

## INVITED PRESENTATIONS, LECTURES AND COURSES

2000-2005

- Presentation on *A Swiss Study on the WTC Collapse for Improving Design and Safety of Extraordinary Building Structures*, NIST Conference, Gaithersburg, USA, 15.09.2005.
- Keynote-Lecture on *Sustainable Risk Management of Natural Hazards in South East Asia*, Scientific Forum on "The Tsunami, its Impact and Recovery, Bangkok, Thailand, 06.06.2005.
- Keynote-Lecture on *On Applied Engineering Decision Making for Society*, IFIP WG7.5, 12th Working Conference on Reliability and Optimization of Structural Systems, Aalborg, Denmark, 22.05.2005.
- Presentations on *Wie sicher ist sicher genug?* 150th anniversary project of ETH Zurich „150 ETH Professorinnen und Professoren im Gespräch“, Zurich, Switzerland, 23.04.-02.05.2005.
- Presentation on *Angemessenes Sicherheitsniveau im Bauwesen*, SIA, 3. Sitzung des Normenbeirats für das Baunormenwesen in der Schweiz, Bern, Switzerland, 30.11.2004.
- Lecture on *Risikobasierte Instandhaltung (RBI)*, International Institute of Research (IIR), Congress, Vienna, Austria, 23.03.2004.
- Lecture on *Die Risikobasierte Instandhaltung (RBI) von der Methode zur Budgetplanung und Erfolgskontrolle*, International Institute of Research (IIR), Basel, Switzerland, 27.01.2004.
- Lecture on *What is the cost of safety - are we allocating our resources rationally*, The Danish/Nordic Concrete Day, Copenhagen, Denmark, 25.09.2003.
- Presentation on *Risk based design and maintenance of structures*, Institute of Fundamental Technological Research, Polish Academy of Science, Warsaw, Poland, 15-18.09.2003.
- Course on *Reliability Methods in Civil Engineering*, HARBIN University of Science and Technology, Heilongjiang, China, 8-12.09.2003.
- Lecture on *Generic Inspection Plans for Steel Structures Subject to Fatigue*. Workshop on Risk-Based Maintenance of Structures, TU Delft, Netherlands, 21.01.2003.
- Lecture on *Grundlagen der Risikobasierten Instandhaltung*, Maintenance and Asset Management, Euroforum, Arabella Sheraton Atlantis Hotel, Zurich, Switzerland, 20.11.2002.
- Lecture on *Decision Making and Risk Acceptance*. Danish Society for Risk Analysis, Copenhagen, Denmark, 21.10.2002.
- Presentation on *Risk Assessment for Optimal Decision Making*, RBO'02 Workshop, Inst. of Fundamental Techn. Research, Polish Academy of Science, Warsaw, Poland, 25.09.2002.
- Lecture on *Risiko-Bewertung im Bauwesen - Fortschritte und Ausblicke*, IBK Kolloquium, ETH Zurich, Zurich, Switzerland, 02.07.2002.
- Lecture on *Risk Based Maintenance, Konzepte, Strategien und organisatorische Umsetzung*. Euroforum, Hotel Maritim, Bad Homburg, Germany, May 2002.
- Lecture on *Inspection Planning of Fatigue Damaged Offshore Structures*, Symposium on Risk Analysis in Offshore Engineering, Mexico City, Mexico, December 2001.
- Course on *Risk Based Inspection Planning*, Rio de Janeiro, Brazil, 05.-10.10.2001.
- Lecture on *Basics of Structural Reliability*, Univ. of Coimbra, Coimbra, Portugal, May, 2001.
- Lecture on *Reliability of Exceptional Structures*, Weltkongress, Sicherheit moderner technischer Systeme, Saarbrücken, Germany, September 2001.
- Risiko und Sicherheit im Bauwesen, Antrittsvorlesung, ETH Zurich, Switzerland, 10.01.2001.
- Lecture on *Risk Based Inspection and Maintenance Planning*, Academy of Science, Prague, Czech Republic, 30.09.2000.

## PUBLICATIONS 1985-2005

### JOURNAL PAPERS (REFEREED)

- 2005
- Faber M.H. (2005). Risiko und Sicherheit im Bauingenieurwesen. *Der Bauingenieur*, Springer Science+Business Media Schweiz AG, **1**(11), November 2005, pp. 24-32.
- Straub D., Faber M.H. (2005). Risk based inspection planning for structural systems. *Structural Safety*, **27**(4), October 2005, pp. 335-355.
- Faber M.H., Sørensen J.D., Tychsen J., Straub D. (2005). Field Implementation of RBI for Jacket Structures. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **127**(3), August 2005, pp. 220-226.
- Faber M.H. (2005). On the Treatment of Uncertainties and Probabilities in Engineering Decision Analysis. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **127**(3), August 2005, pp. 243-248.
- Rackwitz R., Lentz A., Faber M.H. (2005). Socio-economically sustainable civil engineering infrastructures by optimization. *Structural Safety*, **27**(3), July 2005, pp. 187-229.
- Straub D., Faber M.H. (2005). Die Planung und der Wert von Inspektionen für Bauwerke. *Der Bauingenieur*, Springer Science+Business Media Schweiz AG, **1**(6), Juni 2005, pp. 24-29.
- Straub D., Faber M.H. (2005). Risk Based Acceptance Criteria for Joints Subject to Fatigue Deterioration. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **127**(2), May 2005, pp. 150-157.
- 2004
- Kübler, O. and Faber, M.H. (2004). Optimality and Acceptance Criteria in Offshore Design, *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **126**(3), August 2004, pp. 258-264.
- Straub, D. and Faber, M.H. (2004). System Effects in Generic Risk-Based Inspection Planning. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **126**(3), August 2004, pp. 265-271.
- Faber, M.H. and Rackwitz, R. (2004), Sustainable Decision Making in Civil Engineering. *Structural Engineering International (SEI)*, **14**(3), August 2004, pp. 237-242.
- Faber, M.H., Köhler, J. and Sørensen, J.D. (2004) Probabilistic modeling of graded timber material properties. *Structural Safety*, **26**(3), July 2004, pp. 295-309.
- Straub, D. and Faber, M.H. (2004). On the Relation Between Inspection Quantity and Quality. *The e-Journal of Nondestructive Testing*, **9**(7), July 2004, [www.ndt.net](http://www.ndt.net), ISSN 1435-4934.
- 2003
- Johnsen, T.H., Geiker, M.R. and Faber, M.H. (2003) Quantifying Condition Indicators for Concrete Structures. *Concrete International*, ACI, **25**(12), December 2003, pp. 49-56.
- Faber, M.H., Englund, S. and Rackwitz, R. (2003). Aspects of parallel wire cable reliability. *Structural Safety*, **25**(2), May 2003, pp. 201-225.
- Faber, M.H., Straub, D. and Goyet, J. (2003). Unified Approach to Risk-Based Inspection Planning for Offshore Production Facilities. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **125**(2), May 2003, pp. 126-131.
- Faber, M.H. and Stewart, M.G. (2003). Risk Assessment for Civil Engineering Facilities: Critical Overview and Discussion. *Reliability Engineering & System Safety*, **80**(2), May 2003, pp. 173-184.
- Faber, M.H. (2003). New Approaches to Inspection Planning of Fatigue Damaged Offshore Platforms. *Journal of the Safety and Reliability Society*, **23**(1), Winter 2002/3, ISSN 0961-7353, pp. 35-50.
- 2002
- Faber, M.H., Kroon, I.B., Kragh, E., Bayly, D. and Decosemaeker, P. (2002). Risk Assessment of Decommissioning Options Using Bayesian Networks. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **124**(4), November 2002, pp. 231-238.
- Faber, M.H. and Sørensen, J.D. (2002). Indicators for inspection and maintenance planning of concrete structures. *Structural Safety*, **24**(4), October 2002, pp. 377-396.
- Goyet, J., Straub, D. and Faber, M.H. (2002). Risk Based Inspection Planning - Methodology and Application to an Offshore Structure. *Revue Française de Génie Civil*, **6**(3), Hermes, Paris, pp. 489-503.
- Faber, M.H. (2002). Risk Based Inspection: The Framework. *Structural Engineering International (SEI)*, **12**(3), August 2002, pp. 186-194.
- Goyet, J., Straub, D. and Faber, M.H. (2002). Risk-Based Inspection Planning of Offshore Installations. *Structural Engineering International (SEI)*, **12**(3), August 2002, pp. 200-208.

