

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

| | |
|--|---|
| Surname(s) / First name(s) | Turkalj / Goran |
| Address(es) | Vukovarska 58, HR-51000 Rijeka, Croatia |
| Telephone(s) | +385 51 651 499; mob. +385 91 451 48 96 |
| Fax(es) | +385 51 651 490 |
| E-mail(s), Web address(s) | goran.turkalj@riteh.hr ; goran.turkalj@uniri.hr ; http://www.riteh.uniri.hr |
| Nationality(-ies) | Croatian |
| Date of birth | May 5, 1965 |
| Identification number from Records of Scientific Workers | 198063 |

WORK EXPERIENCE

| | |
|--------------------------------------|--|
| • Dates (from – to) | since 2016 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Vukovarska 58, HR-51000 Rijeka, Croatia |
| Type of business or sector | science and education |
| Occupation or position held | <ul style="list-style-type: none"> - rector's counselor for science and STEM, University of Rijeka (since 2021) - member of Rector's Award Committee for student professional/scientific/artistic work, University of Rijeka (2021) - member of Science Council, University of Rijeka (2018-2022) - rector's assistant for science, University of Rijeka (2018-2021) - vice-rector of University of Rijeka Council (2016-2017) - full professor with tenure (since April 2012) - member of Committee for postgraduate study and science (since October 2022) - head of Department of engineering mechanics (2016-2017; 2019-2022) - head of Laboratory for structural strength testing (since October 2019) - head of <i>Computational mechanics</i> modulus, doctoral study (since October 2019) - head of Section for structural analysis (2016-2017) - head of Laboratory for structural fatigue strength measurement (2016-2019) |
| Main activities and responsibilities | scientific researching, lecturing, professional working |
| • Dates (from – to) | June 2017 – September 2018 |
| Name and address of employer | University of Rijeka, Trg braće Mađuranića 10, HR-51000 Rijeka, Croatia |
| Type of business or sector | vice-rector |
| Occupation or position held | vice-rector for organization and infrastructure management |
| Main activities and responsibilities | university organization, university infrastructure management |
| • Dates (from – to) | October 2010 – September 2016 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Rijeka, Croatia |
| Type of business or sector | management, science and education |
| Occupation or position held | <ul style="list-style-type: none"> - dean of Faculty of Engineering - member of University of Rijeka Senat - full professor with tenure (since April 2012) - head of Section for structural analysis - head of Laboratory for structural fatigue strength measurement |

| | |
|--------------------------------------|---|
| Main activities and responsibilities | managing |
| • Dates (from – to) | April 2007 – April 2012 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Vukovarska 58, HR-51000 Rijeka, Croatia |
| Type of business or sector | science and education |
| Occupation or position held | - full professor - head of Chair for structural analysis - head of Laboratory for numerical structural analysis |
| Main activities and responsibilities | scientific researching, lecturing, professional working |
| • Dates (from – to) | December 2003 – April 2007 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Vukovarska 58, HR-51000 Rijeka, Croatia |
| Type of business or sector | science and education |
| Occupation or position held | - associate professor - head of Chair for structural analysis - head of Laboratory for numerical structural analysis |
| Main activities and responsibilities | scientific researching, lecturing, professional working |
| • Dates (from – to) | September 2003 – March 2004 |
| Name and address of employer | OVV-Održavanje vučnih vozila d.o.o., Zagreb, Croatia |
| Type of business or sector | railway vehicles maintenance |
| Occupation or position held | chief of Workshop Rijeka |
| Main activities and responsibilities | running the maintenance of electric locomotives and trains, diesel locomotives |
| • Dates (from – to) | June 2000 – December 2003 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Rijeka, Croatia |
| Type of business or sector | science and education |
| Occupation or position held | - assistant professor - head of the Chair for Structural Analysis - head of the B.Sc. study of mechanical engineering |
| Main activities and responsibilities | scientific researching, lecturing, professional working |
| • Dates (from – to) | January 1993 – June 2000 |
| Name and address of employer | Faculty of Engineering, University of Rijeka, Rijeka, Croatia |
| Type of business or sector | science and education |
| Occupation or position held | teaching assistant |
| Main activities and responsibilities | scientific researching, working on M.Sc. and D.Sc. theses, teaching, professional working |
| • Dates (from – to) | November 1990 – December 1992 |
| Name and address of employer | Croatian Railways, Workshop for railway vehicles maintenance, Rijeka, Croatia |
| Type of business or sector | railway vehicles maintenance |
| Occupation or position held | - executive manager - maintenance engineer |
| Main activities and responsibilities | maintenance and repair of electrical locomotives and trains, and diesel locomotives |
| • Dates (from – to) | September 1990 – November 1990 |
| Name and address of employer | TORPEDO – engine and tractor factory, Rijeka, Croatia |
| Type of business or sector | production of iron and aluminum castings |
| Occupation or position held | - designer in the foundry |
| Main activities and responsibilities | designing models for producing casting molds |

