

5. Publication list

TNO Earth, Environmental and Life Sciences

- 1) Orlic, B., ter Heege, J., Wassing, B. (2010). Assessing the integrity of fault- and top seals at CO₂ storage sites. Proc. of the 10th International Conference on Greenhouse Gas Control Technologies (GHGT-10), Amsterdam. Energy Procedia.
- 2) Feasibility study P18: Top Seal and Fault Integrity Study, (2010). CATO-2 report, WP3.01-D06 (confidential).
- 3) Dynamic Fault Seals, (2010). TNO-report, TNO-060-UT-2011-00891 (confidential)

TNO DIANA BV

- 1) N.B. Yenigul(1), A.S. Elkadi(2), 3D Settlement analysis using GIS and FEM: a case study in Sliedrecht area, the Netherlands, Numerical Methods in Geotechnical Engineering 2010, isbn 978-0-415-59239-0, pag. 529-534.
- 2) Guo, Ultimate load of RC structures, TNO Report 2010-DIANA-R003.
- 3) K. Hoiseth, The total-strain crack model Test methods related to post cracking lateral effects, TNO Report 2010-DIANA-R004.

Chalmers University

- 1) Coronelli, D., Zandi Hanjari, K., Lundgren, K., and Rossi, E., 2010. Severely Corroded Reinforced Concrete with Cover Spalling: Part 1. Crack Initiation, Crack Propagation and Cover Delamination. Joint Fib-RILEM Workshop on Modelling of Corrosion Concrete Structures, 22 - 23 November, 2010, Madrid, Spain, pp. 195-205.
- 2) Zandi Hanjari, K., Lundgren, K., and Coronelli, D., 2010. Severely Corroded Reinforced Concrete with Cover Spalling: Part 2. Anchorage Capacity. Joint Fib-RILEM Workshop on Modelling of Corrosion Concrete Structures, 22 – 23 November, 2010, Madrid, Spain, pp. 207-217.
- 3) Zandi Hanjari, K. 2010. Structural Behaviour of Deteriorated Concrete Structures. Doctoral Thesis, Ny serie Nr 3142, Department of Civil and Environmental Engineering, Division of Structural Engineering, Chalmers University of Technology.

Full text at <http://publications.lib.chalmers.se/records/fulltext/129454.pdf>

University Minho

- 1) Peña, F., Lourenço, P.B., Mendes, N., Oliveira, D.V., Numerical models for the seismic assessment of an old masonry tower, *Engineering Structures*, 32(5), p. 1466-1478 (2010).
- 2) Barbosa, C.S., Lourenço, P.B., Hanai, J.B., On the compressive strength prediction for concrete masonry prisms, *Materials and Structures*, 43(3), p. 331-344 (2010).
- 3) Mendes, N., Lourenço, P.B., Seismic assessment of masonry “Gaioleiros” buildings in Lisbon, Portugal, *Journal of Earthquake Engineering*, 14, p. 80-101 (2010).
- 4) Oliveira, E.A., Silva, R.M., Lourenço, P.B., A Numerical Study of Non Structural Masonry Walls with Bed Joint Reinforcement subject to Flexure, *Proceedings of the Tenth International Conference on Engineering Computational Technology*, September 14-17, Valencia, Spain, CD-ROM, paper 354 (2010).
- 5) Barbosa, C.S., Hanai, J.B., Lourenço, P.B., Numerical validation of compressive strength prediction for hollow concrete blocks, *Proceedings of 8th International Masonry Conference*, Dresden, Germany, July 4-7, p.1625-1634 (2010).
- 6) Lourenço, P.B., Ramos, L.F., Trujillo, A., In situ investigation and stability analysis of Famagusta Churches, *Proceedings of 8th International Masonry Conference*, Dresden, Germany, July 4-7, p. 1973-1982 (2010).
- 7) Ramos, L.F.; Aguilar, R.; Alaboz, M.; Lourenço, P.B., Dynamic Identification and FE Updating of S. Torcato Church, Portugal, *IMAC-XXVIII: A Conference and Exposition on Structural Dynamics*, February, Jacksonville, USA, 2010.

Delft University of Technology

- 1) A.V. van de Graaf, M.A.N. Hendriks, J.G. Rots, "Saw-tooth softening models for discrete cracks and slip planes in concrete and masonry". Abstract in proceedings of the IV European Conference on Computational Mechanics, ECCM 2010, Paris, France, May 16-21, 2010.
- 2) S. Invernizzi, D. Trovato, M.A.N. Hendriks, A.V. van de Graaf, "Sequentially linear modelling of local snap-back in extremely brittle structures", in *Computational Modelling of Concrete Structures*; Editors: Nenad Bicanic et al., EURO-C 2010, Rohrmoos/Schladming, 15-18 March 2010, Austria, 647-654, 2010.
- 3) M.A. Kyriakides, M.A.N. Hendriks, S.L. Billington, "Simulation of Masonry Beams Retrofitted with Engineered Cementitious Composites", in *Computational Modelling of Concrete Structures*; Editors: Nenad Bicanic et al., EURO-C 2010, Rohrmoos/Schladming, 15-18 March 2010, Austria, 655-664, 2010.

