Curriculum Vitae

PERSONAL INFORMATION

Anna PRODAN (ENE)





CURRENT POSITION

PhD student within IOSUD –Politehnica University Timişoara, Doctoral School of Engineering Studies, in the field of Civil Engineering and Building Services, conducted by the Doctoral Supervisor: Prof. PhD. Eng. Aurel STRATAN _____

PROFESSIONAL EXPERIENCE

2019-2025

Graduate Research and Teaching Assistant

Politehnica University Timișoara

- Research activity focused on the behaviour of steel structures in seismic areas, dissipative structural systems, eccentrically braced frames with replaceable links.
- Teaching activities including "Strength of Materials" discipline, and others.

2024-present

Standardization Expert / Member of CT 343 Technical Committee (WG 3&9)

ASRO - Romanian Standards Association

- Technical verification of SR EN 1999-1-4:2023 Romanian version of Eurocode 9 Design of aluminium structures, and of SR EN 1993-1-13:2025 - Romanian version of Eurocode 3 - Beams with large web openings.
- Contributions to the development and verification of other Romanian versions of European Standards in the field of structural design and analysis for steel and aluminium structures, as well as design provisions for buildings in seismic areas.

EDUCATION

2025 Doctor of Philosophy - PhD, Structural Engineering

Politehnica University Timisoara, Romania

• PhD Thesis title: Seismic response of stainless steel and hybrid links for eccentrically braced frames

Master's degree - MSc, Structural Engineering

OVIDIUS University of Constanta, Romania

 Dissertation title: Studiul zonelor cu concentrări de tensiuni în cazul clădirilor cu pereți structurali din beton armat (Study of stress concentration zones in reinforced concrete shear wall buildings)

Bachelor's degree - BSc Eng, Civil Engineering

Technical University of Moldova, Republic of Moldova

Valedictorian - Faculty of Constructions, Geodesy and Cadastre

RELEVANT SKILLS

Language skills:

Native or bilingual proficiency

Romanian / Russian

Full professional proficiency

Digital proficiency

 Drafting & Architecture: AutoCAD, Autodesk Advance Steel, Advance Concrete, ArchiCAD, SketchUp.

English

- Structural Design: ETABS, SAP2000, Graitec
- Finite Element Analysis: Abaqus CAE; IDEA StatiCa.
- Other: Microsoft Office software package, CorelDRAW Graphics Suite, Adobe Photoshop, InDesign.

Driving License

Category B

Publications

- A. ENE, A. STRATAN, I. BOTH. "Behaviour of Dissimilar Welded Connections of Mild Carbon (S235), Stainless (1.4404), and High-Strength (S690) Steels under Monotonic and Cyclic Loading" (2024). Metals. MDPI
- A. ENE, A. STRATAN. "Pre-test Numerical Modelling of Stainless Steel and Hybrid Links" (2022).
 Proceedings of the 10th International Conference on Behaviour of Steel Structures in Seismic Areas
 STESSA 2022
- A. STRATAN, A. ENE. "Experimental Assessment of Austenitic Stainless Steel Shear Links Under Cyclic Loading" (2024). Proceedings of the 11th International Conference on Behaviour of Steel Structures in Seismic Areas - STESSA 2024
- T. F. VOICA, A. STRATAN, **A. ENE**. "Design of Buckling Restrained Braced Frame Structure for the "Marie Sklodowska Curie" Hospital in Bucharest" (2024). Proceedings of the 11th International Conference on Behaviour of Steel Structures in Seismic Areas STESSA 2024
- A. ENE, A. STRATAN. "Monotonic and Cyclic Modelling of Structural Steel for Finite Element Analysis" (2023). Key Engineering Materials
- A. ENE, I. BOTH, O. ABRUDAN, A. STRATAN, H.F. DAŞCĂU, N. A. SÎRBU. "Experimental Investigation of Monotonic and Cyclic Behaviour of High-Performance Steels" (2023). Key Engineering Materials
- A. ENE, A. STRATAN, I. BOTH, O. ABRUDAN. "Monotonic and cyclic response of mild, stainless, and high-strength steels, and their welded connections" (2023). Proceedings in civil engineering. ce/papers
- V. SZALAI, A. STRATAN, A. CIUTINA, A.D. CLEPE, A. ENE. "Procedure for Generation of Finite Element Models of Steel Members from 3D Scanned Data" (2024). Proceedings of the 4th International Conference "Coordinating Engineering for Sustainability and Resilience" & Midterm Conference of CircularB "Implementation of Circular Economy in the Built Environment" (CESARE 2024). SpringerLink

Research Projects

 R&D project and consultancy «Experimental tests on buckling-restrained braces for the clinical hospital "Maria Sklodowska Curie"».

This research and development project involved overseeing the fabrication of buckling-restrained braces (BRBs) for the structure of the "Maria Sklodowska Curie" Hospital in Bucharest, designed by Popp & Asociaţii SRL. It also encompassed subsequent performance evaluation steps, including the design of the experimental setup, execution of tests, analysis of results, and the preparation of the BRB quality report.

 HYLINK: "Hybrid replaceable links made from stainless and high-strength steels". Grant of the Romanian Ministry of Education and Research, CCCDI - UEFISCDI, project number PN-III-P2-2.1-PED-2019-5427, within PNCDI III

Design, development and experimental assessment of a novel typology of replaceable links for eccentrically braced frames, acting as dissipative fuses for structures in seismic areas. The concept of hybrid links aims at exploiting the superior mechanical characteristics of high-performance steels (including austenitic high-alloy steels and high-strength steels) for increasing their ductility and resilience, thus overall performance of EBF structures at seismic actions.

 FREEDAM Plus: "Valorisation of knowledge for FREE from DAMage Steel connections". Fund for Coal and Steel Grant Agreement No. 899321-RFCS-2019

Project aiming at dissemination and valorisation of the results achieved in FREEDAM project, regarding the novel and resilient solution for the problem of the seismic protection of buildings with a focus on the sustainability issues: beam-to-column connections, able to withstand destructive seismic events without any damage to the steel components.

Awards and honours

- Valedictorian, Faculty of Constructions, Geodesy and Cadastre, Technical University of Moldova, 2016-2017 Academic Year.
- Second Place, Best Bachelor's Thesis of the 2016-2017 Academic Year, Technical University of Moldova
- Second Place, National Session of Student Scientific Communications, Cluj-Napoca, Romania, May 17 – 20, 2018, for the paper titled "Stress concentrations in structural bearing walls: design and execution solutions".

Certifications

 "Creşterea competențelor de standardizare ale experților din comitetele tehnice ASRO/CT" – 2024, Organismul Naţional de Standardizare.