

Q-Lab Corporation
800 Canterbury Road
Westlake, Ohio 44145 USA
Tel: +1-440-835-8700
Fax: +1-440-835-8738
www.q-lab.com



Introduction to Weathering (W101) Seminar
Wednesday 2nd October 2024 at Q-Lab Headquarters Office

8:00 – 8:30 am EDT	Registration with Coffee, Pastries, Snacks, & Refreshments
8:30 – 8:45 am	Introductions
8:45 – 9:00 am	Facility Tour
9:00 – 10:30 am	Part 1: Forces of Weathering Sunlight: spectral irradiance and material sensitivity Heat: temperature and thermal cycling Water: relative humidity, dew, and rainfall
10:30 – 10:45 am	Q&A and Coffee Break
10:45 – 11:45 am	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
11:45 am – 12:45 pm	Q&A and Lunch/Free Time
12:45 – 2:00 pm	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, water spray
2:00 – 2:15 pm	Q&A and Coffee Break
2:15 – 3:30 pm	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
3:30 – 3:45 pm	Summary & Conclusions
3:45 – 5:00 pm	Q&A + Demos in Showroom