Per Goltermann

Personal Information	Nationality: Danish Year of birth: 1957
Contact	Email: peg@ramboll.dk Phone: +45 4598 6726 Fax: +45 4598 6302
Education	M.Sc. in Civil Engineering from the Technical University of Denmark, 1981. Ph.D. from the Technical University of Denmark, 1985.
Professional Societies	Danish Society of Engineers, (IDA) Danish Concrete Society, (DBF) Danish Society for Material Research, (DSM) Danish Centre for Applied Mathematics and Mechanics, (DCAMM). American Concrete Institute, (ACI) International Association for Bridge Maintenance and Safety (IABMAS)
Position in firm	Senior engineer, Project leader
Years with firm	Since 1985
Key qualifications	Dr Goltermann has extensive knowledge of theoretical, experimental and developmental work from his work at the R&D department in RAMBØLL, from G.M.Idorn Consult A/S, and the Technical University of Denmark. Dr. Goltermann has been project manager on a large number of projects in which the theoretical research and laboratory testing have been combined with practical experience in order to implement the results in practice in Denmark and internationally. Dr. Goltermann is the chairman of the DS/S282 Committee for “Code of Practice for Structures of Prefabricated Lightweight Concrete Components” and of CEN/TC 177/WG2 “Prefabricated Reinforced Components of Lightweight Aggregate Concrete” as well as a member of ACI Committee 225 “Hydraulic Cements” and of the board of the Danish Concrete Society. Dr. Goltermann has broad practical experience on design of various structures from his work as a consulting engineer and from international research & development projects (Growth, Brite/EuRam, Eureka, SHRP) as well as standardisation. Dr. Goltermann has also worked on large-scale construction projects as an expert on concrete technology and curing design.

Experience	RAMBØLL (Rambøll, Hannemann & Højlund A/S)
2000-2004	Bridge Inspection and Concrete Technology, RAMBØLL
2004	Denmark
	Inspection of the concrete structures on the Oresund Link. Client: The Oresund Link.
2004	Denmark
	Evaluation and assessment of corrosion risk and rate monitoring from the Oresund Link Tunnel. Client: Force Technology
2004	Denmark
	Technical judge in litigation over prefabricated elements for Sewage Reservoirs in Germany. Client: Viborg Court
2004	Denmark
	Assistance in the practical implementation of DS/EN 1520 and the accompanying CE-marking. Client: EXPAN A/S
2004 -	Denmark
	Evaluation of load-carrying capacities of lightly reinforced wall elements of lightweight aggregate concrete with open structure. Comparison of results from current testing of Danish wall productions and older test results with established formulas. Planning of complimentary test program. Client: Dansk Betonindustriforening, BIH
2004	Denmark and Germany
	Responsible for planning and evaluation of documentary testing of new German designs for the Danish market. Safety evaluation of German documentation and control rules for comparison to Danish regulations and safety requirements as a basis for producer declarations. Client: H+H Celcon Gmbh
2004	Denmark
	Calibration of the safety level of the DS/EN 1520 Product standard for prefabricated reinforced elements of lightweight aggregate concrete with open structure. Client: Dansk Standard
2003	Denmark
	Inspection of structure, design and evaluation of monitoring system on critical parts of the Skovdiget bridge. Client: The Danish Road Directorate.