## PUBLICATIONS 1985-2005

### JOURNAL PAPERS (REFEREED)

- 2002 Sørensen, J.D. and Faber, M.H. (2002). Codified Risk-Based Inspection Planning. *Structural Engineering International (SEI)*, **12**(3), August 2002, pp. 195-199.
- Faber, M.H. and Gehlen, C. (2002). Probabilistischer Ansatz zur Beurteilung der Dauerhaftigkeit von bestehenden Stahlbetonbauten. *Journal of Beton- und Stahlbetonbau*, **97**. Jahrgang, August 2002, Heft 8, ISSN 0005-9900, Ernst & Sohn, pp. 421-429.
- 2001 Sørensen, J.D. and Faber, M.H. (2001). Simplified, Generic Inspection Planning for Steel Structures. In: Special issue of the ASCE/SEI Journal, Life-Cycle Cost Analysis and Design of Civil Infrastructure Systems, eds. D.M. Frangopol and H. Fututa, ASCE, Reston, Virginia, July 2001, ISBN 0-7844-0571-9, pp. 271-288.
- Faber, M.H., Hansen, P.F., Jepsen, F.D. and Møller, H.H. (2001). Reliability-Based Management of Marine Fouling. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **123**(2), May 2001, pp. 76-83.
- 2000 Faber, M.H., Val, D.V. and Stewart, M.G. (2000). Proof load testing for bridge assessment and upgrading. *Engineering Structures*, **22**(12), December 2000, pp. 1677-1689.
- Faber, M.H. (2000). Reliability based assessment of existing structures. *Progress in Structural Engineering and Materials*, **2**(2), April/June 2000, John Wiley & Sons, pp. 247-253.
- 1991-1999 Yao, S., Geiker, M. and Faber, M.H. (1999). Alternative Remedial and Assessment Methods for Concrete Infrastructures. *Concrete International, ACI*, **21**(3), March 1999, pp. 46-49.
- Faber, M.H. (1997). Risk Based Structural Maintenance Planning. In: Probabilistic Methods for Structural Design, ed. C. Guedes Soares, the Netherlands, Kluwer Academic Press, ISBN 0-7923-4670-X, Vol. 56, June 1997, pp. 377-402.
- Faber, M.H., Kroon, I.B. and Sørensen, J.D. (1996). Sensitivities in structural maintenance planning. *Reliability Engineering & System Safety*, **51**(3), March 1996, pp. 317-329.
- Sørensen, J.D., Kroon, I.B. and Faber, M.H. (1994). Optimal reliability-based code calibration. *Structural Safety*, **15**(3), September 1994, pp. 197-208.
- Sørensen, J.D., Faber, M.H. and Kroon, I.B. (1993). Reliability-Based Optimal Design of Experiment Plans for Offshore Structures. In: Reliability and Optimization of Structural Systems, V, IFIP Transactions (B-12), eds. P. Thoft-Christensen and H. Ishikawa, Elsevier Science Publishers, B.V. North Holland, 1993, ISBN: 0 444 81605 4, pp. 253-260.
- Schall, G., Faber, M.H. and Rackwitz, R. (1991). The Ergodicity Assumption for Sea States in the Reliability Estimation of Offshore Structures. *Journal of Offshore Mechanics and Arctic Engineering*, Trans. ASME, **113**(3), August 1991, pp. 241-246.

### CONFERENCE PAPERS (REFEREED)

- 2005 Faber M.H., et al. (2005). Sustainable Management of Natural Hazards in the Region of South-East Asia and South Asia. *Proceedings, International Symposium "Disaster Reduction on Coasts"*, Melbourne, Australia, November 14-16, 2005.
- Köhler J., Sørensen J.D., Faber M.H. (2005). Probabilistic Modeling of Timber Structures. *Proceedings, International Conference on Probabilistic Models in Timber Engineering*, Arcachon, France, September 8-9, 2005.
- Faber M.H., Maes M.A. (2005). Epistemic Uncertainties and System Choice in Decision Making. In: *Proceedings, ICOSSAR'05 9th International Conference on Structural Safety and Reliability*, eds. G. Augusti, G.I. Schuëller and M. Ciampoli, Rome, Italy, June 19-23, 2005, pp. 3519-3526.
- Bayraktarli Y.Y., Ulfkjaer J.-P., Yazgan U., Faber M.H. (2005). On the Application of Bayesian Probabilistic Networks for Earthquake Risk Management. In: *Proceedings, ICOSSAR'05 9th International Conference on Structural Safety and Reliability*, eds. G. Augusti, G.I. Schuëller and M. Ciampoli, Rome, Italy, June 19-23, 2005, pp. 3505-3512.
- Schubert M., Straub D., Faber M.H. (2005). Reliability of rock fall protection galleries – A case study with a special focus on the uncertainty modeling. In: *Proceedings, ICOSSAR'05 9th International Conference on Structural Safety and Reliability*, eds. G. Augusti, G.I. Schuëller and M. Ciampoli, Rome, Italy, June 19-23, 2005, pp. 1333-1340.
- Sørensen J.D., Straub D., Faber, M.H. (2005). Generic Reliability-Based Inspection Planning for Fatigue Sensitive Details - with Modification of Fatigue Load. In: *Proceedings, ICOSSAR'05 9th International Conference on Structural Safety and Reliability*, eds. G. Augusti, G.I. Schuëller and M. Ciampoli, Rome, Italy, June 19-23, 2005, pp. 1063-1070.

