor and corrosion loss database, her team is in a preliminary stage of prediction by machine learning approach.