Edgar Andreas Bohner
Civil Engineer, Dr.-Ing.

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Date of birth: 02.09.1973
Place of birth: Friedrichshafen, Germany
Nationality: German

EDUCATION AND DEGREES AWARDED

- 05/2004 - 08/2012: **Karlsruhe Institute of Technology, Department of Civil Engineering, Geo- and Environmental Sciences, Karlsruhe, Germany**
  Doctoral degree: Doktor-Ingenieur (Dr.-Ing.) Thesis title: Concrete Cover Cracking due to Corrosion of Reinforcement Doctoral disputation, grade "summa cum laude" (08/2013)

- 10/1994 - 04/2001: **University of Karlsruhe, Faculty of Civil and Survey Engineering, Karlsruhe, Germany**
  Diploma degree in Civil engineering (05/2001)

- 02/2000 - 12/2000, 08/1997 - 06/1998: **Royal Institute of Technology (KTH), Faculty of Civil Engineering, Stockholm, Sweden**
  Degree of Master of Science in Civil engineering (12/2000)

EMPLOYMENT

- ***VTT Technical Research Centre of Finland, Espoo, Finland***
  Since 08/2013: **Senior Scientist, Research Team Leader**
  Team leader of the "Infrastructure Health team" with 27 research scientists and engineers responsible for leadership, operations, sales and competence development;
  Acquisition and execution of research projects in the field of building materials research, structural engineering and geotechnics, infrastructure monitoring, decommissioning of nuclear facilities and nuclear waste management

- ***SMP Ingenieure im Bauwesen, Karlsruhe, Germany***
  09/2012 - 07/2013: **Consultant, project manager**

Technical assessment of buildings and engineering structures; execution and supervision of construction and restoration projects; building investigations and damage analyses for court appointed expertises

- ***Karlsruhe Institute of Technology (KIT), Institute of Concrete Structures and Building Materials, Germany***
  05/2004 - 08/2012: **Research assistant, PhD-candidate**
  Execution and completion of several research projects

  12/2009 - 08/2012: **Group leader Material Mechanics**
  Acquisition and supervision of projects in the field of material durability, deterioration mechanisms and service life of concrete structures

  01/2005 - 12/2009: **Teaching assistant**
  Organisation, planning and execution of lectures, seminars and laboratory tutorials at the chair for building materials; preparation and execution of written and oral examinations

- ***Prof. Müller + Dr. Günter, Ingenieurgesellschaft Bauwerke GmbH, Karlsruhe, Germany***
  05/2001 - 04/2004 (05/2004 – 09/2010 private consultant): **Project manager**
  Execution, supervision and monitoring of construction and restoration projects; building investigations and damage analyses for court-appointed expertises

AWARDS AND PRIZES

- 10/2012: Förderpreis Beton 2012 by the CEMEX Deutschland AG for the best PhD-thesis in 2011/2012 in the field of concrete technology, Düsseldorf, Germany
- 09/2012: Award for the Best Paper at the 1st International Conference on Sustainable Civil Engineering Structures and Construction Materials, Yogyakarta, Indonesia
- 05/2010: Young Researcher Best Paper Award at the 7th International Conference on Fracture Mechanics of Concrete and Concrete Structures, Jeju, Korea
- 09/2008: Award for the 3rd Best Lecture at the 7th International fib PhD Symposium in Civil Engineering, Stuttgart, Germany
- 01/2003: Ehrensenator-Huber-Prize by the Faculty of Civil and Survey Engineering of the University of Karlsruhe for Excellent Research Works in the Field of Reinforced Concrete Structures, Karlsruhe, Germany

MERITS IN TEACHING

- 10/2012 - 03/2013: University teaching assignment at the Karlsruhe Institute of Technology (KIT), Faculty of Civil Engineering, Geo- and Environmental Sciences in the subject “Corrosion of building materials and durability”
- Since 02/2005: Lecturer at the Architectural Association of Baden-Württemberg in the subject “Structural damage – deformations and deterioration of concrete and masonry structures”

MEMBERSHIPS AND OTHER ACADEMIC MERITS

- Since 09/2008: Member of the International Federation for Structural Concrete (fib)
- Since 01/2017: Reviewer for the Journal “Structural Concrete”
- Since 08/2011: Reviewer for the “Journal of Infrastructure Systems”
- Since 07/2009: Reviewer for the Journal “Materials and Corrosion”