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED)

2005

- Straub D., Faber M.H. (2005). Reliability Updating for Structures Subject to Localized Corrosion Defects. In: *Proceedings, ICOSSAR'05 9th International Conference on Structural Safety and Reliability*, Rome, Italy, June 19-23, 2005, eds. G. Augusti, G.I. Schuëller and M. Ciampoli, pp. 843-850.
- Faber M.H., Maes M.A. (2005). Epistemic Uncertainties in Decision Making. *Proceedings, OMAE2005 24th International Conference on Offshore Mechanics and Arctic Engineering*, Halkidiki, Greece, June 12-17, 2005, [OMAE2005-67241].
- Chakrabarti P., Abu-Odeh I., Mukkamala A., Majumdar B., Faber M.H., Straub D., De la O J. (2005). An Overview of the Reassessment Studies of Fixed Offshore Platforms in the Bay of Campeche, Mexico. *Proceedings, OMAE2005 24th International Conference on Offshore Mechanics and Arctic Engineering*, Halkidiki, Greece, June 12-17, 2005, [OMAE2005-67051].
- Straub D., Faber M.H. (2005). Temporal Variability in Corrosion Modeling and Reliability Updating. *Proceedings, OMAE2005 24th International Conference on Offshore Mechanics and Arctic Engineering*, Halkidiki, Greece, June 12-17, 2005, [OMAE2005-67199].
- Faber M.H., Straub D., Chakrabarti P., Abu-Odeh I., De la O J. (2005). Fatigue Analysis and Risk Based Inspection Planning for Life Extension of Fixed Offshore Platforms. *Proceedings, OMAE2005 24th International Conference on Offshore Mechanics and Arctic Engineering*, Halkidiki, Greece, June 12-17, 2005, [OMAE2005-67229].
- Faber M.H., Maes M.A. (2005). On Applied Engineering Decision Making for Society. In: *Proceedings, 12th IFIP WG7.5 Working Conference on Reliability and Optimization of Structural Systems*, Aalborg, May 22-25, 2005, eds. Dan M. Frangopol & John D. Sørensen.
- Maes M.A., Faber M.H. (2005). Updating utilities and reconciling expert opinion. In: *Proceedings, 12th IFIP WG7.5 Working Conference on Reliability and Optimization of Structural Systems*, Aalborg, Denmark, May 22-25, 2005, eds. Dan M. Frangopol & John D. Sørensen.
- Nishijima K., Straub D., Faber M.H. (2005). The Effect of Changing Decision Makers on the Optimal Service Life Design of Concrete Structures. In: *Proceedings, 4th International Workshop on Life-Cycle Cost Analysis and Design of Civil Infrastructures Systems*, eds. A.S. Nowak and Dan M. Frangopol, Cocoa Beach, Florida, USA, May 8-11, 2005, pp. 325-333.
- Zhou J.F., Li D.Q., Faber M.H. (2005). Reliability Assessment and Acceptance Criteria for Steel Gate Structures subjected to Corrosion Deterioration. In: *Proceedings, 4th International Workshop on Life-Cycle Cost Analysis and Design of Civil Infrastructures Systems*, eds. A.S. Nowak and Dan M. Frangopol, Cocoa Beach, Florida, USA, May 8-11, 2005, pp. 299-306.

2004

- Malioka, V. and Faber, M.H. (2004). Modeling of the Spatial Variability for Concrete Structures. *Proceedings, IABMAS'04 2nd International Conference on Bridge Maintenance, Safety and Management*, Kyoto, Japan, October 18-22, 2004.
- Hommel, D.L., Prato, C.A., Sloth, M. and Faber, M.H. (2004). Probability-Based Capacity Assessment of the Zárate-Brazo Largo Bridges during Rehabilitation. *Proceedings IABMAS'04, 2nd International Conference on Bridge Maintenance, Safety and Management*, Kyoto, Japan, October 18-22, 2004.
- Johnsen, T.H., Sloth, M. and Faber, M.H. (2004). Decision support for inspections using a probabilistic approach. *Proceedings, IABMAS'04 2nd International Conference on Bridge Maintenance, Safety and Management*, Kyoto, Japan, October 18-22, 2004.
- Kübler, O., Faber, M.H. and Fontana, M. (2004). Acceptance Criteria for the Design of High-Rise Buildings. *Proceedings, IABSE Symposium 2004 - Metropolitan Habitats and Infrastructure*, Shanghai, China, September 22-24, 2004.
- Köhler, J. and Faber, M.H. (2004). Proposal for a Probabilistic Model Code for Design of Timber Structures. *Proceedings, CIB-W18 37th Meeting of International Council for Research and Innovation in Building and Construction*, Edinburgh, UK, 30.08.-03.09.2004, No. 37-104-1.
- Faber, M.H. and Nishijima, K. (2004). Aspects of Sustainability in Engineering Decision Analysis. *Proceedings, 9th ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability*, Albuquerque, New Mexico, USA, July 26-29, 2004.
- Ersdal, G., Kübler, O., Faber, M.H., Sørensen, J.D., Haver, S. and Langen, I. (2004). Economic Optimal Reserve Strength for a Jacket Structure. *Proceedings 2nd International ASRANet Colloquium*, Barcelona, Spain, July 5-7, 2004.
- Straub, D. and Faber, M.H. (2004). Computational Aspects of Generic Risk Based Inspection Planning. *Proceedings, 2nd International ASRANet Colloq.*, Barcelona, Spain, July 5-7, 2004.