2003 - 4	Denmark Responsible for revising 2 handbooks dealing with the design and safety of structures, built with lightweight aggregate concrete elements (Book 2: “Load-carrying capacity and stability (Bæreevne og stabilitet)” and Book 4 ”Stability (Stabilitet)”. The work includes recommendation and guidance for designs of individual elements, of the joints and of the overall stability of the structure. Client: Dansk Betonindustriforening, BIH
2003	Denmark Responsible for the overview report of the documentation of the design, control and safety of prefabricated, un-reinforced lightweight aggregate concrete walls. Client: Dansk Betonindustriforening, BIH
2003	Denmark Responsible for planning and evaluation of testing of strength in beams under balconies at Farum Midtpunkt Client: Lemming & Eriksson A/S.
2003-	Germany and Denmark Responsible for planning and evaluation of documentary testing of new German designs for the Danish market. Safety evaluation of German documentation and control rules for comparison to Danish regulations and safety requirements as a basis for producer declarations. Client: Xella Baustoffe Gmbh
2003	Norway Design and control of a monitoring system for durability conditions in a highway concrete bridge. Client: Norwegian Public Road Administration
2002-2003	Denmark Monitoring of durability conditions in a highway concrete bridge. Evaluation of results and documentation. Client: Danish Road Directorate
2002	Denmark Evaluation of testing and recommendation for improvements in test bench and in conditioning of aerated autoclaved concrete masonry. Client: H+H Celcon A/S.
2000-2003	Denmark Special inspection of the bridge structures for assessing condition and deterioration rates. Establishing maintenance and repair strategies and recommendation of repair activities. Client: National Railways and National Road Directorate

2000-2003	Denmark General inspection of the pylons and anchor blocks on the Great Belt Link bridge and supervision of repair works. Inspection of columns on the eastern bridge. Design of monitoring system for durability monitoring of structures. Client: Great Belt Link
2001	Denmark Non-destructive testing for strength of concrete bridge and concrete floors, including assessment of results. Client: Copenhagen Airports A/S
2001-	Denmark and Europe Taskleader on monitoring and practical bridge management in EU-network SAMCO (Structural Assessment, Control and Monitoring). Client: European Commission.
1990-2000	G.M. Idorn Consult A/S, RAMBØLL-group, later G.M.Idorn department
1998-	Denmark and Europe Exploitation manager on the R&D project “TEAM – Testing and Assessment of Marble and Limestone” under the Brite/Euram-program with 14 partners. Technical leader of the design and installation of the monitoring systems on the stone panels on buildings. Client: European Commission.
1998-2002	Denmark and Europe Project co-ordinator and scientific leader on the R&D project “SMART STRUCTURES - Integrated Monitoring System of Concrete Structures” under the Brite/Euram-program. Co-ordinator of the activities by the 8 partners. Focus on durability, maintenance and repair models, development of probes and integrating software, which can be assessed over the Internet. Client: European Commission.
1989-	Denmark and Europe Chairman from 2001 and technical secretary from 1989 in CEN/TC177/WG2, responsible for the standard “EN1520. Prefabricated Reinforced Components of Lightweight Aggregate Concrete with open Structure” and responsible for producing CEN/TC177-Technical Report “Guidelines for the application of LAC-components in structures”. Member of national mirror group. Chairman of enquiry, assessment and safety evaluation group. Client: Contractors Association, Element Division.

1998-2002	Denmark, Germany and Belgium Safety evaluation of German and Belgian documentation and control rules for comparison to Danish regulations and safety requirements as a basis for producer declarations. Responsible for documentary testing of new German designs for the Danish market. Evaluation of imported elements for specific construction project. Client: Dendek Trading A/S, YTONG Danmark A/S and YTONG Deutschland AG.
2000	Denmark Evaluation of conformity to Danish safety levels, when using imported reinforcing steel, focusing on requirements, test standards and frequencies, as well as the third-party control. Client: H+H Fiboment
1999-2000	Denmark Responsible for design, planning and evaluation of tests for strengths of glued joints between aerated, autoclaved concrete elements in co-operation with the Technical University in Copenhagen and the Technological Institute. Client: Dansk Standard
1999-2000	Denmark Documentation of bond and anchorage in lightweight concrete and planning of testing at Statens Prövningsanstalt in Borås, Sweden. Client: Dansk Standard
1999	Denmark Specialist advisor for Product Certification of Prefabricated Lightweight Concrete Components and third-party control of production, testing and declarations. Client: BVQI Denmark A/S
1998	Denmark Project leader on project on non-destructive measurement of glue percentage in joints between autoclaved, aerated concrete elements, using the Impact-echo method. Evaluation of design rules for assembled wall panels with adhesive joints. Client: H+H Industry
1997-1998	Denmark Evaluation of curing design including the implementation of internal cooling pipes of the concrete structures for the tunnel at the Oresund Link. Auditing the contractors documentation of curing design, compliance with the specifications and corrective actions. Client: The Oresund Link