LINGUISTIC SKILLS AND SOFTWARE SKILLS

- German (native language), English (fluent), Swedish (very good command), French (basic knowl
- Finite Element Analysis Program DIANA, Data Analysis and Graphing Software OriginLab, Gra Authoring and Publishing Software Adobe FrameMaker, Microsoft Office

MAIN AREAS OF INTEREST

- Durability of concrete structures, deterioration mechanisms and corrosion processes
- Material mechanics, structural behaviour of concrete structures
- Nuclear waste management and decommissioning of nuclear facilities
- Monitoring of (infra)structures and wireless sensing
- Life cycle assessment and service life prediction of (infra)structures
- Damage analyses and on-site investigations
- Concrete repair and retrofitting

LIST OF PUBLICATIONS

Scientific Journals:

[1] Müller, H. S., Günter, M., Bohner, E., Vogel, M.: Gentle Concrete Repair – Scientific Background and Practical Methods. In: Restoration of Buildings and Monuments 12 (2006), Nr. 5/6, S. 469-480

[2] Bohner, E., Müller, H. S.: Modelling of reinforcement corrosion – Investigations on the influence of shrinkage and creep on the development of concrete cracking in the early propagation stage of reinforcement corrosion. In: Materials and Corrosion 57 (2006), Nr. 12, S. 940-944

[3] Bohner, E., Fenchel, M., Müller, H. S.: Konzeption und Herstellung eines unterirdischen Betonsperrwerks zur Trinkwassergewinnung auf Java. In: Wasserwirtschaft 99 (2009), Nr. 7-8, S. 47-52

[4] Tschegg, E. K., Bohner, E., Tritthart J., Müller, H. S.: Investigations into fracture of carbonated concrete. In: Magazine of Concrete Research 63 (2011), Nr. 1, S. 21-30
[5] Müller, H. S., Bohner, E.: Rissbildung infolge Bewehrungskorrosion – Mechanismen und Prognosemodelle. In: Beton- und Stahlbetonbau 107 (2012), Nr. 2, S. 68-78
[6] Bohner, E.: Rissbildung in Beton infolge Bewehrungskorrosion. In: beton (2013), Nr. 7+8, S. 316
[7] Bohner, E.: Der Rissbildung auf der Spur: Forschungsarbeit prämiert. In: bauwerk (2013), Nr. 18, S. 16-17
[8] Ferreira, M., Bohner, E., Saarela, O.: Designing concrete durability by coupling limit states of corrosion initiation and corrosion induced cracking of concrete cover. In: Nordic Concrete Research, Publication No. 54, 1/2016. Nordic Concrete Federation, 2016, pp. 7-20

Books:

[1] Müller, H. S., Günter, M., Bohner, E., Vogel, M.: Behutsame Betoninstandsetzung – Technisch-wissenschaftliche Grundlagen, Instandsetzungsmethoden und ihre praktische Umsetzung. In: VDI Jahrbuch 2006/2007 Bautechnik, Verein Deutscher Ingenieure (Hrsg.), VDI Verlag GmbH, Düsseldorf, 2006, S. 297-322
[2] Bohner, E.: Sichtbetoninstandsetzung bei historischen Bauwerken. In: 47. Forschungskolloquium des Deutschen Ausschusses für Stahlbeton am 9. und 10. November 2006 an der Universität Karlsruhe (TH), 2006, S. 145-162
[3] Müller, H. S., Bohner, E.: Sanierung historischer Betonbauten. In: Sanierung und Verstärkung von Massivbauten, Innovationen im Bauwesen, Beiträge aus Praxis und Wissenschaft, Dehn, F. et al. (Hrsg.), Bauwerk Verlag GmbH, Berlin, 2007, S. 85-105
[4] Bohner, E.: Prognosemodell für die Rissbildung infolge Bewehrungskorrosion. In: Baustoffe und Betonbau: Lehren, Forschen, Prüfen, Anwenden – Festschrift zum 60. Geburtstag von Prof. Dr.-Ing. Harald S. Müller, Haist, M. und Herrmann, N. (Hrsg.), KIT Scientific Publishing, Karlsruhe, 2012, S. 87-104
[5] Müller, H. S., Bohner, E.: Rissbildung infolge Bewehrungskorrosion. In: Deutscher Ausschuss für Stahlbeton (DAfStb), Heft Nr. 602, Beuth Verlag GmbH, Berlin, 2012

Theses:

