

Henrik Brøner Jørgensen
Associate Professor
Department of Technology and Innovation
E-mail: hebj@iti.sdu.dk
Direct phone: 65507520
Mobile phone: 40847858



Relevant education and employments

2018 - present	Employed as Associate Professor, Civil and Architectural Engineering, Department of Technology and Innovation, University of Southern Denmark
2015 - present	Laboratory Responsible for the Civil Engineering laboratory, including responsibility for safety and maintenance planning
2018 - present	Working environment representative at Department of Technology and Innovation
2014 - 2018	Employed as Assistant Professor at the Department of Technology and Innovation, University of Southern Denmark
2015 - 2018	Part time consultant engineer at Infrastructure DK South, COWI A/S. Mainly doing Quality Assessment and supervision on structural design of timber, steel and concrete structures.
2015 - 2016	University Lecturer Training Programme, University of Southern Denmark
2013	PhD internship in the research group: "Structural concrete laboratory, ibeton, Civil engineering section, École Polytechnique Fédérale de Lausanne", Lausanne, Switzerland. Head of group: Professor Aurelio Muttoni.
2011 - 2014	Employed as PhD student at the Department of Technology and Innovation, University of Southern Denmark
2009 - 2011	MSc student in structural engineering at the University of Southern Denmark
2005 - 2009	B.Eng. student in civil engineering at the University of Southern Denmark

Publications

Anchorage capacity of looped wire ropes for connections between precast concrete wall-elements

Veyhe, T., Jørgensen, H. B. & Hansen, S. G., 15. Mar 2024, In: Engineering Structures. 303, 117533.

Anchorage capacity of bent looped wire ropes in precast concrete wall elements for T- and L- connections

Veyhe, T., Jørgensen, H. B. & Hansen, S. G., 2024, (E-pub ahead of print) In: Structural Concrete.

3DLightBeam+. Design, simulation, and testing of carbon-efficient reinforced 3D concrete printed beams

Breseghello, L., Hajikarimian, H., Jørgensen, H. B. & Naboni, R., 1. Oct 2023, In: Engineering Structures. 292, 116511.

Mechanical modeling of dowel action and the influence of small amounts of shear reinforcement on the shear-transfer actions in RC beams

Autrup, F., Jørgensen, H. B., Fernández Ruiz, M. & Hoang, L. C., Oct 2023, In: Structural Concrete. 24, 5, p. 5928-5946

The influence of small amounts of shear reinforcement on the shear-transferring mechanisms in RC beams: An analysis based on refined experimental measurements

Autrup, F., Jørgensen, H. B. & Hoang, L. C., Apr 2023, In: Structural Concrete. 24, 2, p. 2844-2861

Dowel action of the tensile reinforcement in RC beams without shear reinforcement: Novel experimental investigation and mechanical modelling

Autrup, F., Jørgensen, H. B. & Hoang, L. C., 15. Mar 2023, In: Engineering Structures. 279, 13 p., 115471.

Experimental Investigation of Connections for Reuse of Hollow Core Slabs

Jørgensen, H. B., Jensen, I. K. & Storm, J. G., 2023, *Building for the Future: Durable, Sustainable, Resilient - Proceedings of the Symposium 2023 - Volume 2*. Ilki, A., Çavunt, D. & Çavunt, Y. S. (eds.). Springer, p. 775-785 (Lecture Notes in Civil Engineering, Vol. 350).

Experimental Investigation of the Anchorage Capacity of Looped Wire Ropes in Precast Concrete Element Connections
Veyhe, T., Joergensen, H. B. & Hansen, S. G., 2022, *Proceedings for the 6th fib International Congress, 2022- Concrete Innovation for Sustainability*. Stokkeland, S. & Braarud, H. C. (eds.). fib. The International Federation for Structural Concrete, p. 1592-1601 (fib Symposium Proceedings).

Experimental Investigation of the Anchorage Capacity of Looped Wire Ropes placed in Wall Elements for T-and L-connections

Veyhe, T., Jørgensen, H. B. & Hansen, S. G., 2022, *Proceedings of the 14th fib International PhD Symposium in Civil Engineering*. di Prisco, M., Meda, A. & Balázs (eds.). fib. The International Federation for Structural Concrete, Vol. 58. p. 153-160 (fib Symposium Proceedings).