1997-1998	Denmark Project manager on planning, testing and evaluation of frost resistance of lightweight aggregate concrete. Client: Danish Leca
1997-1999	Denmark Technical secretary in the revision of the Danish Code of Practice for structures of precast lightweight concrete elements, DS420. Client: Contractors Association, Element Division
1997-1998	Denmark and Canada Simulation and estimation of the risk of freeze-thaw damages in concrete and in soil as support of microscopic examinations of concrete samples in a litigation.
1997-1999	Denmark Project manager on planning, testing and evaluation of corrosion protection of reinforcement in lightweight aggregate concrete. Review of current experience from practice and preparation of new acceptance criteria for corrosion protection in Danish Code. Client: Contractors Association, Element Division
1996-1998	Denmark and USA Expert evaluation of concrete strength, testing and evaluation in litigations. Modelling and simulation of deterioration. Documentation on non-destructive testing methods.
1996-1997	Denmark Screening of a CEN product standard for prefabricated elements and the corresponding CEN test standards. Evaluation of correlation to existing Danish test standards. Assessment of impact on Danish consumers, producers and consultants. Client: Danish Standard
1996-1997	Greece Concrete technology on the tunnel for the Preveza-Aktio Crossing. Evaluation of the mix design, site inspection and assessment of the design of the cooling system for the prevention of early-age thermal cracking. Client: Ministry of Environment of Greece, Planning and Public Works.
1996	Denmark Project leader on evaluation of alternative applications of flyash and lightweight aggregates in the concrete industry in Denmark. Evaluation of aggregate performance and durability requirements. Client: Elkraft.

1996-1997 Denmark

Project leader on R&D project “HETEK-High Performance Concrete - Contractors Technology”. Responsible for site-inspections, reporting and selection of test sites for the evaluation and testing of frost-resistance. Development of new frost-damage models.
Client: Danish Concrete Institute

1995-1996 India

International concrete technology expert assisting the Indian Ministry of Surface Transportation on technical standards for highway concrete structures in India. Inspection of a representative range of old and new bridges and construction sites. Responsible for development of a “Manual of Concrete Practice”, 16 Instruction Manuals for the “Man on the Job”, covering different areas of the work. Preparation of revised “Specifications for Concrete Road Bridges” as well as reviewing the Codes of Practice for concrete structures and bridges for the Ministry of Surface Transport of India. Presentation of manuals and results of site visits on a seminar in New Delhi.
Client: Asian Development Bank

1995-1996 Holland

Evaluation of the use of fine marine sand for concrete in Holland for the Dients Water en Mileeu. Results presented and discussed at a Seminar in Holland.
Client: Dutch Ministry for Environment.

1994-1995 Denmark

Technical secretary for the organisation of the Nordic Concrete Research Congress and Nordic Concrete Industry Meeting 1995.
Client: Danish Concrete Association.

1994-1995 Denmark

Project leader on a project “HUA-High Performance Concrete in Marine Environments”, involving laboratory and on-site implementation of rheologic measurements for the workability of fresh concrete. Rheological classification of cement types mixed with flyash and microsilica.
Client: Danish Concrete Institute.

1994 Denmark

Project leader on development of commercial version of the expert system “EUROCON - Performance Tailoring of Structural Concrete” for selection and use of local materials for concrete proportioning, for determining requirements and for the design and optimisation of the concrete mix.