[1] Bohner, E.: Salt and Moisture Induced Damage on Historical Masonry. Institut für Massivbau und Baustofftechnologie, Universität Karlsruhe und Institutionen för Byggvetenskap, Avd. Byggnadsmaterial, Kungl Tekniska Högskolan, Stockholm, Diplomarbeit, 2000
[2] Bohner, E.: Rissbildung in Beton infolge Bewehrungskorrosion. Karlsruher Institut für Technologie (KIT), Institut für Massivbau und Baustofftechnologie (IMB), Diss., 2013

International Conferences/Symposiums:

[1] Bohner, E., Ödeen, K.: Durability of Autoclaved Aerated Concrete. In: Proceedings of the Eighth International Conference on Durability of Building Materials and

Components (8dbmc), M. A. Lacasse, M. A.,Vanier D. J. (Hrsg.), NCR Research Press, Ottawa, Canada, 1999, Band 1, S. 107-117
[2] Vogel, M., Bohner, E., Müller, H. S.: Lebensdauerprognose und Dauerhaftigkeit von Betonrandzonen. In: Instandsetzung bedeutsamer Betonbauten der Moderne in Deutschland, 1. Symposium Baustoffe und Bauwerkserhaltung; Müller, H. S., Nolting, U., Vogel, M., Haist, M. (Hrsg.), Universitätsverlag Karlsruhe, 2004, S. 53-63
[3] Müller, H. S., Bohner, E., Günter, M.: Repair of historical concrete structures and monuments. In: Concrete Repair, Rehabilitation and Retrofitting, Alexander M., Beushausen, H.-D., Dehn, F., Moyo, P. (Hrsg.), Taylor and Francis Group, London, 2006, S. 873-879
[4] Vogel, M., Bohner, E., Günter, M., Müller, H. S.: Beurteilung der Dauerhaftigkeit und Restnutzungsdauer von Betonbauteilen mittels probabilistischer Methoden. In: Innovationen in der Betonbautechnik, 3. Symposium Baustoffe und Bauwerkserhaltung, Müller, H. S., Nolting, U., Haist, M. (Hrsg.), Universitätsverlag Karlsruhe, 2006, S. 65-78
[5] Vogel, M., Bohner, E., Günter, M., Müller, H. S.: Modelling of Carbonation-Induced Corrosion of Concrete Facades. In: European Symposium on Service Life and Serviceability of Concrete Structures ESCS, Espoo, Finland, 2006, S. 1001-1006
[6] Bohner, E., Müller, H. S.: Modellierung von Bewehrungskorrosion – Untersuchungen zu Rissbildungen und Abplatzungen. In: 16. Internationale Baustofftagung (ibausil), Stark, J. (Hrsg.), F. A. Finger-Institut für Baustoffkunde, Weimar, 2006, Band 1, S. 1231-1238
[7] Bohner, E., Müller, H. S.: Modelling of reinforcement corrosion – Cracking and spalling of concrete. In: EUROCORR 2006, The Netherlands Corrosion Centre (NCC), Maastricht, The Netherlands, 2006, CD-ROM
[8] Müller, H. S., Fenchel, M., Bohner, E., Mutschler, T.: Bau eines Höhlenkraftwerks zur Trinkwassergewinnung auf Java, Teil 2: Konzeption und Realisierung des Sperrwerks unter Berücksichtigung örtlich verfügbarer Baustoffe und Technologien. In: Betonbauwerke im Untergrund – Infrastruktur für die Zukunft, 5. Symposium Baustoffe und Bauwerkserhaltung, Müller, H. S., Nolting, U., Haist, M. (Hrsg.), Universitätsverlag Karlsruhe, 2008, S. 121-137
[9] Bohner, E.: Investigations on Cracking and Spalling due to Corrosion of Reinforcement. In: 7th fib PhD Symposium in Civil Engineering, Eligehausen, R., Gehlen, C. (Hrsg.), Universität Stuttgart, 2008, S. 11.3-11.13
[10] Müller, H. S., Bohner, E., Vogel, M.: Repair of architectural concrete and related modelling of carbonation-induced corrosion. In: Concrete Repair, Rehabilitation and Retrofitting II, Alexander, M. et al. (Hrsg.), Taylor and Francis Group, London, 2009, S. 353-358
[11] Bohner, E., Soddemann, N., Müller, H. S.: DFG Research Group 537: Modelling reinforcement corrosion – Investigations on the mechanism of cracking and spalling. In: Concrete Repair, Rehabilitation and Retrofitting II, Alexander, M. et al. (Hrsg.), Taylor and Francis Group, London, 2009, S. 391-397
[12] Müller, H. S., Bohner, E., Vogel, M.: Repair of architectural concrete and concrete monuments. In: 1st International Concference on Rehabilitation and Maintenance in