- 4) A.V. van de Graaf, M.A.N. Hendriks & J.G. Rots, "A discrete cracking model for sequentially linear analysis", in Computational Modelling of Concrete Structures; Editors: Nenad Bicanic et al., EURO-C 2010, Rohrmoos/Schladming, 15-18 March 2010, Austria, 409-418, 2010.
- 5) Beatrice Belletti, Max A.N. Hendriks, Joop A. den Uijl, Cecilia Damoni, "Developing standardized guidelines for safety assessment of shear-critical RC beams based on nonlinear finite element modeling", proceedings of the 3rd fib International Congress - 2010, Washington, 30 May - 2 June 2010.
- 6) Marios A. Kyriakides, Max A.N. Hendriks, and Sarah L. Billington, "Experimental and analytical investigation of masonry beams retrofitted with ECCc under out-of-plane bending", proceedings of the 9th HSTAM International Congress on Mechanics Limassol, Cyprus, 12 - 14 July 2010, 2010.
- 7) M. A. Kyriakides, M. A. N. Hendriks and S. L. Billington, "Simulation of unreinforced masonry beams retrofitted with Engineered Cementitious Composites in flexure", Journal of Materials in Civil Engineering (ASCE), under review.
- 8) Verstryngne, E., Schueremans, L., van Gemert, D., Hendriks, M.A.N., "A 3D damage model to describe creep deterioration in historical masonry", In: 8IMC, Dresden, 8th International Masonry Conference 2010 in Dresden, Editors: Prof. Dr.-Ing. Wolfram Jäger, Barry A. Haseltine, Anton Fried, ISBN: 978-3-00-031381-3, Vol. 1, pp. 267-276.
- 9) Giardina, Giorgia, Hendriks, Max A.N., Rots Jan G., Marini, Alessandra, "A 3D damage model to describe creep deterioration in historical masonry", In: 8IMC, Dresden, 8th International Masonry Conference 2010 in Dresden, Editors: Prof. Dr.-Ing. Wolfram Jäger, Barry A. Haseltine, Anton Fried, ISBN: 978-3-00-031381-3, Vol. 2, pp. 1163-1170.
- 10) Giorgia Giardina, Max A.N. Hendriks and Jan G. Rots, "Numerical analysis of tunnelling effects on masonry buildings: the influence of tunnel location on damage assessment", SAHC, Advanced Materials Research, Vols. 133-134 (2010) pp 289-294
- 11) J. Rots, B. Belletti, C. Damoni, M. Hendriks, "Development of Dutch guidelines for nonlinear finite element analyses of shear critical bridge and viaduct beams", In "Shear and punching shear in RC and FRC elements", fib Bulletin, No 57 (2010), pp.139-154.
- 12) E. Verstryngne, L. Schueremans, D. Van Gemert, M.A.N. Hendriks, "Modelling and analysis of time-dependent behaviour of historical masonry under high stress levels", Engineering Structures, article in press.
- 13) S. Invernizzi, D. Trovato, M.A.N. Hendriks, A.V. van de Graaf, "Sequentially linear modelling of local snap-back in extremely brittle structures", Engineering Structures, submitted.

- 14) B. Belletti, M. Hendriks, C. Damoni, "Sviluppo di linee guida per l'analisi nonlineare ad elementi finiti di strutture in c.a.", Proceedings of the 18th CTE conference, Brescia, November 11-13, 2010, Also: European Journal of Environmental and Civil Engineering, selected for publication.
- 15) Calvin C.K. Leung, "Reinforcing glass with glass - Application of transparent reinforcement in structural glass beams", MSc thesis, TU Delft, 2010.
- 16) Michiel Kortenaar, "Application of Ultra High Strength Concrete in LNG Terminals", MSc thesis, TU Delft, 2010.
- 17) Niels Kostense, "Feasibility of a full concrete viaduct modelled with volume elements" , MSc thesis, TU Delft, 2010.
- 18) Sebastiaan Ensink, "Simulation of steel-concrete bond-slip with sequentially linear analysis using interface elements" , MSc thesis, TU Delft, 2010.

Rijkswaterstaat, Centre for Infrastructure and Delft University of Technology

A. de Boer, "Design strategy structural concrete in 3D", PhD Thesis, Delft University of Technology, Delft

P.C.J. Hoogenboom A. de Boer, " Computation of optimal concrete reinforcement in three dimensions", Euro-C, Saalbach-Hinterglem, Austria, March 2010

Ane de Boer, Cornelis van der Veen, "Safety aspects re-examination of existing reinforced concrete bridge structures", fib 2010 Washington, USA, may 2010

Yuguang Yang, Joop den Uijl, Gerrie Dieteren, Ane de Boer, "Shear capacity of 50 years old reinforced concrete bridge deck without shear reinforcement", fib 2010 Washington, USA, may 2010

C. van der Veen en A. de Boer, "Ten years of monitoring a HPC bridge", Short and Medium span bridges, Niagara Falls, Canada 2010