1993-1995	Denmark Senior structural engineer on prestandardisation project on precast light-weight aggregate concrete walls and beams for 13 Danish factories. Project involves planning and evaluation of testing of beams and strengths of 40 different concrete mixes as well as documentation of new design rules in Danish and European standards as an alternative to the load-testing. Client: Contractors Association, Element Division - 13 Factories.
1993-1995	Denmark Expert on lifetime predictions of structures and development of durability requirements, expert on temperature related problems in fresh concrete. Drafting of durability requirements for the specifications. Client: The Oresund Link
1992-1995	Denmark Structural expert on establishing design rules and diagram for precast wall elements of lightweight aggregate concrete. Design of experiments and evaluation of pilot tests and full-scale test results for several series of light-weight multilayer elements. Client: A/S FIBO.
1992-1994	Denmark Senior structural engineer on prestandardisation project on precast light-weight aggregate concrete slabs for the major Danish producers. Project involves planning and evaluation of results from 5000 test specimens, which are used as documentation of new rules in Danish and European standards as an alternative to the load-testing. Project includes more than full-scale test of prefabricated elements, having monolithic or multilayer cross-sections. Client: A/S FIBO, Danish Leca, H+H Industry
1992-1994	Denmark Expert on evaluation of curing technology, estimations of temperatures and stresses and crack prediction on early age concretes on the East Bridge of the Great Belt Link. Client: Great Belt Link.
1992	Belgium Assigned Expert Evaluator on the BRITE/EURAM-projects in EEC. Recommendations of projects to be supported by EEC. Client: European Commission

1990-1993	Denmark Project leader on the Brite/Euram project “Performance Tailoring of Structural Concrete”. Responsible for review of durability requirements in a number of countries. Development of an expert system for the price-optimal use of local materials, leading to fulfilment of the functional requirements. Client: European Commission.
1990-1992	Denmark Project manager on integrated optimisation of structural design and material design for prefabricated components. Client: A/S FIBO
1990-1992	Denmark Senior research engineer on development and documentation of design rules for structural components.
1990	Denmark Project manager on a number of projects on optimisation of concrete products, performance assessments and damage assessment. Project includes as well structural evaluation and design as material assessment and optimisation.
1990	Denmark Project manager on a number of projects on optimisation of concrete products, designs, expert evaluations and damage assessment.
1990	Denmark Structural expert. Assessment of damage causes on macro-scale (structures) and micro-scale (thin-section microscopes).
1990	Denmark Project leader for the development of graphical database system for microscopy pictures.
1985-1990	Rambøll & Hannemann A/S
1989-1992	Denmark Project engineer on evaluation of creep and shrinkage in lightweight concrete elements. Client: A/S FIBO

1989-1992 Denmark

Design of experiments and evaluation of pilot and full-scale test results for several series of lightweight sandwich elements. Development and documentation of design formulas.
Client: A/S FIBO

1989-1991 Denmark

Danish project leader on EUREKA 269 ”Design of aluminium structures under fatigue loading”, covering friction bolted joints and glued joints.
Client: Danish Council for Industry and Technology.

1989-1991 Denmark

Project leader on various R&D projects.
Client: Danish Council for Industry and Technology.

1985-1989 Denmark

Project engineer on a large number of construction jobs, reconstructions or strengthening projects. Site supervisor and designer on concrete, steel and wooden structures.

1981–1985 Technical University of Denmark, Department of Structural Design.

1982-1985 Denmark

Technical University of Denmark , Department of Structural Engineering.
Post-graduate studies leading to Ph.D. thesis.
Member of the board of the Department of Structural Engineering.
Member of several committees under the Board of the Technical University.
Lecturing at the University on different topics.

1981-1982 Denmark

Technical University, Department of Structural Engineering.
Research engineer. Experimental, theoretical and computational work concerning built-up wooden structures with partial interaction.

Languages

	Speaking	Reading	Writing
English:	Excellent	Excellent	Excellent
German:	Good	Good	Fair
French:	Fair	Good	Fair
Spanish:	Fair	Good	Fair

Awards	Award from The Danish Council of the Timber Trade for the Project “Nailed Timber Beams”, 1980.