Civil Engineering (ICRMCE), Sambowo, K. A. et al. (Hrsg.), Solo, Indonesien, 2009, S. 452-458
[13] Tschegg, E. K., Bohner, E., Tritthart, J., Müller, H. S.: Brucheigenschaften von karbonatisiertem Beton. In: 17. Internationale Baustofftagung (ibausil), Stark, J. (Hrsg.), F. A. Finger-Institut für Baustoffkunde, Weimar, 2009, Band 2, S. 403-408
[14] Bohner, E., Müller, H. S.: Untersuchungen zu Rissbildungen und Abplatzungen infolge Bewehrungskorrosion. In: 17. Internationale Baustofftagung (ibausil), Stark, J. (Hrsg.), F. A. Finger-Institut für Baustoffkunde, Weimar, 2009, CD-ROM, P 2.42
[15] Bohner, E., Müller, H. S., Bröhl, S.: Investigations on the mechanism of concrete cover cracking due to reinforcement corrosion. In: 7th International Conference on Fracture Mechanics of Concrete and Concrete Structures (FraMCoS-7), Oh, B.H. et al. (Hrsg.), Jeju, Korea, 2010, CD-ROM, S. 936-943
[16] Breiner, R., Bohner, E., Fenchel, M., Müller, H. S., Mutschler, T., Triantafyllidis, T.: Grouting of an underground concrete barrage in karst limestone. In: Asian Trans-Disciplinary Karst Conference, Haryono, E. et al. (Hrsg.), Faculty of Geography, Gadjah Mada University, Yogyakarta, Indonesien, 2011, S. 181-190
[17] Müller, H. S., Bohner, E.: Corrosion-induced crack formation – From mechanism of action to prevention strategies. In: Proceedings of the 56th BetonTage, 07.-09. February 2012, Neu-Ulm, BFT International, Gütersloh, S. 26-27
[18] Müller, H. S., Bohner, E., Vogel, M., Kvitsel, V., Solichin: Innovative solutions for the construction and the repair of hydraulic structures. In: 2nd International Conference on Rehabilitation and Maintenance in Civil Engineering (ICRMCE-2), Kristiawan, S. A., Sholihin As'ad (Hrsg.), Solo, Indonesien, 2012, S. 21-37
[19] Bohner, E., Müller, H. S.: Prediction Model for Concrete Cover Cracking due to Corrosion of Reinforcement. In: Proceedings of the *fib* Symposium Stockholm 2012, Concrete Structures for Sustainable Community, Bager, D. H. und Silfwerbrand, J. (Hrsg.), Stockholm, Schweden, 2012, S. 113-136
[20] Breiner, R., Bohner, E., Müller, H. S.: Development and optimization of cement based grouting materials. In: 1st International Conference on Sustainable Civil Engineering Structures and Construction Materials (SCESCM), Suhendro, B. et al. (Hrsg.), Yogyakarta, Indonesien, 2012, S. 177-185
[21] Bohner, E., Müller, H. S.: Analytical prediction model for concrete cover cracking due to reinforcement corrosion. In: Life-Cycle and Sustainability of Civil Infrastructure Systems, Strauss, Frangopol und Bergmeister (Hrsg.), Taylor and Francis Group, London, 2012, S. 442-448
[22] Müller, H. S., Vogel, M., Bohner, E., Kvitsel, V.: Sustainable construction and maintenance of hydraulic concrete structures. In: Proceedings of the 1st International Conference on Performance-based and Life-cycle Structural Engineering (PLSE), Hong Kong, China, 5 - 7 December, 2012, S. 2042-2051 (CD-ROM)
[23] Hakola, I., Halonen, M., Bohner, E., Holt, E., Kylliäinen, A.-J., Kemppainen, K., Koho, P.: Instrumentation and Monitoring of Tunnel Plug in ONKALO. In: Final Proceedings of the 40th Waste Management Conference (WM2014), March 2-6, 2014, Phoenix, Arizona, USA, 2014, 14 p. (CD-ROM, Paper Nr. 14261)

