

Michael Elwardany, PhD
Program Manager for Asphalt
Asphalt and Petroleum Technology



Dr. Elwardany has been with WRI since 2017 and he is now WRI's Program Manager for Paving Asphalts. He has worked as a paving material engineer for 12 years engaged in the research area of asphalt material chemical, thermal, and mechanical multiscale characterization throughout his career. Dr. Elwardany received his B.Sc. degree from Alexandria University, Egypt, M.S. degree from University of New Hampshire, and Ph.D. from North Carolina State University. Dr. Elwardany is currently the project manager for the Asphalt Industry Research Consortium with 10 industrial partners and two road administrations (IFSTTAR, France and FHWA Turner-Fairbank Highway Research Center).

He also leads the National Cooperative Highway Research Program (NCHRP) 09-60 project that includes the study of 23 field sections and corresponding binder properties, a plastic recycling project with NCAT and PIA, and a recycling agents/rejuvenators project with University of California Pavement Research Center (UCPRC) Davis-Berkeley, among other industrial proprietary R&D projects. He was also heavily involved in the NCHRP 09-54 project at North Carolina State University to study long-term oxidative aging of asphalt mixtures for pavement performance and evaluation. Dr. Elwardany is an active member of TRB committees on Design and Rehabilitation of Asphalt Pavements and on Asphalt Binders, an active member of the ASCE–Airfield Pavement Committee, and AAPT. He is also an active member of RILEM – TC 272-PIM TG1 on phase and interphase behavior of bituminous materials.