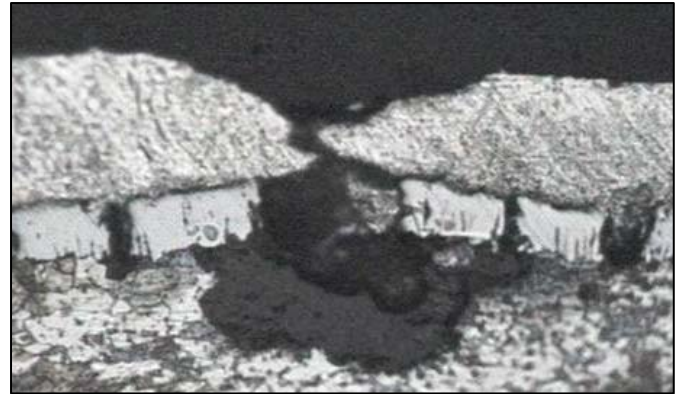
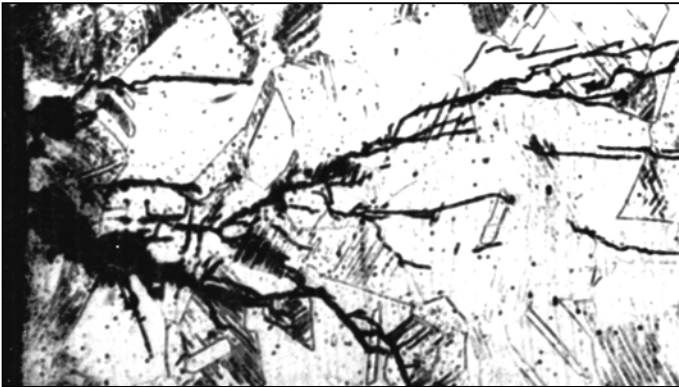
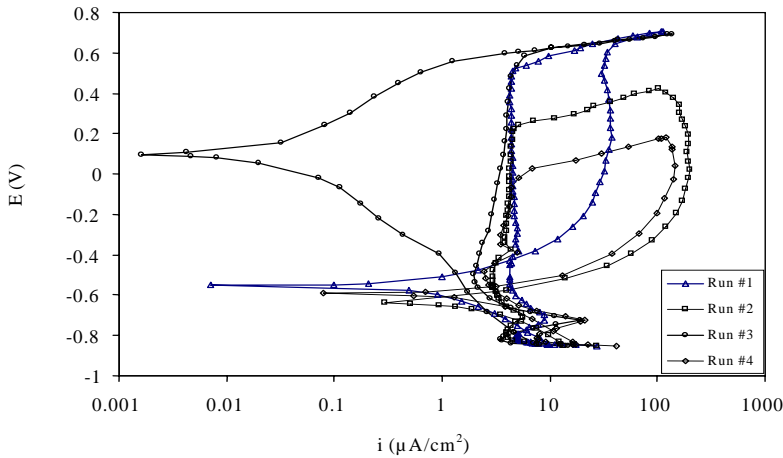


# Fall 2008 Interdisciplinary Graduate Course

## CORROSION OF MATERIALS: GRADUATE LEVEL

CGN 6933 - REF # 85149 - T 6:20p-9:05p



**Corrosion** is a mostly electrochemical surface phenomenon with a huge cost, about 3% of the U.S. gross domestic product affecting all economy sectors. Much of the loss is preventable by application of basic science and engineering principles, and demand for expertise in this area is increasing. This interdisciplinary course is for Graduate students of all engineering departments, and of other USF programs with emphasis on Materials. The causes and control of corrosion degradation of engineering materials in service environments are addressed. Topics include electrochemical principles; interfacial reactions and passivity; polarization kinetics; corrosion/oxidation modes; materials performance and selection; corrosion measurement, modeling and control. Lecture classes are concurrent with the Senior undergraduate course EMA 4324 (Corrosion of Engineering Materials). Graduate students learn also special topics and conduct a laboratory/modeling research project as part of the course.

**Instructor:** Distinguished. Univ. Prof. Alberto Sagüés, Ph.D., P.E., - Civil and Environmental Engineering. Dr Sagüés leads a widely recognized research group in Corrosion Science and Engineering, using the facilities of the USF Corrosion Engineering Laboratory, which are available for research projects in this course. For additional details contact [sagues@eng.usf.edu](mailto:sagues@eng.usf.edu) or call 974-5819. See also [www.eng.usf.edu/~sagues](http://www.eng.usf.edu/~sagues).