Special appointments

2004 -	Member of Editorial Board for the technical publications from the Danish Concrete Association.
2003	Member of Danish Standards group for ”Robustness – Background and principles – Guidance – 2003”, Dansk Standard DS/INF 146, 2003.
2002 -	Danish representative in ECSN (European Concrete Society Network).
2002 -	Member of the board in the Danish Concrete Society.
2001 -	Chairman from 2001 in CEN/TC177/WG2, responsible for EN 1520 “Prefabricated Reinforced Components of Lightweight Aggregate Concrete with open Structure”. (Technical Secretary in WG2 from 1989).
2000 -	Member of Danish Standards coordination group for the committees responsible for all Danish Codes-of-Practise.
1997 - 2002	Member of the Danish Concrete Society’s committee for education, presentation and development.
1992 - 2002	Member of ACI/Committee 231 “Properties of Concrete at Early Ages”.
1992 -	Member of ACI/Committee 225 “Hydraulic Cements”.
1989 -	Representative of the Association of Consulting Engineers (FRI) in the National Standardisation Committee for the “Code of practise for lightweight concrete structures”. Chairman since 2000.
1989 - 2001	Technical secretary in CEN/TC177/WG2 “Prefabricated Reinforced Components of Lightweight Aggregate Concrete with open Structure”

Supervision, Training and Assessment

2004-5	Denmark External supervisor for midproject for Vigfus Bjørnsson and Avdo Fetahagic ”Forankring i letklinkerbeton. Effekt af vederlagstryk (Anchorage in lightweight aggregate concrete with open structure. Effect of pressure from support)” Client: Danish Technical University.
2003-4	Denmark Training of engineers in revised Code-of-Practice for lightweight concrete structures of prefabricated lightweight concrete elements. Client: Danish Construction and Concrete Institute
2004	Denmark External supervisor for K.K. Knudsen ”Vigtigheden af dæklag i beton (The importance of the cover in concrete structures)” Client: Copenhagen Technical School
2003	United Kingdom Lecturing in Cambridge Summer School, arranged by SAMCO (Structural Assessment, Monitoring and COntrol) on use of monitoring in bridge management. Client: European Commission
2003	Denmark External partner on final year project by Lars Rehsøe Larsen ”Monitering af betonkonstruktioner (Monitoring of concrete structures)” Client: Copenhagen University College of Engineering
Before 2000	Denmark External partner and assisting on supervision on final year projects with Kurt Kielsgaard Hansen. Client: Technical University of Denmark
1998	Denmark Opponent on Birgitte dela Friis Ph.D.-thesis “Determination of eigenstresses in hardening concrete” Client: Technical University of Denmark
1991-1996	Denmark Supervisor on Mette Elbæk Andersen’s industrial Ph.D. study on “Design of Concrete Structures Considering Early Age Thermal Effects”. Client: Erhvervsfremmestyrelsen

Manuals and Educational Material

Goltermann , P. and Larsen, H.: “Revision af letbetonnormen, DS420”, Educational material for post-education of Danish engineers in lightweight concrete structures, Dansk Betoninstitut A/S, March 2003 and November 2004.

Goltermann, P. and Kristnamoorthy: Manuals of concrete practise, 1995 (prepared for Indian practice).

Goltermann, P. and Kristnamoorthy: 16 “Man on the Job”-manuals, 1995 (Instruction manuals prepared for Indian practise):

1. Testing aggregates on the site
2. How to store materials for concrete
3. Mixing better concrete
4. Testing for slump of concrete
5. Batching concrete by weight
6. Testing for moisture in the aggregate
7. How to vibrate concrete
8. Making test specimens on the site
9. Bending and fixing reinforcement
10. Transporting concrete to the job
11. Pumping concrete
12. Thin reinforced concrete webs
13. Protecting and curing concrete
14. Concreting in cold weather
15. Concreting in hot weather
16. How to treat formwork and ensure finish

Codes of practice, Standards and Guidelines

DS/INF 160:2004 “Guidance in use of DS/EN 1520”, (Chairman of Committee).

