

Course E.10 Marine Corrosion in offshore constructions

Tuesday 5 March 2013 through Wednesday 6 March 2013

Course leader: **Lisbeth R. Hilbert** **(LTH)**
 Anders Rosborg Black (ACK)
 Troels Mathiesen (TRM)
 Harald Osvoll (HO)

Time	1 day	Responsible
09.00-10.10	Welcome; Introduction to corrosion basics and corrosion types	LTH
10.10-10.20	BREAK	
10.20-11.10	Corrosion in marine zones and corrosion of carbon steel	ACK
11.10-11.20	BREAK	
11.20-11.45	Corrosion properties of typically applied aluminium, zinc, and copper alloys	ACK
11.45-12.45	LUNCH	
12.45-13.05	Exercise (corrosion basics)	
13.05-14.05	Corrosion properties of typically applied stainless steels, nickel, and titanium alloys	TRM
14.05-14.15	BREAK	
14.15-15.00	Factors affecting corrosion mechanisms – galvanic corrosion	LTH
15.00-15.15	Exercise (cases)	
15.15-15.25	BREAK	
15.25-16.20	Mechanically affected corrosion: Stress corrosion cracking, corrosion fatigue, hydrogen-related degradation	LTH
16.20-16.30	Discussions	

Time	2 day	Responsible
09.00-09.15	Effects of flow and wear on corrosion	LTH
09.15-10.05	Microbiologically influenced corrosion	LTH
10.05-10.15	BREAK	
10.15-10.45	Cathodic protection basics	HO
10.45-10.55	BREAK	
10.55-11.45	Cathodic protection basics.	HO
11.45-12.45	LUNCH	
12.45-13.15	Exercise (Corrosion control by design)	
13.15-14.00	Corrosion protection by coatings	ACK
14.00-14.10	BREAK	
14.10-14.55	Corrosion protection by coatings	ACK
14.55-15.05	BREAK	
15.05-15.40	Exercise - group work	
15.40-16.15	Inspection and monitoring of corrosion	LTH
16.15-16.30	Discussions and closure	