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED) 2004

- Faber, M.H., Maes, M.A. and Nishijima, K. (2004). Optimal Design and Portfolio Risk Management for Groups of Structures. *Proceedings, OMAE2004 23rd International Conference on Offshore Mechanics and Arctic Engineering*, Vancouver, Canada, June 20-25, 2004, [OMAE2004-51430].
- Maes, M.A., Faber, M.H. and Abdelatif, S.S. (2004). Consequence and Utility Modeling in Rational Decision Making. *Proceedings, OMAE2004 23rd International Conference on Offshore Mechanics and Arctic Engineering*, Vancouver, Canada, June 20-25, 2004, [OMAE2004-51511].
- Goyet, J., Rouhan, A. and Faber, M.H. (2004). Industrial Implementation of Risk Based Inspection Planning Methods - Lessons learned from Experience: (1) The case of FPSO's. *Proceedings, OMAE2004 23rd International Conference on Offshore Mechanics and Arctic Engineering*, Vancouver, Canada, June 20-25, 2004, [OMAE2004-51572].
- Rouhan A., Goyet, J. and Faber, M.H. (2004). Industrial Implementation of Risk Based Inspection Planning Methods - Lessons learned from Experience - (2) The case of fixed steel offshore structures. *Proceedings, OMAE2004 23rd Intern. Conference on Offshore Mechanics and Arctic Engineering*, Vancouver, Canada, June 20-25, 2004, [OMAE2004-51573].
- Faber, M.H., Kübler, O. and Fontana, M. (2004). Modeling Consequences due to Failure of Extraordinary Structures. *Proceedings, PSAM7-ESREL'04 International Conference on Probabilistic Safety Assessment and Management*, Berlin, Germany, June 14-18, 2004.
- Straub, D. and Faber, M.H. (2004). Recent Advantages in Risk Based Inspection Planning for Structures. *Proceedings, PSAM7-ESREL'04 International Conference on Probabilistic Safety Assessment and Management*, Berlin, Germany, June 14-18, 2004.
- Bayraktarli, Y., Faber, M.H., Laue, J., Grün, A., Dazio, A., Schalcher, H.-R. and Hollenstein, K. (2004). Management of Earthquake Risks using Condition Indicators. *Proceedings, 14th International Conference on Engineering Surveying*, Zurich, Switzerland, 15-19 March, 2004.

### CONFERENCE PAPERS (REFEREED) 2003

- Faber, M.H. and Maes, M.A., (2003). Modeling of Risk Perception in Engineering Decision Analysis. In: *Proceedings 11th IFIP WG7.5 Working Conference on Reliability and Optimization of Structural Systems*, eds. M.A. Maes and L. Huyse, Banff, Canada, November 2-5, 2003.
- Maes, M.A. and Faber, M.H. (2003). Issues in Utility Modeling and Rational Decision Making. In: *Proceedings 11th IFIP WG7.5 Working Conference on Reliability and Optimization of Structural Systems*, eds. M.A. Maes and L. Huyse, Banff, Canada, November 2-5, 2003.
- Faber, M.H. (2003). Aspects of Sustainable Decision Making For Design and Maintenance. *Proceedings of Workshop on Reliability-based Optimization*, Centre of Excellence, The Polish Academy of Science, Warsaw, September, 2003.
- Köhler, J. and Faber, M.H. (2003). A Probabilistic Approach to Cost Optimal Timber Grading. *Proceedings of CIB-W18*, Paper No. 36-5-2, Colorado, USA, August 11-14, 2003.
- Faber, M.H. and Sørensen, J.D. (2003). Reliability based code calibration - The JCSS approach. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003, pp. 927-935.
- Malioka, V. and Faber, M.H. (2003). Condition indicators for inspection and maintenance planning. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003, pp. 1101-1108.
- Straub, D. and Faber, M.H. (2003). Modeling dependency in inspection performance. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003, pp. 1123-1130.
- Vrouwenvelder, A., Faber, M.H. and Chryssanthopoulos, M. (2003). Mission and work program of the Joint Committee on Structural Safety. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003 pp. 989-994.
- Kübler, O. and Faber, M.H. (2003). Optimal design of infrastructure facilities subject to deterioration. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003, pp.1031-1039.
- Köhler, J. and Faber, M.H. (2003). A probabilistic creep and fatigue model for timber materials. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 2, San Francisco, USA, July 6-9, 2003, pp. 1141-1148.

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED) 2003

- Stewart, M.G. and Faber, M.H. (2003). Probabilistic modelling of deterioration mechanisms for concrete structures. *Proceedings ICASP9, 9th International Conference on Applications of Statistics and Probability in Civil Engineering*, Vol. 1, San Francisco, USA, July 6-9, 2003 pp. 645-651.
- Faber, M.H. (2003). Uncertainty Modeling and Probabilities in Engineering Decision Analysis. *Proceedings OMAE2003, 22nd International Conference on Offshore Mechanics and Arctic Engineering*, Cancun, Mexico, June 8-13, 2003, [OMAE 2003-37217].
- Faber, M.H., Straub, D., Sørensen, J.D. and Tychsen, J. (2003). Field Implementation of RBI for Jacket Structures. *Proceedings OMAE2003, 22nd International Conference on Offshore Mechanics and Arctic Engineering*, Cancun, Mexico, June 8-13, 2003, [OMAE 2003-37304].
- Straub, D. and Faber, M.H. (2003). Risk Based Acceptance Criteria for Joints Subject to Fatigue Deterioration. *Proceedings OMAE2003, 22nd International Conference on Offshore Mechanics and Arctic Engineering*, Cancun, Mexico, June 8-13, 2003, [OMAE2003-37224].
- Stewart, M.G., Faber, M.H. and Gehlen, C. (2003). Temporal and Spatial Aspects of Probabilistic Corrosion Models. *Proceedings to the Joint JCSS, fib and LCC03 workshop at EPFL*, Lausanne, Switzerland, March 24-26, 2003, pp. 183-193.
- Wicki, R., Malioka V. and Faber, M.H. (2003). Condition indicators for inspection and maintenance planning. *Proceedings to the Joint JCSS, fib and LCC03 workshop at EPFL*, Lausanne, Switzerland, March 24-26, 2003, pp. 344-354.
- Wicki, R., Malioka, V. and Faber, M.H. (2003). Condition indicators for inspection and maintenance planning. In: *Proceedings to the Workshop on Risk-Based Maintenance of Civil Engineering Structures*, Delft, Netherlands, January 21, 2003, eds. P.H.A.J.M. van Gelder, A.C.W.M. Vrouwenvelder, ISBN90-75729-10-3., pp. 62-76.

