



Introduction to Weathering (W101) Seminar

Wednesday, 01 October 2025 at Q-Lab Europe - Bolton Office

09:00 - 09:30	Registration with Coffee & Refreshments
09:30 - 09:40	Introductions
09:40 – 11:00	Part 1: Forces of Weathering • Sunlight: spectral irradiance and material sensitivity • Heat: temperature and thermal cycling • Water: relative humidity, dew, and rainfall
11:00 - 11:15	Coffee Break
11:15 – 12:00	Part 2: Outdoor Weathering • Benchmark outdoor test locations: Florida & Arizona • Natural outdoor weathering testing • Black box, interior automotive material, and behind-glass exposures • Natural sunlight concentrators
12:00 – 13:00	Lunch
13:00 – 14:15	Part 3: Accelerated Laboratory Weathering <u>Xenon Arc</u> • Light delivery: Xenon arc lamps, optical filters, and irradiance control • Environment simulation: black panel, chamber air, humidity, water spray <u>Fluorescent UV Weathering</u> • Light delivery: fluorescent UV choice of lamps and irradiance control • Environment simulation: black panel, condensation
14:15 - 14:30	Coffee Break
14:30 - 15:45	Part 4: Developing Weathering Testing Programs • Why Test? • Factors affecting correlation between natural and accelerated weathering • Fluorescent UV and xenon-arc comparison • Weathering test program development • Weathering case studies
15:45 - 16:15	Summary & Conclusions