

Name-Surname	Georgios Kouremadas
Thesis Title	<i>Experimental estimation of the corrosion/soiling of the materials due to atmospheric pollution</i>
Supervisor	C. Varotsos, Professor
Summary	<p>When a material is exposed to the atmospheric environment can undergo corrosion/soiling, which depends among others on the chemical composition, the exposure period and the location. The most important problem of the corrosion/soiling is evidenced for structural materials, like alloys that are used in modern constructions and also structural materials of the ancient monuments, like limestone. For many years, an attempt has been made to develop functions, which are called Dose Response Functions (DRFs), for estimating the corrosion/soiling in a future time period due to atmospheric pollution. ICP Materials project is such an effort. In this study, the results of DRFs are presented for the greater Athens area and the region of Greece. The materials that were studied were copper, zinc, limestone, modern glass, carbon steel, and weathering steel for the time period 1/1/2015 – 31/12/2015. The DRFs that we used were developed by MULTI-ASSESS experiment, part of ICP Materials, in the period 2002 – 2005. At the end, a comparison is presented between the above results, from 2015 and the time period 4/2013 – 3/2014 in an attempt to study the change of the corrosion/soiling in time.</p>
Key words	corrosion, soiling, atmospheric pollution, DRFs, ICP Materials
Evaluation committee	C. Varotsos, Professor D. Deligiorgi, Associate Professor C. Tzanis, Assistant Professor