### CONFERENCE PAPERS (REFEREED) 2002

- Faber, M.H. (2002). Risk assessment and decision making in civil engineering. In: Conference Proceedings AMAS Workshop - RBO'02 'Reliability-Based Design and Optimisation', eds. S. Jendo, K. Dolinski and M. Kleiber, Warsaw, Poland, September 23-25, 2002, pp. 35-56.
- Straub, D. and Faber, M.H. (2002). On the Relation Between Inspection Quantity and Quality. Proceedings to the 3rd European-American Workshop on NDE Reliability, Berlin, Germany, September 13, 2002.
- Faber, M.H. and Sørensen, J.D. (2002). Condition Indicators for Inspection Planning of Concrete Structures. In: Proceedings IABMAS'02, 1st International Conference on 'Bridge Maintenance, Safety and Management', eds. J.R. Casas, D.M. Frangopol and A.S. Nowak, Barcelona, Spain, July 14-17, 2002, pp. 131-132.
- Lentz, A., Johnsen, T.H. and Faber, M.H. (2002). Half-Cell Potential Measurements for Condition Assessment. In: Proceedings IABMAS'02, 1st International Conference on 'Bridge Maintenance, Safety and Management', eds. J.R. Casas, D.M. Frangopol and A.S. Nowak, Barcelona, Spain, July 14-17, 2002, pp. 365-366.
- Sørensen, J.D. and Faber, M.H. (2002). Optimal, Generic Planning of Maintenance and Inspection of Steel Bridges. In: Proceedings IABMAS'02, 1st International Conference on 'Bridge Maintenance, Safety and Management', eds. J.R. Casas, D.M. Frangopol and A.S. Nowak, Barcelona, Spain, July 14-17, 2002, pp. 71-72.
- Sloth, M., Jensen, J.S. and Faber, M.H. (2002). Bridge Management Using Bayesian Condition Indicators. In: Proceedings IABMAS'02, 1st International Conference on 'Bridge Maintenance, Safety and Management', eds. J.R. Casas, D.M. Frangopol and A.S. Nowak, Barcelona, Spain, July 14-17, 2002, pp. 75-76.
- Straub, D. and Faber, M.H. (2002). System Effects in Generic Risk Based Inspection Planning. Proceedings OMAE2002, 21st International Conference on Offshore Mechanics and Arctic Engineering, Oslo, Norway, June 23-28, 2002, [OMAE2002-28426].
- Kübler, O. and Faber, M.H. (2002). Optimality and Acceptance Criteria in Offshore Design. Proceedings OMAE2002, 21st International Conference on Offshore Mechanics and Arctic Engineering, Oslo, Norway, June 23-28, 2002, [OMAE2002-28427].

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED) 2001

- Faber, M.H. (2001). Reliability Based Inspection Planning of Fatigue Damaged Offshore Platforms. *Proceedings to the International PEP-IMP Symposium on Risk and Reliability Assessment for Offshore Structures*, Mexico City, Mexico, December 3-4, 2001.
- Faber, M.H. (2001). Reliability of Exceptional Structures. In: *Congress Documentation Saarbrücken - World Congress Safety of Modern Technical Systems*, ed. TÜV Saarland Foundation, Verlag TÜV Rheinland, Köln, Germany, 2001.
- Faber, M.H. and Sørensen, J.D. (2001). Bayesian Sampling using Condition Indicators. In: *Structural safety and reliability - Proceedings of the 8th International Conference, ICOSSAR '01*, eds. R.B. Corotis, G.I. Schuëller and M. Shinozuka, Newport Beach, CA, USA, June 17-22, 2001.
- Sørensen, J.D. and Faber, M.H. (2001). Generic inspection planning for steel structures. In: *Structural safety and reliability - Proceedings of the 8th International Conference, ICOSSAR '01*, eds. R.B. Corotis, G.I. Schuëller and M. Shinozuka, Newport Beach, CA, USA, June 17-22, 2001.
- Faber, M.H., Kroon, I.B, Kragh, E., Bayly, D. and Decosemaeker, P. (2001). Risk Assessment of Decommissioning Options Using Bayesian Networks. *Proceedings OMAE2001, 20th Conference on Offshore Mechanics and Arctic Engineering*, Rio de Janeiro, Brazil, June 3-8, 2001, [OMAE2001/S&R-2115].
- Faber, M.H., Straub, D. and Goyet, J. (2001). Unified Approach to Risk Based Inspection Planning for Offshore Production Facilities. *Proceedings OMAE2001, 20th Conference on Offshore Mechanics and Arctic Engineering*, Rio de Janeiro, Brazil, June 3-8, 2001, [OMAE2001/S&R-2117].
- Faber, M.H. and Melchers, R.E. (2001). Aspects of Safety in Design and Assessment of Deteriorating Structures. *Proceedings to the International IABSE Conference on Safety, Risk and Reliability - Trends in Engineering*, March 21-23, Malta 2001, pp. 161-166.
- Faber, M.H. and Rostam, S. (2001). Durability and Service Life of Concrete Structures – the Owner's Perspective. *Proceedings to the International IABSE Conference on Safety, Risk and Reliability - Trends in Engineering*, March 21-23, Malta 2001, pp. 369-374.
- Goyet, J., Straub, D. and Faber, M.H. (2001). Planning d'inspection basé sur l'analyse de risque: méthodologie d'ensemble et application aux structures offshore. *Proceedings Troisième Conférence Nationale Fiabilité des matériaux et des structures (JN Fiab 3)*, Bordeaux, France, February 1-2, 2001.

