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**Session 11:**        **Corrosion of Steel in Concrete.**  
*organisers: M. Raupach, G. Taché*

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**Poster Sessions**    **Monday 13 September: 18:00 – 19:30**  
                          **Tuesday 14 September: 18:00 – 19:30**

*List of Posters: see at the end of this Session Program*

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### Wednesday 15 September

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Co-chair: B. Elsener  
“Corrosion Process, Protection and Modelling”

- 14:00**            **11-KN-569**  
Modelling corrosion of steel reinforcement in concrete ; proposal for a new approach based on electrochemical processes.  
**Joost GULIKERS**
- 14:40**            **11-O-419**  
Long-term behaviour of reinforced and prestressed concrete elements in aggressive environments.  
**Ilie PETRE-LAZAR**
- 15:00**            **11-O-157**  
The Investigation on Atmospheric Corrosion Behavior and Protection Methods for Reinforced Concrete Structures in Coasts of Persian Gulf.  
**Masoud REZAEI SAMAN KANDI**
- 15:20**            **11-O-495**  
Corrosion modelling in cracked reinforced concrete structures : a probabilistic approach.  
**Bruno CAPRA**
- 15:40**            *Coffee break*
- 16:10**            **11-O-242**  
Corrosion of galvanized steel in concrete environment and its impact on cement paste microstructure.  
**Milan KOURIL**
- 16:30**            **11-O-485**  
Experimental study of carbon steel general and localised corrosion in concrete.  
**François FOCT**
- 16:50**            **11-O-044**  
Initiation and Corrosion Propagation of Stainless Steel Reinforcement in Concrete Structures.  
**Yves SCHIEGG**

- 17:10**      **11-O-049**  
Influence of chloride saturation mode of concrete on electrochemical chloride extraction.  
**Gerardo FAJARDO**
- 17:30**      **11-O-335**  
Corrosion Behaviour of Steel Fibres in Concrete containing Chlorides.  
**Michael RAUPACH**
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### Thursday 16 September

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Co-chairs: M. Raupach, Ø. Vennesland  
“Modelling of Deterioration and Monitoring”

- 08:40**      **11-KN-570**  
Corrosion of steel in reinforced concrete structures - progress and limits of modelling.  
**Bernhard ELSENER**
- 09:20**      **11-O-415**  
Influence of corrosion on the mechanical behaviour of rebars in reinforced concrete structures.  
**Yves BERTHAUD**
- 09:40**      **11-O-102**  
Long term effect of reinforcement corrosion on mechanical properties of reinforced concrete beams: a probabilistic approach.  
**Rita SILVA**
- 10:00**      **11-O-364**  
Validation of mechanical models for reinforced concrete structures: Presentation of the French project “Benchmark des Poutres de la Rance”.  
**Valérie L'HOSTIS**
- 10:20**      *Coffee break*
- 10:50**      **11-O-139**  
Integrated Protection System for Chloride Deteriorated Concrete Structures.  
**Ralph BÄßLER**
- 11:10**      **11-O-490**  
Long term monitoring of reinforced concrete remediation method in a marine environment.  
**Liam HOLLOWAY**
- 11:30**      **11-O-500**  
Pros and Cons of Half-Cell Potentials and Corrosion Rate Measurements.  
**Oskar KLINGHOFFER**
- 12:30**      *Lunch*

**Joint Session 11 + 16 + 1**

Co-chairs: J. Gulikers, J. Goddin  
“Cathodic Protection and Inhibitors”

- 14:00**            **11-O-382**  
Extension of Service Time of Concrete Structures by Cathodic Protection (CP) of the Steel Reinforcement – A Four Case Study.  
**Wolfgang SCHWARZ**
- 14:20**            **11-O-538**  
Durability assessment of pre-stressed concrete elements under stray current interference.  
**Willy PEELEN**
- 14:40**            **11-O-145**  
Hydrogen Embrittlement of Prestressed Concrete Cylinder Pipes.  
**Behzad BAVARIAN**
- 15:00**            **11-O-337**  
A combined corrosion protection system for reinforced concrete structures using a carbon fibre mesh.  
**Michael BRUNS**
- 15:20**            **11-O-452**  
Acceptance criteria for electrochemical maintenance methods used on concrete structures.  
**Øystein VENNESLAND**
- 15:40**            **Coffee break**
- 16:10**            **11-O-383**  
Influence of Cathodic Protection (CP) on the distribution of ions in the concrete overlay containing chlorides.  
**Wolfgang SCHWARZ**
- 16:30**            **11-O-272**  
Numerical simulation of the throwing power of cathodic prevention applied to marine reinforced concrete piles by means of sacrificial anodes.  
**Elena REDAELLI**
- 16:50**            **11-O-146**  
Current Progress on Improving the Durability of Reinforced Concrete Structures using Migrating Corrosion Inhibitors.  
**Behzad BAVARIAN**
- 17:10**            **11-O-186**  
Electrochemical and analytical investigation of the behaviour of an inhibitor for steel reinforcement in concrete.  
**Thierry CHAUSSADENT**
- 17:30**            **11-O-194**  
Corrosion protection of steel reinforcement with DMEA in the presence of chloride ions.  
**Eleni RAKANTA**

**Session 11: List of Posters**

- 11-P-057** Corrosion of prestressed concrete structures. Case Histories.  
*Ioan PEPENAR*
- 11-P-153** Cost effective cathodic protection of reinforced concrete building elements.  
*Oswaldo FUMEI*
- 11-P-206** Corrosion protection study of polypyrrole/PW12O403- coatings on carbon steel electrodes embedded in cement mortars.  
*José BONASTRE*
- 11-P-239** Reinforcement corrosion studies by the Strain Gauge technique.  
*Athanassios ROUTOULAS*
- 11-P-259** Electrical resistivity of cement pastes as a function of relative humidity and chloride concentration.  
*Simone BRASIL*