Experimental investigation of the influence of stirrup spacing on the shear capacity of reinforced concrete beams

Astrup, F., Jørgensen, H. B. & Hoang, L. C., 2022, *14th fib Phd Symposium in Civil Engineering, 2022, Proceedings*. di Prisco, M., Meda, A. & Balazs, G. L. (eds.). fib. The International Federation for Structural Concrete, p. 49-56 (fib Symposium Proceedings).

Shear capacity of RC members without shear reinforcement: A modified crack sliding model

Astrup, F. & Joergensen, H. B., 15. Jul 2021, In: *Engineering Structures*. 239, 13 p., 112147.

Experimental Investigation of the Shear Capacity of RC Beams with Very Small Amounts of Shear Reinforcement

Astrup, F., Jørgensen, H. B. & Hoang, L. C., 14. Jun 2021, *Concrete Structures: New Trends for Eco-Efficiency and Performance. Proceedings of the fib Symposium 2021*. Julio, E., Valenca, J. & Louro, A. S. (eds.). p. 1668-1677

Experimental Study on the Anisotropic Behaviour and Strength of 3D Printed Concrete

Jørgensen, H. B., Douglas, P. J. & Naboni, R., 2021, *Concrete Structures: New Trends for Eco-Efficiency and Performance. Proceedings for the 2021 fib Symposium, held online from Lisbon, Portugal, June 14-16, 2021..* Julio, E., Valenca, J. & Louro, A. S. (eds.). International Federation for Structural Concrete, p. 739-748 (fib Symposium Proceedings, Vol. 2021-June).

Experimental Study on the Shear Behaviour of Post-Tensioned Beams without Shear Reinforcement

Jørgensen, H. B. & Fisker, J., 2021, *Concrete Structures: New Trends for Eco-Efficiency and performance. Proceedings of the fib Symposium 2021 held online from Lisbon, Portugal, 14-16 June 2021*. Julio, E., Valenca, A. & Louro, A. S. (eds.). International Federation for Structural Concrete

Experimental Investigation of Dowel Action in RC Beams without shear reinforcement

Astrup, F., Jørgensen, H. B. & Hoang, L. C., 2020, *Concrete Structures for Resilient Society: Proceedings of the fib Symposium 2020*. Zhao, B. & Lu, X. (eds.). p. 540-548

Anisotropic Concrete Compressive Strength in Existing Structures

Hansen, S. G., Meinen, N. E. & Jørgensen, H. B., 2019, *20th Congress of IABSE, New York City 2019: The Evolving Metropolis - Report*. International Association for Bridge and Structural Engineering, p. 2407-2413

The influence of tolerances on the load bearing capacity of looped wire rope connections

Joergensen, H. B., 2019, *Proceedings of the fib Symposium 2019: Concrete - Innovations in Materials, Design and Structures*. Derkowski, W., Krajewski, P., Gwozdziewicz, P., Pantak, M. & Hojdys, L. (eds.). International Federation for Structural Concrete, p. 2218-2230

Experimental Study on the Tensile Capacity of Bridge Deck Loop Connections with Shear Keys

Jørgensen, H. B., Christensen, L. & Bendixen, J., Oct 2018, *Better, Smarter, Stronger: Proceedings for the International Federation for Structural Concrete, 5th International fib Congress*. Foster, S., R. Gilbert, I., Mendis, P., Al-Mahaidi, R. & Millar, D. (eds.). Federation internationale du beton (fib), p. 1705-1718

Experimental investigation on the shear capacity of RC beams with curtailed reinforcement

Jørgensen, H. B. & Gustenhoff Hansen, S., 15. Aug 2018, In: *Engineering Structures*. 169, p. 81-93

Strengthening Strategy for the Shear Capacity in Existing Concrete Structures

Gustenhoff Hansen, S., Eiken Abildgaard, N. & Jørgensen, H. B., Aug 2018, In: *Structural Engineering International*. 28, 4, p. 489-497