### 2000

- Faber, M.H. (2000). Risk Based Inspection - the Framework. In: *Proceedings International Workshop on Risk Based Inspection and Maintenance Planning*, Zurich, Switzerland, December 14-15, 2000, ed. M.H. Faber, Birkhäuser Verlag Basel, Switzerland, 2001, pp.5-23.
- Faber, M.H. and Sørensen, J.D. (2000). Indicators for Assessment and Inspection Planning. In: *Proceedings International Workshop on Risk Based Inspection and Maintenance Planning*, Zurich, Switzerland, December 14-15, 2000, ed. M.H. Faber, Birkhäuser Verlag Basel, Switzerland, 2001, pp. 57-65.
- Sørensen, J.D. and Faber, M.H. (2000). Codified Risk Based Inspection Planning. In: *Proceedings International Workshop on Risk Based Inspection and Maintenance Planning*, Zurich, Switzerland, December 14-15, 2000, ed. M.H. Faber, Birkhäuser Verlag Basel, Switzerland, 2001, pp. 175-183.
- Straub, D. and Faber, M.H. (2000). Generic Risk Based Inspection Planning for Components Due to Corrosion. In: *Proceedings International Workshop on Risk Based Inspection and Maintenance Planning*, Zurich, Switzerland, December 14-15, 2000, ed. M.H. Faber, Birkhäuser Verlag Basel, Switzerland, 2001, pp. 129-138.
- Bloch, A., Sørensen, J.D. and Faber, M.H. (2000). Simplified Approach to Inspection Planning. *Proceedings PMC2000, 8th ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability*, Notre Dame, Indianapolis USA, July 23-26, 2000, [PMC2000-188], CD.
- Engelund, S., Faber, M.H., Sørensen, J.D. and Bloch, A. (2000). Approximations in Inspection Planning. *Proceedings PMC2000, 8th ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability*, Notre Dame, Indianapolis USA, July 23-26, 2000, [PMC2000-198].
- Engelund, S. and Faber, M.H. (2000). Planning of Ultrasonic Inspections of Parallel Wire Cables. *Proceedings PMC2000, 8th ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability*, Notre Dame, Indianapolis USA, July 23-26, 2000, [PMC2000-098].
- Faber, M.H., Engelund, S., Sørensen, J.D. and Bloch, A. (2000). Simplified and Generic Risk Based Inspection Planning. *Proceedings OMAE2000, 19th Conference on Offshore Mechanics and Arctic Engineering*, New Orleans, Louisiana, USA, February 14-17, 2000, [OMAE2000/S&R-6143].

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED)

- 1999  
Faber, M.H. and Sørensen, J.D. (1999). Aspects of Inspection Planning – Quality and Quantity. In: Proceedings ICASP8, 8th Conference on the Application of Statistics and Probability, Sydney, Australia, December 12-15, 1999, eds. R.E. Melchers and M. Stewart, Balkema, Rotterdam, 2000, pp. 739-746.
- Engelund, S. and Faber, M.H. (1999). Development of a Code for Durability Design of Concrete Structures. In: Proceedings ICASP8, 8th Conference on the Application of Statistics and Probability, Sydney, Australia, December 12-15, 1999, eds. R.E. Melchers and M. Stewart, Balkema, Rotterdam, 2000, pp. 965-972.
- Sørensen, J.D., Engelund, S. and Faber, M.H. (1999). Reliability analysis and test planning using CAPO-tests for existing structures. In: Proceedings ICASP8, 8th Conference on Application of Statistics and Probability, Sydney, Australia, December 12-15, 1999, eds. R.E. Melchers and M. Stewart, Balkema, Rotterdam, 2000, pp. 723-730.
- Faber, M.H., Berge, H.E., Tiller, I. and Hall, M.E. (1999). Reliability Based Assessment of Offshore Concrete Structures. Proceedings OMAE1999, 18th Conference on Offshore Mechanics and Arctic Engineering, St. John's, Newfoundland, Canada, July 11-16, 1999, [OMAE99/S&R-6043].
- Faber, M.H., Hansen, P.F., Jepsen, F.D. and Møller, H.H. (1999). Reliability Based Management of Marine Fouling. Proceedings OMAE1999, 18th Conference on Offshore Mechanics and Arctic Engineering, St. John's, Newfoundland, Canada, July 11-16, 1999, [OMAE99/S&R-6039].
- 1998  
Hommel, D.L. and Faber, M.H. (1998). Zarate-Brazo Largo Bridges: Stay Cables Damages and Rehabilitation. In: *Proceedings to the International IABSE Conference on Long-Span and High-Rise Structures*, Kobe, Japan, August 1998. IABSE Report Vol. 79, pp. 837-842.
- 1997  
Rostam, S., Faber, M.H. and Engelund, S. (1997). Reliability Based Framework for Economically Optimal Assessment of Structures and Design of Repairs. *Proceedings 5th International Conference on Deterioration and Repair of Reinforced Concrete Structures in the Arabian Gulf*, Bahrain, October 27-29, 1997.
- Sørensen, C.S., Faber, M.H. and Stenstrup, B. (1997). Reliability Based Reassessment of an Existing Pile Foundation. *Proceedings 14th of the International Conference on Soil Mechanics and Foundation Engineering*, Hamburg, Germany, September 6-12, 1997, pp. 1197-1200.
- 1996  
Faber, M.H., Arnbjerg-Nielsen, T. and Von Scholten, C. (1996). A Guideline for Reliability Based Reassessment of Existing Bridges. Proceedings PIARC, International Conference on Bridge Engineering and Management in Asian Countries, Jakarta, Indonesia, September 10-13, 1996.
- Faber, M.H. and Rostam, S. (1996). Rehabilitation Strategies - A Multi Disciplinary Challenge to the Engineering Profession. In: Proceedings of the International Conference on Concrete Repair, Rehabilitation and Protection, ed. Prof. Kirr, Dundee, Scotland, June 27-28, 1996, pp. 865-876.
- Faber, M.H. and Lauridsen, J. (1996). Reliability Based Reassessment of an Existing Concrete Bridge - A Case Study. In: Proceedings of the 3rd International Conference: Bridge Management 3: Inspection, Maintenance, Assessment and Repair, eds. J.E. Harding et al., London: E&FN Spon, pp. 34-44.
- 1995  
Faber, M.H. and Maroini, A. (1995). Synthesis of Session 8d: Reliability theory: Systems. In: *Applications of Statistics and Probability, Proceedings of the ICASP7 Conference Paris, France, July 10-13, 1995*, eds. M. Lemaire, J.L. Favre, A. Mebarki, A.A. Balkema, Rotterdam, 1995, pp. 1471-1473.
- Olsen, D., Faber, M.H. and Rosenthal, P. (1995). Close Ship Encounters and Sizing of Horizontal Bridge Clearance. In: *Applications of Statistics and Probability, Proceedings of the ICASP7 Conference Paris, France, July 10-13, 1995*, eds. M. Lemaire, J.L. Favre, A. Mebarki, A.A. Balkema, Rotterdam, 1995, pp. 701-707.
- Sørensen, J.D., Faber, M.H. and Kroon, I.B. (1995). Optimal Reliability-Based Planning of Experiments for POD Curves. *Proceedings ISOPE-95, 5th International Offshore and Polar Engineering Conference*, The Hague, Netherlands, June 11-16, 1995, pp. 339-345.



## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED) 1994

- Kroon, I.B., Sørensen, J.D. and Faber, M.H. (1994). Rational Planning of Offshore On-site Measurements. *Proceedings ISOPE-94, 4th International Offshore and Polar Engineering Conference*, Osaka, Japan, April 10-15, 1994, Vol. IV, pp. 500-504.
- Van Foeken, R.J., Dijkstra, O.D., Dharmavasan, S. and Faber, M.H. (1994). Fracture Mechanics Limit States for Reassessment and Maintenance of Fixed Offshore Structures. *Proceedings ISOPE-94, 4th International Offshore and Polar Engineering Conference*, Osaka, Japan, April 10-15, 1994, Vol. IV, pp. 505-513.
- Dharmavasan, S., Peers, S.M.C., Faber, M.H., Dijkstra, O.D., Servetto, D. and Manfred, E. (1994). Reliability-Based Inspection Scheduling for Fixed Offshore Structures. In: *Proceedings OMAE1994, 13th International Conference on Offshore Mechanics and Arctic Engineering*, ed. C. Guedes Soares, Vol.II, Houston, Texas, Feb. 27 - March 3, 1994, pp. 227-235.
- Faber, M.H., Dharmavasan, S. and Dijkstra, O.D. (1994). Integrated Analysis Methodology for Reassessment and Maintenance of Offshore Structures. In: *Proceedings OMAE1994, 13th International Conference on Offshore Mechanics and Arctic Engineering*, ed. C. Guedes Soares, Vol.II, Houston, Texas, February 27 - March 3, 1994, pp. 235-244.
- Goyet, J., Faber, M.H., Paygnard, J.-C. and Maroini, A. (1994). Optimal Inspection and Repair Planning: Case Studies using IMREL Software. In: *Proceedings OMAE1994, 13th International Conference on Offshore Mechanics and Arctic Engineering*, ed. C. Guedes Soares, Vol.II, Houston, Texas, February 27 - March 3, 1994, pp. 325-333.
- 1993**
- Sørensen, J.D., Kroon, I.B. and Faber, M.H. (1993). Code Calibration as a Decision Problem. In: *Structural Safety & Reliability - Proceedings of the 6th International Conference on Structural Safety and Reliability, ICOSSAR'93*, eds. G.I. Schuëller, M. Shinozuka and James T.P. Yao, Innsbruck, Austria, August 9-13, 1993, pp. 717-726.
- Enevoldsen, I., Faber, M.H. and Sørensen, J.D. (1993). Adaptive response surface techniques in reliability estimation. In: *Structural Safety & Reliability - Proceedings of the 6th International Conference on Structural Safety and Reliability, ICOSSAR'93*, eds. G.I. Schuëller, M. Shinozuka and James T.P. Yao, Innsbruck, Austria, August 9-13, 1993, pp. 1257-1264.
- Faber, M.H., Sørensen, J.D. and Kroon, I.B. (1993). Optimal Fatigue Testing - a Reassessment Tool. *Proceedings of the IABSE Colloquium, Copenhagen, Denmark, March 1993, IABSE Report 67*, pp. 61-68.
- 1992**
- Faber, M.H., Sørensen, J.D. and Kroon, I.B. (1992). Risk Based Optimal Fatigue Testing. *Proceedings of the ASCE Spec. Conference on 'Probabilistic Methods in Civil Engineering'*, Denver, Colorado, USA, July 8-10, 1992.
- Faber, M.H., Sørensen, J.D., Rackwitz, R., Thoft-Christensen, P. and Bryla, P. (1992). Reliability Analysis of an Offshore Structure - A Case Study I. *Proceedings OMAE1992, 11th International Conference on Offshore Mechanics and Arctic Engineering*, Calgary, Canada, June 6-11, 1992, pp. 449-455.
- Sørensen, J.D., Faber, M.H., Rackwitz, R., Thoft-Christensen, P. and Lebas, G. (1992). Reliability Analysis of an Offshore Structure - A Case Study II. *Proceedings OMAE1992, 11th International Conference on Offshore Mechanics and Arctic Engineering*, Calgary, Canada, June 6-11, 1992, pp. 457-463.
- Faber, M.H., Sørensen, J.D. and Kroon, I.B. (1992). Optimal Inspection Strategies for Offshore Structural Systems. *Proceedings OMAE1992, 11th International Conference on Offshore Mechanics and Arctic Engineering*, Calgary, Canada, June 6-11, 1992, pp. 145-151.
- 1991**
- Faber, M.H. and Rackwitz, R. (1991). On Excursions of Non-Homogeneous Vector-Valued Gaussian Random Fields. *Proceedings to the 1st International Conference on Computational Stochastic Mechanics*, Corfu, Greece, September 17-19, 1991, pp. 3-13.
- Sørensen, J.D. and Faber, M.H. (1991). Optimal Inspection and Repair Strategies for Structural Systems. In: *Proceedings 4th IFIP WG 7.5 Working Conference*, ed. P. Thoft-Christensen, Springer-Verlag 1991, Munich, Germany, September 11-13, 1991, pp. 383-394.
- Bryla, P., Faber, M.H. and Rackwitz, R. (1991). Second Order Methods in Time Variant Reliability Problems. In: *Proceedings OMAE1991, 10th International Conference on Offshore Mechanics and Arctic Engineering*, eds. C. Guedes Soares et al., Vol.II, Stavanger, Norway, June 23-28, 1991, pp. 143-150.

## PUBLICATIONS 1985-2005

### CONFERENCE PAPERS (REFEREED) 1991

Sørensen, J.D., Faber, M.H., Rackwitz, R. and Thoft-Christensen, P. (1991). Modelling in Optimal Inspection and Repair. In: *Proceedings OMAE1991, 10th International Conference on Offshore Mechanics and Arctic Engineering*, eds. C. Guedes Soares et al., Vol.II, Stavanger, Norway, June 23-28, 1991, pp. 281-288.

Rackwitz, R. and Faber, M.H. (1991). Reliability of Parallel Wire Cables Under Fatigue. *Proceedings ICASP6, 6th International Conference on Applications of Statistics and Probability in Civil Engineering*, Mexico City, Mexico, June 3-7, 1991, pp. 166-175.

### 1989-1990

Schall, G., Faber, M.H. and Rackwitz, R. (1990). Investigation of the Ergodicity Assumption for Sea States in the Reliability Assessment of Offshore Structures. In: *Proceedings OMAE1990, 9th International Conference on Offshore Mechanics and Arctic Engineering*, eds. C. Guedes Soares et al., Houston, USA, 1990, Book No. 10296C, pp. 1-6.

