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Education

1995 - Faculty of Civil Engineering, Brno University of Technology (red diploma)
1998 – Ph.D. degree on the topic "Nonlinear Response of Steel Frames to Static Loadings"
2003 – Assoc. Prof. degree on the topic "Verification of Criteria for Design of Steel Structures by Methods of Reliability Analysis"
2008 – Prof. degree on the topic "Structures and Traffic Constructions"

Specialization, research interests and key words

Stochastic computational mechanics, global sensitivity analysis, structural reliability and safety, nonlinear structural mechanics, metal structures, stability of metal structures, thin-walled structures, buckling and lateral-torsional buckling, imperfection sensitivity studies (steel structures), geometrical nonlinear analysis of steel structures, Monte Carlo simulation techniques, mathematical statistics (random variables and random fields) connected with stability problems of steel structures, structural design, structural optimization, MCDM in civil engineering, RBI methods in power plants, sensitivity analysis in geotechnics.

Ph.D. students

Supervisor of 5 Ph.D. students: • 2006 “Fuzzy Sets and Stochastic Methods and their Applications in Civil Engineering” • 2011 “Experimental and probabilistic analysis of operational reliability of the bucket wheel excavator SchRs 1320/4x30” • 2005 “Reliability Analysis of Steel Columns with Encased Web in High Strength Concrete under Compression” • 2018 “Sensitivity Analysis of Stability Problems of Steel Structures” • 2021 “Analysis of Reliability of Steel Structures with Imperfections”.

Successful applicant of the GA ČR projects

103/99/P023 (1999–2000), 103/01/D022 (2001–2004), 103/03/0233 (2003–2005), 103/07/1067 (2007–2009), 103/08/0275 (2008–2010), 14-17997S (2014–2016), 17-01589S (2017–2019), 20-01734S (2020–2022), 20-00761S (2020–2022), the last one with an **EXCELLENT** rating.

Successful applicant of the AV ČR projects

AVČR KJB201720602 (2006–2008), AVČR IAA201720901 (2009–2011).

Memberships Member of convocation of Faculty of Civil Engineering (2010-now).

Memberships in editorial boards

Guest editor of Special Issue [Sensitivity Analysis and Decision Making](#) of peer-reviewed journal [Mathematics](#) *• (2023-2024)

Guest editor of Special Issue [Sensitivity Analysis](#) of peer-reviewed journal [Mathematics](#) *• (2021-2023)

Member of editorial board of peer-reviewed [Archives of Civil Engineering](#) *• (2021-now)

Member of editorial board of peer-reviewed journal [Mathematics](#) *• (2020-now)

Member of editorial board of scientific journal [Communications](#) • (2018-now)

Member of editorial board of scientific journal [Czech Journal of Civil Engineering](#) (2016-now)

Guest editor of scientific peer-reviewed journal [Mathematical Problems in Engineering](#) * (2015)

Member of editorial board of peer-reviewed journal [Engineering Structures and Technologies](#) (2012-now)

Member of editorial board of peer-reviewed [Journal Civil Engineering and Management](#) *• (2011-now)

Indexed on: *Web of Science (WOS) • Scopus

Selected teaching activities

Lectures on: Elasticity and plasticity (2000-now), Structural mechanics (2001-now).

Tutorial classes on: Elasticity and plasticity (1995-now), Statics of engineering structures II (1996-now), Reliability of engineering structures (1999), Automation of static calculations (2000), Fundamentals of structural mechanics (2001-now).

Selected courses and training abroad

Bauhaus-Universität Weimar, Faculty of Civil Engineering, Advanced Studies in Structural Engineering – CAE, Weimar, August 1st to August 14th, 1998.

Università degli Studi di Roma La Sapienza, October 25th to November 7th, 2005.

Professional practice

1995-2001 Designer of steel structures at the computation centre of the corporation Královopolská J.S.C., Czech Republic, specialized in calculation and designs of steel structures for nuclear power plants (Temelín, Mochovce).

2001-2003 Designer with the corporation Stress Analysis Group Ltd., specialized in static and dynamic analyses of load bearing steel structures.

Awards and Honors

► **Highly Cited Researcher awards** from Stanford University in collaboration with Elsevier: citation years [2019](#), [2020](#), [2021](#), [2022](#), [2023](#)

Awards in TOP 10 competitions for the best publishing results

- Award of Dean, 5th place in faculty competition TOP10 (IF) in 2008
- Award of Dean, 1st place in faculty competition TOP10 (IF) in 2012
- Award of Rector, 9th place in university competition TOP10 (IF) in 2012
- Award of Dean, 1st place in faculty competition TOP10 (IF) in 2015
- Award of Dean, 3rd place in faculty competition TOP10 (IF) in 2016
- Award of Dean, 1st place in faculty competition TOP10 (IF) in 2017
- Award of Dean, 9th place in faculty competition TOP10 (IF) in 2018
- Award of Dean, 1st place in faculty competition TOP10 (IF) in 2019
- Award of Dean, 3rd place in faculty competition TOP10 (IF) in 2020
- Award of Dean, 1st place in faculty competition TOP10 (AIS) in 2021

[Top10 for the best publishing results in 2008](#)

[Top10 for the best publishing results in 2012](#)

[Top10 Excellence for the best publishing results in 2012](#)

[Top10 for the best publishing results in 2015](#)

[Top10 for the best publishing results in 2016](#)

[Top10 for the best publishing results in 2017](#)

[Top10 for the best publishing results in 2018](#)

[Top10 for the best publishing results in 2019](#)

[Top10 for the best publishing results in 2020](#)

[Top10 for the best publishing results in 2021](#)

[Awarded Recognition in Module M1, Methodology M17+ \(2022\)](#). Diploma awarded by the Dean, Faculty of Civil Engineering, BUT.

[Recognized by the Dean of the Faculty of Civil Engineering](#) – Awarded the SIGNUM EXCELLENTIAE Medal, September 2024, for significant contributions to academic excellence.