Experimental Investigation of the Effect of Curtailed Reinforcement on the Shear Failure of RC Members Without Stirrups

Jørgensen, H. B. & Gustenhoff Hansen, S., 2018, *High Tech Concrete: Where Technology and Engineering Meet: Proceedings of the 2017 fib Symposium, held in Maastricht, The Netherlands, June 12–14, 2017*. Hordijk, D. A. & Lukovic, M. (eds.). Springer, p. 758-768

Anisotropic Concrete Compressive Strength

Gustenhoff Hansen, S., Jørgensen, H. B. & Hoang, L. C., 2017, In: *IABSE Symposium, Engineering the Future*. 109, p. 3061-3068

Load Carrying Capacity of Shear Wall T-Connections Reinforced with High Strength Wire Ropes

Jørgensen, H. B., Bryndum, T., Larsen, M. & Hoang, L. C., 2017, *fib Symposium 2016: Performance-Based Approaches for Concrete Structures*. Lausanne: Federation internationale du beton (fib), 11 p.

Strength of precast concrete shear joints reinforced with high-strength wire ropes

Jørgensen, H. B., Hoang, L. C. & Hagsten, L. G., 2017, In: *Proceedings of the Institution of Civil Engineers - Structures and Buildings*. 170, 3, p. 168-179

BEF Bulletin No 2 - Juni 2016: Wirebokse i elementsamlinger

Jørgensen, H. B., Hoang, L. C. & Hagsten, L. G., Jun 2016, *Betonelementforeningen*. 23 p.

Strength of Loop Connections between Precast Bridge Decks Loaded in Combined Tension and Bending

Jørgensen, H. B. & Hoang, L. C., Feb 2015, In: *Structural Engineering International*. 25, 1, p. 71-80

Load Carrying Capacity of Keyed Joints Reinforced with High Strength Wire Rope Loops

Jørgensen, H. B. & Hoang, L. C., 2015. 13 p.

Calculation of shear strength of prestressed hollow core slabs by use of plastic theory

Hoang, L. C., Jørgensen, H. B. & Nielsen, M. P., 2014, In: *Concrete in Australia*. 40, 2, p. 30-36

Strength of Loop Connections between Precast Concrete Elements: Part I: U-bar Connections Loaded in Combined Tension and Bending -Part II: Wire Loop Connections Loaded in Shear

Jørgensen, H. B., 2014, Syddansk Universitet. Det Tekniske Fakultet.

Tests and limit analysis of loop connections between precast concrete elements loaded in tension

Jørgensen, H. B. & Hoang, L. C., Jul 2013, In: *Engineering Structures*. 52, p. 558-569 12 p.

Influence of High Axial Tension on the Shear Strength of non-shear RC Beams

Jørgensen, H. B., Hoang, L. C., Fabrin, L. S. & Maagaard, J., May 2013, *IABSE Symposium Report, IABSE Symposium, Rotterdam 2013: Assessment, Upgrading and Refurbishment of Infrastructures*. International Association for Bridge and Structural Engineering, p. 155-161 7 p. (I A B S E Symposium Report, Vol. 99).

Tensile strength of loop connections between precast bridge deck elements

Jørgensen, H. B., 2012, *Proceedings of the 9th fib International PhD Symposium in Civil Engineering: Karlsruhe Institute of Technology (KIT), July 22 to 25 2012*. Karlsruhe, Germany: KIT Scientific Publishing, p. 123-128

Shear strength of heavily reinforced concrete members with circular cross section

Jensen, U. G., Hoang, L. C., Jørgensen, H. B. & Fabrin, L., 2010, In: *Engineering Structures*. 32, 3, p. 617-626 10 p.

Shear Test on RC Elements with Circular Cross Section

Jensen, U. G., Hoang, L. C., Jørgensen, H. B., Fabrin, L. & Maagaard, J., 2009, *IABSE Report Vol. 96, IABSE Symposium Bangkok 2009: Sustainable Infrastructure - Environment Friendly, Safe and Resource Efficient*. International Association

for Bridge and Structural Engineering, Vol. 96. (I A B S E Symposium Report, Vol. 96).