DS 420/Ret.1:2004 “Corrigendum to Code-of-Practice for the structural use of lightweight concrete” (Chairman of Committee).

DS/EN 1520/Till.1:2004 “National Anneks til DS/EN 1520+AC” (Chairman of Committee).

DS 420:2003 “Code of Practise for the structural use of lightweight concrete” (Chairman of Committee)

DS/INF 146:2003 “Robustness – Background and principles – Guidance – 2003” (Member of ad-hoc group)

EN 1520:2002 “Prefabricated reinforced components of lightweight aggregate concrete with open structure” (Coordinator of working group)

CEN/CR 13962:2000 “Guidelines for the application of LAC-components in structures “ (Coordinator of ad-hoc group)

DS420, Till. 3:1998 ”Addendums and corrections to Code of Practice DS420, Design of Beam Elements – Material Relationships” (Member of Committee)

DS420, Till. 2:1997: ”Addendums and corrections to Code of Practice DS420, Design of Beam Elements” (Member of Committee)

DS420, Till. 1:1996 ”Calculation of Composite Walls, Supplement to DS 420”, (Member of Committee)

Publications, Reviewed Journals

Goltermann, P. “Variation of chloride profiles in homogeneous areas”, Materials and Structures, Vol. 37, pp. 608-614, November 2004.

Goltermann, P.: “Chloride ingress in concrete structures: Extrapolation of observations” pp.114-119, Vol.100, March 2003, ACI Material Journal.

Goltermann, P.: “Corrosion protection in prefabricated elements of lightweight aggregate concrete with open structure, Nordic Concrete Research, No.27, 2/2001, pp.15-26.

Larsen, H.; Goltermann, P. and Ingholt, N.U.: "Lightweight Aggregate Concrete Beams. Load-bearing Capacity", pp.42-58, Nordic Concrete Research, No.20, 1997.

Goltermann, P.; Johansen, V. and Palbøl, L.: "Packing of Aggregates: An Alternative Tool to Determine the Optimal Aggregate Mix", ACI Material Journal, Sep.-Oct., 1997.

Larsen, H.; Goltermann, P.; Scherfig, S. and Micheelsen, C.: “In-Plane Shear Joint Capacity of Precast Lightweight Aggregate Concrete Elements”. Nordic Concrete Research, No.19, pp.41-54, 1996/2.

Goltermann, P.: "Lightweight Concrete Walls and Columns: Determining the Load-carrying Capacity", Nordic Concrete Research, pp.10-26, No.16, 1995.

Larsen, H., Ingholt, N.U. and Goltermann, P.: "Moment Capacity and Shear Force Capacity of Lightweight Aggregate Concrete Floor Components", Nordic Concrete Research, pp.56-69, No.16, 1995.

Johansen, V., Goltermann, P. and Thaulow, N.: "Chloride Transport in Concrete", Concrete International, July 1995, pp.43-44.

Goltermann, P.: "Mechanical Predictions on Concrete Deterioration. Part 2: Classification of Crack Patterns". ACI Material Journal, pp.58-63, Vol.92, No.1, Jan-Feb, 1995.

Goltermann, P.: "Mechanical Predictions on Concrete Deterioration. Part 1: Eigenstresses in Concrete". ACI Material Journal, pp.543-550, Vol.91, No.6, Nov-Dec, 1994.

Palbøl, L., Goltermann, P. and Johansen, V.: "Optimierung der Packungdichte der Zuschlagstoffen des Betons", Betonwerk+Fertigteil-Technik, pp.58-62, 11/94, 1994

Goltermann, P., Larsen, H. and Ingholt, N.U.:"Strength and Stiffness Relations in Lightweight Aggregate Concrete with Open Structure", Nordic Concrete Research, pp.35-46, No.15, 1994

Goltermann, P., Larsen, H. and Ingholt, N.U.: "Precast Sandwich Elements of Lightweight Aggregate Concrete". Nordic Concrete Research, pp.43-55, No.13, 1993.

Goltermann, P.: "Performance Tailoring of Structural Concrete", Nordic Concrete Research, pp.35-42, No.13, 1993.