EDUCATION

| | |
|---|--|
| Date | 1996 – 2000 |
| Place of education | Rijeka |
| Name and type of organisation providing education | Faculty of Engineering, University of Rijeka |
| Title or qualification awarded | D.Sc., structural engineering |

| | |
|---|--|
| Date | 1992 – 1996 |
| Place of education | Rijeka |
| Name and type of organisation providing education | Faculty of Engineering, University of Rijeka |
| Title or qualification awarded | M.Sc., structural engineering |

| | |
|---|--|
| Date | 1985 – 1990 |
| Place of education | Rijeka |
| Name and type of organisation providing education | Faculty of Engineering, University of Rijeka |
| Title or qualification awarded | Univ. Dipl. Ing., mechanical engineering |

| | |
|---|---|
| Date | 1980 – 1984 |
| Place of education | Rijeka |
| Name and type of organisation providing education | Technical High School, Rijeka High School for Economics, Administration, Mathematics and Informatics, Rijeka |
| Title or qualification awarded | mechanical technician |

TRAINING

| | |
|--|---|
| Year | 2014 |
| Place of training | Sveti Martin na Muri, Croatia |
| Name and type of organisation providing training | Faculty of Mechanical Engineering in Slavonski Brod |
| Principal subjects/Occupational skills covered | <i>ME4CataLogue (Mechanical Engineering for Catalogue): Strategic Management Workshop</i> |

| | |
|--|--------------------------------|
| Year | 2012 |
| Place of training | Harbin, China |
| Name and type of organisation providing training | Harbin Institute of Technology |
| Principal subjects/Occupational skills covered | structural mechanics |

| | |
|--|--|
| Year | 2011 |
| Place of training | Rijeka, Croatia |
| Name and type of organisation providing training | University of Rijeka, Embassy of the United States |
| Principal subjects/Occupational skills covered | Strategic Management Workshop |

| | |
|--|---|
| Year | 2008 |
| Place of training | Zadar, Croatia |
| Name and type of organisation providing training | University of Zadar |
| Principal subjects/Occupational skills covered | <i>TEMPUS Capacity Building for Research in Croatia (CBRC): Seminar on Collecting and publishing information about science and scientific productivity in Croatia</i> |

| | |
|--|--|
| Year | 2008. |
| Place of training | Ulm, Germany |
| Name and type of organisation providing training | Zwick/Roell |
| Principal subjects/Occupational skills covered | experimental mechanics |
| Year | 2007 |
| Place of training | Zadar, Croatia |
| Name and type of organisation providing training | University of Zadar |
| Principal subjects/Occupational skills covered | TEMPUS <i>Capacity Building for Research in Croatia</i> (CBRC): Workshop on Research Strategy |
| Year | 2005. |
| Place of training | Udine, Italy |
| Name and type of organisation providing training | International Centre for Mechanical Sciences CISM |
| Principal subjects/Occupational skills covered | mixed finite element technologies |
| Year | 2004. |
| Place of training | Ulm, Germany |
| Name and type of organisation providing training | Zwick/Roell |
| Principal subjects/Occupational skills covered | experimental mechanics |
| Year | 2001. |
| Place of training | Udine, Italy |
| Name and type of organisation providing training | International Centre for Mechanical Sciences CISM |
| Principal subjects/Occupational skills covered | structural stability - modern problems and unconventional solutions |
| Year | 1998. |
| Place of training | Ljubljana, Slovenia |
| Name and type of organisation providing training | University of Ljubljana, Faculty of Mechanical Engineering |
| Principal subjects/Occupational skills covered | finite element method (The MacNeal-Schwendler Corporation: <i>MSC/DYTRAN</i> - <i>MSC/SuperForge</i>) |
| Year | 1996 |
| Place of training | Brno, Czech Republic |
| Name and type of organisation providing training | Technical University of Brno, Faculty of Mechanical Engineering |
| Principal subjects/Occupational skills covered | structural analysis |
| Year | 1994 |
| Place of training | Pula, Croatia |
| Name and type of organisation providing training | Summer School of Computational Mechanics |
| Principal subjects/Occupational skills covered | nonlinear solid mechanics |

