



UNIVERSIDADE FEDERAL DO PARANÁ
Setor de Tecnologia
Programa de Pós-graduação em Engenharia Mecânica



CURSO

“CORROSION & CORROSION PREVENTION IN THEORY AND PRACTICE”

Ministrante: Prof. Dr. Christoph Strobl (Technische Hochschule Ingolstadt/Alemanha)

Período: 23, 24, 25, 26, 29, 30, 31/10 e 01/11/18

Horário: 16:00 às 18:0 horas

Local: Centro Politécnico / Bloco IV – Piso Superior / Sala PGMec 2



EMENTA

1. Fundamentals

- 1.1. Corrosive attack from the gas phase
- 1.2. Electrochemical mechanism of corrosion
- 1.3. Morphology of corrosion
- 1.4. Thermodynamics of Corrosion
- 1.5. Kinetics of corrosion
- 1.6. Electrochemical methods and their practical importance

2. Corrosion behavior of different materials

- 2.1. Aluminum and its alloys
- 2.2. Magnesium and its alloys
- 2.3. Titanium and its alloys
- 2.4. Steels and cast Iron



2.4.1. Steels and Cast Iron outside the “Stainless” specification

2.4.2. Stainless Steels

3. Corrosion Testing

3.1. Long term tests

3.2. Short term tests

3.3. Specific methods