List of Publications – Ueli M. Angst

November 2020

Summary

Scientific journal papers: 68 published/in press (29 as first author)
Conference papers: 43 (16 as first author)
Conference presentations: 53 (23 presented by myself)
Invited lectures / seminars: 11
Book chapters: 2
Links to Google Scholar Profile Researcher ID: M-6348-2014

Scientific peer-reviewed journal publications (published or in press)

Open access: doi.org/10.1016/j.cemconres.2020.106229


45. Angst U. Predicting the time to corrosion initiation in reinforced concrete structures exposed to chlorides. *Cement and Concrete Research* 115 (2019) 559–567. doi:10.1016/j.cemconres.2018.08.007


29. **Angst U**, Elsener B. Chloride Threshold Values in Concrete – A Look Back and Ahead. *ACI Special Publication* SP-308 “Chloride Thresholds and Limits for New Construction”. American Concrete Institute, 2016.


17. Zintel M, Angst U, Keßler S, Gehlen C. Epoxy-coated reinforcement – New findings after two decades of practical experience (in German) 


Other publications in journals


PhD thesis

Research reports

- **Angst U** and Büchler M. Electrochemical determination of the corrosion rate for localized corrosion in reinforced concrete. Research report AGB 2015/009, no. 698, funded by the Swiss Federal Roads Office, 100 p, September 2019. (in German) [Link for Download]


- **Angst U** and Büchler M. Optimizing and validating methods for the determination of the corrosion rate in reinforced concrete. Research report no. 670, AGB 2012/013, funded by the Swiss Federal Roads Office, 116 p, October 2015. (in German)

- **Angst U** and Büchler M. Cathodically protected steel in soil – temperature effects. Research report of a laboratory study performed for a client, Swiss Society for Corrosion Protection, 30 p, 2014.


- **Angst U** and Büchler M. Assessment of cement-based fill materials for the annulus of cased pipes in pipeline construction. Research report of a laboratory study performed for a client, Swiss Society for Corrosion Protection, 60 p, 2013.

Contributions to books


Conference contributions

* Asterisks = presentation and conference paper. Without asterisk = presentation without paper.


54. Stefanoni M, Zhang Z, **Angst U**. Role of the concrete cover to suppress corrosion of steel in carbonated concrete. 74th RILEM Week and 40th Cement and Concrete Science Conference. Sheffield, UK / online conference. 31 August 31 – 4 September 2020.

53. **Angst U**. Corrosion challenges in civil engineering infrastructures – examples from research at the corrosion laboratory at ETH Zurich. Swiss Corrosion Science Day, Thun, Switzerland, 3 March 2020.

52. **Angst U**. "Advances in Forecasting Reinforcing Steel Corrosion in Concrete". Invited lecture at the 2020 Gordon Research Conference (GRC) on Advanced Materials for Sustainable Infrastructure Development, 23-27 February 2020 Ventura, California, USA.


46*. Femenias Y, **Angst U**. Novel sensor for non-destructive durability monitoring in reinforced concrete. Paper No. we.4.a.3. In: SMAR 2019 – 5th Conf. on Smart Monitoring, Assessment and Rehabilitation of Civil Structures. Potsdam, Germany, August 2019. Link to Proceedings


41.* Michel L, **Angst U**. Towards understanding corrosion initiation in concrete – Influence of local electrochemical properties of reinforcing steel, in: Int. Conf. on Concrete Repair, Rehabilitation and Retrofitting (ICCRRR). 10-12 November 2018, Cape Town, South Africa.


35.* Stefanoni M, Angst U, Elsener B. Corrosion Challenges and Opportunities in Digital Fabrication of Reinforced Concrete, in: RILEM 1st International Conference on Concrete and Digital Fabrication. 10-12 September 2018, Zurich, Switzerland.


31.* Angst U. Die Korrosion unserer Infrastruktur. Opening lecture at 3-Länder-Korrosionstagung (in German), 12. April 2018, Düben­dorf, Switzerland.


26.* Angst U. Forecasting the time to corrosion of reinforced concrete structures. The Corvallis Workshops – “Service Life Prediction of Concrete”, July 16-19, 2017, Corvallis, Oregon, USA.


18.* Angst U, Elsener B. Chloride threshold values in concrete – a look back and ahead. ACI Fall Convention, Denver, Colorado, USA, 8-12 November 2015.


15. Femenias YS, *Angst U.*, Elsener B. Monitoring chloride concentrations in concrete by means of Ag/AgCl ion-selective electrodes. In: 4th International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICCRRR 2015), Leipzig, Germany, 05-07 October 2015.


Invited lectures and seminars

(12.) Angst U. “Size effects in corrosion of steel in concrete”. Invited plenary lecture at the 2nd Int. Conf. on Construction Materials for a Sustainable Future (CoMS 2020), Bled, Slovenia. Postponed to spring 2021 due to COVID-19


10. Angst U. “Advances in Forecasting Reinforcing Steel Corrosion in Concrete”. Invited lecture at the 2020 Gordon Research Conference (GRC) on Advanced Materials for Sustainable Infrastructure Development, 23-27 February 2020 Ventura, California, USA.