Goltermann, P.: "Linear Distortional Beam-Theory", Journal of Constructional Steel Research, 1993, Vol.24, pp.1-23.

Goltermann, P.: "Short, Thin-Walled Cylinders Subjected to Combined Loading". ASCE, Journal of Structural Engineering, vol 117, No. 3, pp. 951-971, March 1991.

Møllmann, H. and Goltermann, P.: "Interactive Buckling in Thin-Walled Beams. Part 1: Theory". The Journal of Solids and Structures, Vol 25, No. 1, pp. 715-728, 1989.

Goltermann, P. and Møllmann,H.: "Interactive Buckling in Thin-Walled Beams. Part 2: Applications". The Journal of Solids and Structures, Vol 25, No. 1, pp. 729-749, 1989.

Goltermann, P. and Svensson, S.E.: "Lateral Distortional Buckling of Beams, a Simple and Accurate Method for Predicting the Elastic Critical Stress". ASCE, Journal of the Structural Division, pp.1606-1625, July 1988.

Publications,
Reviewed Proceedings

Goltermann, P: “Managing Concrete Bridges: Methods for reducing Costs and User Inconveniences”, submitted for 6th International Conference on Global Construction; Ultimate Concrete Opportunities, Dundee, Scotland, 5-7 July 2005.

Pardi, L.; Woodward, R.; Dumoulin, C. and Goltermann, P.: “The role of monitoring in bridge management”, Proc. 3ECSC, 3rd European Conference on Structural Control, July 12-15 2004, Vienna, Austria.

Yates, T.J.S.; Brundin, J.-A.; Goltermann, P. and Grelk, B.: ”Observations from the inspection of marble cladding in Europe”, pp. 267-273, Proc. Dimension Stone 2004 “New perspectives for a traditional building material” 14-17 June 2004,Prague, Czech Republic.

Grelk, B.; Goltermann, P.; Schouenburg, B.; Koch, A. and Alnæs, L.: “The laboratory testing of potential bowing and expansion of marble”, pp.253-260, Proc. Dimension Stone 2004 “New perspectives for a traditional building material” 14-17 June 2004,Prague, Czech Republic.

Bassler, R.; Mietz, J.; Raupach, M. and Goltermann, P.: “Use of embeddable sensors in an integrated monitoring system for reinforced concrete structures”, Proc. 58th annual conference & exposition “Corrosion 2003”, NACE, 2003.

Pardi, L.; Mercalli, A. and Goltermann, P.: “SMART STRUCTURES: per una migliore gestione dei ponti”, Proc. Giornata di Studi La valutazione del Degrado dei Ponti ed I Sistemi di Gestione in Europe, 30 September 2002, Messina, Italy

Mietz, J.; Raupach, M. and Goltermann, P.: ”Integrated monitoring system for reinforced concrete structures”, Proc. 1st FIUP Congress “Concrete structures in the 21st century”, 13-19 October, 2002, Osaka, Japan.

Klinghoffer, O.; Goltermann, P. and Bässler, R.: “Smart Structures: Embeddable sensors for use in the integrated monitoring systems of concrete structures”, Proc. IABMAS 02, July 2002, Barcelona, Spain.

Goltermann, P.; Jensen, F. and Andersen, M.E.: “Smart Structures: Possibilities, experiences and benefits from permanent monitoring“, Proc. IABMAS 02, July 2002, Barcelona, Spain.

Goltermann, P.: “Prefabricated floor slabs in roller-compacted lightweight aggregate concrete”, pp.531-539, Proc. 2nd International Symposium on Structural Lightweight Concrete, 18-20 June, 2000, Norway

Andersen, M.E.; Knudsen, A.; Goltermann, P., Jensen, F. and Thøgersen, F. “Optimised Bridge Management with Permanent Monitoring Systems”, pp.129-136, Proc. Int. Conf. on Bridge Management, April 2000, Surrey

Goltermann, P.: ”Design by Testing”, pp.22-28, 44. Ulmer Beton- und Fertigteil Tage, February 1-3, 2000, FBF Betondienst Gmbh, Germany.