[24] Bohner, E., Häkli, J., Lehikoinen, T.: Demonstration of wireless monitoring in rock mass, compacted bentonite and reinforced concrete. In: Proceedings of the XXII Nordic Concrete Research Symposia (NCR 2014), August 13-15, 2014, Reykjavik, Iceland. Nordic Concrete Federation (ed.), Norsk Betonforening, Oslo, 2014, S. 135-138
[25] Bohner, E., Müller, H. S.: Analytical model for predicting time to concrete cover cracking due to corrosion of reinforcement. In: Proceedings of the XXII Nordic Concrete Research Symposia (NCR 2014), August 13-15, 2014, Reykjavik, Iceland, Nordic Concrete Federation (ed.), Norsk Betonforening, Oslo, 2014, S. 421-424
[26] Ferreira, M., Bohner, E.: Modelling the time to concrete cover cracking due to reinforcement corrosion. In: Proceedings of Structural Mechanics in Reactor Technology SMIRT 23, 10-14 August 2015, Manchester, UK, Devision I, Paper ID 221, 10 p.
[27] Bohner, E., Ferreira, M., Saarela, O.: Modelling the service life of concrete until cover cracking due to reinforcement corrosion. In: International Conference on Concrete Repair, Rehabilitation and Retrofitting ICCRRR2015, 05-07 October 2015, Leipzig, Germany
[28] Bohner, E., Ferreira, M., Saarela, O.: A methodology for coupling limit states in service life design of reinforced concrete structures. In: 3rd International Conference on Rehabilitation and Maintenance in Civil Engineering (ICRMCE), 19-21 November 2015, Solo, Indonesia, 2015, 12 p.
[29] Holt, E., Bohner, B., Sanden, T., Malm, R., Pacovsky, J., Svoboda, J.: Instrumentation and Monitoring Systems for Evaluation of Plug Responses in Geological Disposal Demonstration. In: Proceedings of the DOPAS Seminar, 25-26 May 2016, Turku, Finland, 2016, pp. 152-158
[30] Al-Neshawy, F., Sistonen, E., Ferreira, M., Bohner, E., Puttonen, J.: Selection Matrix for Non-Destructive Testing of NPP Concrete Structures. In: 19th World Conference on Non-Destructive Testing (WCNDT 2016), 13-17 June 2016, Munich, Germany, 2016, 9 p.
[31] Ferreira, M., Bohner, E., Saarela, O.: Coupling limit states of corrosion initiation and corrosion induced crack opening – sensitivity analysis of model parameters. In: International RILEM Conference on Materials, Systems and Structures in Civil Engineering (MSSCE 2016). Service life of cement-based materials and structures, 22-24 August 2016, Lyngby, Denmark, 2016, pp. 165-176
[32] Laukkanen, A., Pinomaa, T., Andersson, T., Ferreira, M., Bohner, E.: Modeling chloride ingress under freeze thaw loading – 3D FEM approach. In: Proceedings of the fib Symposium 2016, 21-23 November 2016, Cape Town, South Africa, 2016, 10 p.
[33] Bohner, E., Ferreira, M., Saarela, O.: Parametric study of coupled modes for corrosion initiation of reinforcement and induced cracking of concrete cover. In: Proceedings of the fib Symposium 2016, 21-23 November 2016, Cape Town, South Africa, 2016, 10 p.
[34] Al-Neshawy, F., Ferreira, M., M., Bohner, E.: NDT&E methods for aged NPP concrete structures. In: Concrete for Nuclear Structures - Nordic Concrete Research

Seminar (NUCCON 2016), 31 October - 1 November 2016, Espoo, Finland, 2016, pp. 69-76
[35] Ferreira, M., Bohner, E., Saarela, O.: Stochastic limit state design extension to include corrosion induced cracking. In: Concrete for Nuclear Structures - Nordic Concrete Research Seminar (NUCCON 2016), 31 October - 1 November 2016, Espoo, Finland, 2016, pp. 142-152
[36] Bohner, E., Holt, E, Leivo, M.: Monitoring of a concrete tunnel end plug for geological disposal. In: Concrete for Nuclear Structures - Nordic Concrete Research Seminar (NUCCON 2016), 31 October - 1 November 2016, Espoo, Finland, 2016
[37] Al-Neshawy, F., Ferreira, M., Bohner, E., Puttonen, J.: NDT Matrix - A Tool for Selecting Non-Destructive Testing methods for NPP Concrete Structures. SMIRT 24, Buson, Korea, 20-25 August 2017, 2017 (In Preparation)