Faber, M.H. and Rackwitz, R. (1989). Excursion Probabilities of Non-Homogeneous Gaussian Scalar Fields Based on Maxima Considerations. In: *Proceedings 2nd IFIP WG 7.5 Working Conference*, London, England, September 25-27, 1988, ed. P. Thoft-Christensen, Springer-Verlag 1989, pp. 117-134.

Faber, M.H., Plantec, J.-Y. and Rackwitz, R. (1989). Two Applications of Asymptotic Laplace Integrals in Structural Reliability. In: *Structural Safety & Reliability - Proceedings 5th International Conference on Structural Safety and Reliability, ICOSSAR'89*, eds. A. Hua-Sing Ang, M. Shinozuka and G.I. Schuëller, San Francisco, USA, Aug. 7-11, 1989, pp. 1263-1270.

### MONOGRAPHS

Life-cycle performance of deteriorating structures: assessment, design and management. Eds. Dan M. Frangopol, E. Brühwiler, Michael H. Faber, Bryan Adey, ASCE and American Society of Civil Engineers, 2004.

Faber, M.H. (2001). *Risk and Reliability in Civil Engineering*. Short Course, Malta, March 2001.

Faber, M.H. (1989). *Excursions of Gaussian Random Fields in Structural Reliability Theory*. Ph. D. Thesis. Structural Reliability Theory, Paper No. 52. Institute of Building Technology and Structural Engineering, University of Aalborg, Denmark, 1989.

## PUBLICATIONS 1985-2005

### RESEARCH REPORTS AND OTHER PUBLICATIONS 1985-2005

- Baker J.W., Straub D., Nishijima K., Faber M.H. (2005). *On the Assessment of Robustness I: A General Framework*. International Workshop "Robustness of Structures", Garston, Watford, United Kingdom, November 28-29, 2005, <http://www.jcss.ethz.ch/>.
- Schubert M., Straub D., Baker J.W., Faber M.H. (2005). *On the Assessment of Robustness II: Numerical Investigations*. International Workshop "Robustness of Structures", Garston, Watford, United Kingdom, November 28-29, 2005, <http://www.jcss.ethz.ch/>.
- Michael H. Faber, Oliver Kübler, Mario Fontana, Markus Knobloch (2004). *Failure Consequences and Reliability Acceptance Criteria for Exceptional Building Structures. A Study taking Basis in the Failure of the World Trade Center Twin Towers*. IBK Bericht 285. vdf Hochschulverlag AG, Zürich. ISBN 3-7281-2976-3.
- Faizian, M., Schalcher H.R. and Faber, M.H. (2004). *Consequence Assessment in Earthquake Risk Management Using Damage Indicators*. First Forum on Engineering Decision Making IFED, Stoos, Switzerland, December 5-9, 2004, [www.ifed.ethz.ch](http://www.ifed.ethz.ch).
- Maes, M.A. and Faber, M.H. (2004). *Consequence Modeling Based on Stated Preferences*. First Forum on Engineering Decision Making IFED, Stoos, Switzerland, December 5-9, 2004, [www.ifed.ethz.ch](http://www.ifed.ethz.ch).
- Nishijima, K., Straub, D. and Faber M. H. (2004). *Sustainable Decisions for Life-Cycle Based Design and Maintenance*. First Forum on Engineering Decision Making IFED, Stoos, Switzerland, December 5-9, 2004, [www.ifed.ethz.ch](http://www.ifed.ethz.ch).
- Faber, M.H. et. al. (2003). *Risikoanalysen an Schweizerischen Stauanlagen – Forschungsempfehlungen*. Schweiz. Talsperrenkomitee (Hrsg.) Bericht zuhanden der Technischen Kommission der STK.
- Faber, M.H. (Editor) (2001). *Risk Based Inspection and Maintenance Planning - Proceedings International Workshop, December 14-15, 2000*. IBK Bericht 266. Birkhäuser Verlag Basel, Switzerland, ISBN 3-7643-6615-X, 196pp.
- Faber, M.H., Köhler, J. and Sørensen, J.D. (2001). *Aspects of the Probabilistic Modelling of Timber Material Properties*. COST E-24 Workshop, Copenhagen, Denmark, October 19-20, 2001.
- Faber, M.H. and Stewart, M.G. (2001). *Aspects of Risk Analysis in Civil Engineering*. JCSS Web-publication <http://www.jcss.ethz.ch/>.
- Faber, M.H. and Sørensen, J.D. (2001). *Reliability Based Code Calibration*. JCSS Web-publication <http://www.jcss.ethz.ch/>.
- Faber, M.H., Val, D.V. and Stewart, M.G. (1998). *Target Proof Loads for Bridge Assessment*. Research Report No. 166.09.1998, Department of Civil, Surveying and Environmental Engineering, The University of Newcastle, Australia, 1998, ISBN 07259 10437.
- Sørensen, J.D. and Faber, M.H. (1993). *Fatigue Analysis of Offshore Structures*. Lecture notes, University of Aalborg, Denmark, 1993.
- Kroon, I.B., Faber, M.H. and Sørensen, J.D. (1992). *Decision Theory in Structural Engineering*. Structural Reliability Theory, Paper No. 90, University of Aalborg, Denmark, July 1992, ISSN 0902-7513 R9218.
- Thoft-Christensen, P. and Faber, M.H. (1988). *Deflection and Global Instability Failure Elements for Geometrical Non-Linear Structures*. Structural Reliability Theory, Paper No. 26, Institute of Building Technology and Structural Engineering, University of Aalborg, Denmark, 1988.
- Faber, M.H. and Thoft-Christensen, P. (1988). *Modelling of Floor Loads*. Structural Reliability Theory, Paper No. 38, Institute of Building Technology and Structural Engineering, University of Aalborg, Denmark, 1988.
- Faber, M.H. (1988). *Austritte von Skalaren Zufallsfeldern über hohe Niveaus*. Aus unseren Forschungsarbeiten VI, Dezember 1988, Lehrstuhl für Massivbau, Technische Universität München, Germany, 1988.
- Faber, M.H. and Thoft-Christensen, P. (1987). *Instability and Buckling Failure Elements for Columns*. Structural Reliability Theory, Paper No. 25, Institute of Building Technology and Structural Engineering, University of Aalborg, Denmark, 1987.
- Faber, M.H. and Thoft-Christensen, P. (1985). *Reliability Analysis of a Plane Lattice Structure with Local Imperfections*. Structural Reliability Theory, Paper No. 14, Institute of Building Technology and Structural Engineering, University of Aalborg, Denmark, 1985.