Goltermann, P. and Karl, S.: "Intended EN 1520 Prefabricated reinforced components of lightweight aggregate concrete with open structure", pp.61-70, Proceedings from the International symposium on "European concrete standards in practice", 22-24 May 1997, Copenhagen, Denmark.

Schreiner, H.; Sørlie, M.; Goltermann, P. and Johansen, V.: "Modelling of Packing of Petroleum Coke Fractions", Proc. of Light Metals Conference 1996, pp.507-514, Anaheim, Pennsylvania, USA., The Minerals, Metals & Materials Society

Holm, J. and Goltermann, P.: "Fracture Mechanics Considerations in the Assessment of Deteriorating Mechanisms in Concrete", in "Evaluation and Rehabilitation of Concrete Structures and Innovations in Design", ACI-SP 128, Proceedings ACI International Conference Hong Kong, December 1991, pp.323-338.

Goltermann, P.: "Buckling of Short, Thin-walled Cylinders under Combined Loading". Transactions of the ASME, pp. 306-311, November 1991.

Riberholt, H. and Goltermann, P.: “Nailed timber beams”, pp. 370-378, Proc. IUFRO Timber Engineering Group Meeting, Borås, Sweden, 1982

Goltermann, P. and Riberholt, H.: "Composite Beams with Partly Interaction and Variable Cross-Section", (in Danish). 1981, No. 7, Nordisk trætidsskrift.

Other publications

Goltermann, P. and Kjærbye, P.: “Load-carrying capacity and stability (In Danish: Bæreevne og stabilitet)”, Hæfte 2, Dansk Byggeri, BIH – Dansk Beton Industriforenings Elementfraktion, In Press 2004.

Goltermann, P.: ”Danske letklinkerbetonelementer fremstilles nu efter DS/EN 1520 og CE-mærkes”, Dansk beton, 4:2004.

Dalsgaard Sørensen, J. and Goltermann, P.: “Calibration of partial safety factors for EN 1520”, Dansk Standard, August 2004.

Knudsen, A. and Goltermann, P.: “Stainless steel as reinforcement in concrete (In Danish: Rustfrit stål som armering i beton)”, pp10.1-10.12 in “Levetidsprosjektering av betongkonstruksjoner. Kompendium 1”, Norsk Betonforening, 2004.

Goltermann, P.: ”Full-wall elements of lightweight aggregate concrete. Development, experiences and safety in the design of un-reinforced wall elements (In Danish: Helvægge af letklinkerbeton. Udvikling, erfaring og sikkerhed vedrørende dimensionering af uarmerede vægelementer)”, Hæfte 8, Dansk Byggeri, BIH – Dansk Beton Industriforenings Elementfraktion, Oktober 2003.

Goltermann, P.: “Managing large bridge structures in Scandinavia”, pp.1-23, Proc. SAMCO Summer Academy, 14-18 July, Cambridge, United Kingdom, 2003.

Goltermann, P.: “SMART STRUCTURES: Using condition monitoring for assessment”, approved for publication at The Third International Conference on Current and Future Trends in Bridge Design, Construction and Maintenance Shanghai, China, April 28-30, 2003.

Thøgersen, F. and Goltermann, P. “SMART STRUCTURES: Monitoring of concrete structures”, Proc. Dansk Vejforum, 4- 5 December 2002, Nyborg Strand, Denmark.

Goltermann, P.: “SMART STRUCTURES: Monitoring of Concrete Structures”, pp.143-145, Proc. XVII Nordic Concrete Research Symposium, 12-14 June 2002, Helsingør, Denmark.

Goltermann, P: et al: ”SMART STRUCTURES - Integrated Monitoring Systems for Durability Assessment of Concrete Structures”,
Final Project Report February 2002, available for download at
http://smart.ramboll.dk/smart_eu/index.htm.

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