Research Reports, Technical Reports:

[1] Fenchel, M., Bohner, E., Müller, H. S.: Schlussbericht zum BMBF-Verbundprojekt: Erschließung und Bewirtschaftung unterirdischer Karstfließgewässer in Mitteljava, Indonesien, Teilprojekt 4: Konstruktion und Herstellung dauerhafter unterirdischer Sperrwerke unter Berücksichtigung örtlich verfügbarer Baustoffe und Technologien (Förderkennzeichen 02WT0427). Universität Karlsruhe, September 2009
[2] Müller, H. S., Bohner, E.: Modellierung des Schadenfortschritts bei Korrosion von Stahl im Beton und Bemessung von Stahlbetonbauteilen auf Dauerhaftigkeit, Teilprojekt B1: Rissbildung und Abplatzungen infolge Bewehrungskorrosion. Schlussbericht zum Teilprojekt B1 (MU 1368/7) der DFG-FOR 537, Juni 2011
[3] Hakola, I., Halonen, M., Bohner, E.: Deliverable Report D3.25: Test plan for the full-scale test including the instrumentation plan for POPLU plug. DOPAS "Full Scale Demonstration of Plugs and Seals" (2012-16), EU FP7 Fission-2012-1.1.1, Grant Agreement no. 323273. Research Report VTT-R-08513-13, 2014, 27 p. (CONFIDENTIAL)
[4] Ferreira, M., Bohner, E.: Research on concrete deterioration mechanisms – Assessment of structures with concrete pathologies. OECD NEA/CSNI – WGIAGE ASCET Assessment of structures with concrete pathologies. Research Report VTT-R-01527-15, 2015, 17 p.
[5] Bohner, E., Halonen, M.: Assessment of EBS monitoring technologies. Posiva Working report, 2015, 42 p. (CONFIDENTIAL)
[6] Kuosa, H., Bohner, E.: Potential of ultra-high performance concrete as casing material for wireless sensors. Research Report VTT-R-06177-15, 2015, 27 p. (CONFIDENTIAL)
[7] Häkli, J., Saari, J.-M., Sopanen, M., Strömmer, E., Bohner, E., Kuosa, H.: Wireless Sensor Demonstration in ONKALO – Final report. Research Report VTT-R-06166-15, 201, 30 p. (CONFIDENTIAL)
[8] Al-Neshawy, F., Ferreira, M., Bohner, E.: NDE of thick-walled reinforced concrete structures – Selection matrix for non–destructive evaluation of NPP concrete structures. VTT Research Report. VTT-R-00215-16, 2016, 90 p.

[9] Bohner, E., Kuosa, H., Al-Neshawy, F., Ferreira, M.: NDE of thick-walled reinforced concrete structures – Technologies and systems for performance monitoring. VTT Research Report. VTT-R-00449-16, 2016, 63 p.
[10] Ferreira, M., Bohner, E., Al-Neshawy, F.: NDE of thick-walled reinforced concrete structures – International research review. VTT Research Report. VTT-R-04696-15, 2016, 36 p.
[11] Bohner, E., Kivikoski, H., Salparanta, L., Löija, M.: Evaluation of Performance of Uniaxially and Isostatically Compressed Buffer Blocks. Posiva working report. 2016, 97 p.
[12] Bohner, E., Salparanta, L., Gharbieh, H.: Tests on middle scale and full scale isostatic blocks. Posiva working report 2016, p. 122
[13] Jäppinen, T., Ferreira, M., Koskinen, T., Bohner, E., Al-Neshawy, F., Virkkunen, I.: Non-destructive examination of NPP primary circuit components and concrete infrastructure (WANDA). In: SAFIR2018. The Finnish Research Programme on Nuclear Power Plant Safety 2015-2018. Interim Report. VTT Technology XX. VTT. Espoo. 2017, XXX – XXX:

Lectures, Others:

[1] Bohner, E., Hansen, J., Lahdenperä, J., Kylliäinen, A.-J., Koho, P., Hakola, I., Holt, E.: Reflections on the use of monitoring technologies in geological nuclear waste repositories. In: Linking science and technology in Geological Repositories (GeoRepNet 2/RATE), October 23-24, 2014, British Geological Survey, Nottingham, UK. Geo.Rep.Net - UK Centre for Astrobiology, University of Edinburgh, 2014