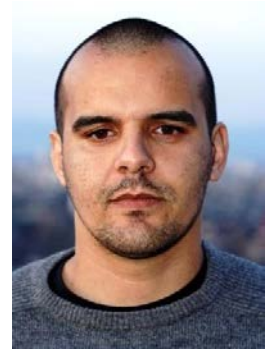


CURRICULUM VITAE

PERSONAL INFORMATION

Name Dimo Siderov Zhelev
Date of birth 23.11.1985
Address Sofia, Bulgaria
Telephone +359 899 127641
Family status Married with two kids
Email **dimo@yantrom.com**
dimosiderov1@gmail.com



EDUCATION

05.2012 – 02.2016

University of Architecture, Civil Engineering and Geodesy, Sofia
Doctoral studies in "Steel, Timber and Plastic Structures" department
Main duties Preparation of doctoral thesis and participation in the teaching activities of the department.
Key achievements FEA with ANSYS APDL of beam-to-column joint with end plate connections subjected to cyclic load are performed. An equation is proposed binding the end plate connection resistance and the equivalent T-stub yielding mechanism to improve the joint ductility. Frame joints with different end plate connection types are compared and the advantages of some of them are revealed.

Granted with degree *Doctor* in scientific speciality Building Structures for thesis entitled "Ductile Behaviour of Beam-to-column Joint with End Plate Connection" in 02.2016.

10.2014 – 05.2015

Chiba University, Graduate School of Engineering, Japan
Exchange research student
Main duties Realization of scientific research in the doctoral thesis, visit and participation in seminars.
Key achievements Preparation of conference paper for the Japan Society of Steel Construction Journal. Conduction of seminars in Chiba University and in major Japanese construction companies.

09.2005 – 07.2009

University of Architecture, Civil Engineering and Geodesy, Sofia
Master's degree in Structural engineering
Main courses Design of reinforced concrete, steel and timber structures
Thesis project Design of complex steel structure for public building, excellent graded.
Key achievements Awarded project for heat insulation of partition wall by BAUMIT, Bulgaria.

TRAINING

10.2009 – 11.2009

Department of Continuing Education in University of Architecture, Civil Engineering and Geodesy
Course with Autodesk Robot Structural Professional software for analysis of structures. Finished with exam with excellent grade.

11.2013 – 04.2014

Department of Continuing Education in University of Architecture, Civil Engineering and Geodesy
Course with ANSYS APDL and CivilFEM software for analysis of structures. Finished with exam with excellent grade.

EMPLOYMENT

05.2008 – 05.2010

SI CONSULT

Civil engineer

Main duties

Preparation of the required calculation and drawings for reinforced concrete structures for residential and public buildings.

Key achievements

Implementation in the working process of specialized software for reinforcement detail and specification ARMCAD. Initiation for the application of Robot Structural Analysis Professional for analysis of the designed structures. Preparation of design charts in MS Excel for strength and deformation capacities of RC elements based on НИПСБК.

05.2010 – 07.2014

Walltopia LTD

Civil engineer

Main duties

Design of steel structures for artificial climbing walls, which contains preparation for calculations for steel structures located in different countries, with concerning the local requirements for structure design. Preparation of 3D CAD models of steel structures. Supervise the production and the assembly of the steel structure. Communication with investors.

Key achievements

Improvement the steel design capabilities of the engineering department. Implementation in the working process of specialized software for steel structures detailing Graitec Advance Steel. Conducting a training course in “Graitec Advance steel” for Walltopia LTD engineering department. Initiation for the application of Robot Structural Analysis Professional for analysis of the designed structures. Preparation of design charts in Mathcad for evaluating the strength capacities of steel elements and connections according to the relevant Eurocodes.

09.2016-01.2018

University of Architecture, Civil engineering and Geodesy, Sofia

Senior researcher

Main duties

Participating in INNOSSEIS project. My participating includes the nonlinear numerical simulations in SAP2000 and ANSYS APDL, performing incremental dynamic analysis of modified braced frame, low cycle fatigue life estimation. Writing part of the INNOSSEIS book, conference paper and translating.

06.2015 – 09.2019

IRCON LTD

Senior Structural Engineer

Main duties

Design of steel structures for industry, including boiler houses, chutes, silos, ducts and etc. Design of steel structures for public buildings. BIM modelling in Revit.

Key achievements

Implementation several software products in working process as Robot Structural Analysis, MidasGen, IdeaStatica, Mathcad.

