



## **Atmospheric Corrosion Testing 101 Seminar**

Thursday, 6th October 2022 at Q-Lab Headquarters Office

8:00 – 8:30am EDT	Registration with Coffee, Pastries, Snacks & Refreshments
8:30 – 8:45am	Introductions
<b>8:45 – 10:15am</b>	<b>Part 1: Corrosion Basics</b> <ul style="list-style-type: none"><li>• Thermodynamics &amp; definitions of Corrosion</li><li>• Chemistry of Corrosion</li><li>• Forms of Atmospheric Corrosion</li><li>• Mitigation of Corrosion</li></ul>
10:15 – 10:25am	Q&A
10:25 – 10:40am	Coffee Break
<b>10:40 – 11:50am</b>	<b>Part 2: Characterizing Corrosive Environments &amp; Outdoor Corrosion Testing</b> <ul style="list-style-type: none"><li>• Key factors in outdoor corrosion: water, oxygen, and ionic species</li><li>• Outdoor corrosion testing</li><li>• Characterization of outdoor corrosion environments</li></ul>
11:50 – 12:00pm	Q&A
12:00 – 12:45pm	Lunch/Free Time
<b>12:45 – 12:00pm</b>	<b>Part 3: Laboratory Atmospheric Corrosion Test Methods</b> <ul style="list-style-type: none"><li>• Continuous Salt Spray tests</li><li>• Early Wet/Dry cyclic testing: Prohesion</li><li>• First Generation Cyclic Automotive Tests</li><li>• Relative humidity, deliquescence, and correlation to outdoor testing</li><li>• Modern Cyclic Corrosion test methods</li><li>• Controlling tester environments in modern corrosion testing</li></ul>
2:00 – 2:10pm	Q&A
2:10 – 2:25pm	Coffee Break
<b>2:25 – 3:30pm</b>	<b>Part 4: Corrosion Test Monitoring &amp; Specimen Evaluation</b> <ul style="list-style-type: none"><li>• Test Monitoring: Mass loss coupons, Pluviometry, and Independent RH and temperature verification</li><li>• Validating chamber performance</li><li>• Performing post-test corrosion evaluations</li></ul>
3:30 – 3:40pm	Q&A
3:40 – 4:30pm	Summary & Conclusions
<b>4:30 – 5:00pm</b>	<b>Q-Lab Facility tour and questions</b>