Key achievements

Lead Structural Engineer

Engineering team training.

10.2019 – till now

YANTROM LTD

Lead Structural Engineer, Managing partner

Main duties

Steel structures design, BIM modeling, using Advance Steel and Revit. Structural calculations in Autodesk Robot, corresponding to Eurocode and ASCE/SEI, AISC. Team management.

LANGUAGES

English, level B2

TECHNICAL SKILLS

Microsoft office, AutoCAD 2D/3D, SAP2000, Autodesk Robot Structural Analysis Professional, MidasGen, Gritec Advance Steel, Mathcad, ANSYS APDL, ANSYS Workbench, Idea Statica Connection, Navisworks, Revit.

SKILLS

Nonlinear analysis of structures in SAP2000, Autodesk Robot and MidasGen. Numerical simulations in ANSYS with concerning geometrical, material and contact nonlinearity. Preparation of 3D BIM models of steel structures with Gritec Advance Steel. BIM modelling and reinforcement in REVIT. Detail knowledge of Eurocode and ASCE/SEI, AISC design codes.

PUBLICATIONS

Zhelev D., Numerical simulation of cyclic load on end plate connection, Proceedings of the METNET Seminar 2014, Moscow.

Zhelev D., Harada Y. and Honma S., Numerical simulation of Mechanical Behavior of Ductile Steel Knee-Brace Member with Built-in Comb-Shaped Damper, Japan Society of Steel Construction Journal (JSSC), 2015.

Partov D., Petkov M., Zhelev D., REDESIGN OF TEMPORARY STEEL FRAME STRUCTURES USED FOR STRENGTHENING OF A GREAT EXCAVATION FOR NEW METRO IN SOFIA, IN THE LIGHT OF ROBUSTNESS STRUCTURES, 3rd International Scientific Meeting E-GTZ, 2016, Tuzla.

D. Partov, M. Petkov, Vl. Matuski., D. Zhelev, Temporary steel structures: for strengthening of a large excavation for new metro in Sofia, Proceedings of Eurosteel 2017

Dissemination EU project under the coordination of Prof. Dr. Eng. Ioannis Vayas and participation of 9 European Universities and two partners. Innovative systems and devices for seismic resistant steel and composite buildings (INNOSEIS).

Tzv. Georgiev, L. Raycheva, D. Zhelev, N. Rangelov, Chapter 9: „Concentrically braced frames with modified braces (CBF-MB)”, book title „INNOVATIVE ANTI-SEISMIC DEVICES AND SYSTEMS“, edited by Ioannis Vayas., pp 269-310, ECCS, 2017; ISBN: 978-92-9147- 136-2.

Tzv. Georgiev, D. Zhelev, L. Raycheva, “PERFORMANCE ASSESSMENT OF CONCENTRICALLY BRACED FRAMES WITH MODIFIED BRACES DEPENDING ON THE APPLIED BEAM-COLUMN JOINTS”. COMPDYN 2017, 6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, M. Papadrakakis, M. Fragiadakis (eds.), Rhodes Island, Greece, 15–17 June 2017.

Tzv. Georgiev, D. Zhelev, L. Raycheva, N. Rangelov, Chapter 10, Volume on case studies for low-rise buildings, INNOSEIS - Valorization of innovative anti-seismic devices, 2017.

***SIGNIFICANT
PROJECTS***

FPA (55m high dry mortar facility) BAUMIT, Yambol, Bulgaria – largest in Bulgaria

Rose Air Hangar, Sofia, Bulgaria – air plane hangar, span 90m

North power station 4 MAN 14V51/60 DF Bermuda subproject: FOT Building (UEM) & Service tank farm (UEK) , Bermuda

GS Dangjin Biomass 2 Power Plant Bag house, South Korea

GS Dangjin Biomass 2 Power Plant: SB silo and PAC Silo, South Korea

FCC Nottingham bag house, UK - steel structure up to 200t

TEES bag house, UK - world largest structure of this type, steel structure up to 1000t

Planta de biomasa DE 49,5MW Cubillos de sil (León), Spain –steel structure up to 30t

New Anode Furnnace, Pirdop, Bulgaria

Nuclear Power Plant Modules for pipe supports, UK – main steel structure up to 90t

Boiler Building in Dosab, Turkey – main steel structure up to 2000t

Boiler Building in Sendai, Japan – main steel structure up to 3000t