| | |
|--|--|
| Year | 1993. |
| Place of training | Ljubljana, Slovenia |
| Name and type of organisation providing training | Kmetijski institut |
| Principal subjects/Occupational skills covered | experimental mechanics (Hottinger Baldwin Messtechnik HBM: <i>Measuring equipments</i>) |

| | |
|--|---|
| Year | 1993. |
| Place of training | Udine, Italija |
| Name and type of organisation providing training | International Centre for Mechanical Sciences CISM |
| Principal subjects/Occupational skills covered | engineering mechanics of fibre reinforced polymers and composite structures |

| | |
|--|--|
| Year | 1991. |
| Place of training | Zagreb |
| Name and type of organisation providing training | Tvornica za remont željezničkih vozila "JANKO GREDELJ" |
| Principal subjects/Occupational skills covered | repair of railway vehicles |

PERSONAL SKILLS AND COMPETENCIES

Mother tongue(s) Croatian

Other language(s)

| | |
|---------------------------------------|----------------------|
| Language | English |
| Speaking | Proficient user (B2) |
| Writing | Proficient user (B2) |
| Understanding (listening and reading) | Proficient user (C1) |

SOCIAL SKILLS AND COMPETENCIES

- team spirit
- good ability to adapt to different job conditions, gained through the work experience

ORGANISATIONAL SKILLS AND COMPETENCIES

- organization and running the railway vehicles maintenance and repair
- organization of teaching activities under the Chair for Structural Analysis
- running the Laboratory for Numerical Structural Analysis
- running the B.Sc. study of mechanical engineering at the Faculty of Engineering, University of Rijeka

TECHNICAL SKILLS AND COMPETENCIES

- analyses in the field of structural mechanics, especially in the cases of an elastic-plastic response analysis of beam-type structures under large displacement regime, structural stability, creep analysis
- in-house developed computer programs for geometrically and materially nonlinear analysis of beam and frame structures, based on the finite element method
- finite element analyses by computer programs: MSC.Patran, MSC.Nastran, MASTAN2
- tensometric measurement using 20-channel digital amplifier HBM DMCplus and software Beam
- mechanical testing of materials on the testing system Zwick/Roell Z400 (400 kN)
- programming: Fortran 77/90
- other software: Microsoft Office, AutoCAD

DRIVING LICENCE(S)

Category B

ADDITIONAL INFORMATION

- ❑ Publications:
 - 2 books and 5 book chapters
 - 108 papers in scientific journals
 - 124 papers in proceedings of scientific conferences
 - 99 professional papers/studies
- ❑ Awards:
 - *Annual National Science Award for 2005* for scientific achievements in the field of engineering;
 - Decoration of the President of the Republic of Croatia: *Oluja Medal*, 1995.
 - Foundation of the University of Rijeka: *Award for the Academic Year 2008/2009 in the fields of engineering and natural science znanosti*;
 - *Memorial* as a sign of recognition and gratitude for the contribution to the development of the University of Rijeka, 2013.
 - Dean's Annual Award: 1989/90.
 - Dean's Annual Award: 1988/89.
- ❑ Head of research projects:
 - *Finite element models for nonlinear analysis of thin-walled beam-type structure* (uniri-tehnic-18-107-1243), University of Rijeka, since 2018.
 - *Development of numerical models for stability analysis of beam-type structure deformation forms* (13.09.1.1.03), University of Rijeka, 2014-2017.
 - *Finite element models for stability analysis of beam-type structures* (069-0691736-1731), Ministry of Science, Education and Sports, Republic of Croatia, 2007-2013.
 - *Numerical stability analysis and optimization of thin-walled beam-type structures* (069-101), Ministry of Science and Technology, Republic of Croatia, 1998-2001.
- ❑ Member of project team:
 - *Estimation of limit load capacity of engineering structures* (IP-2019-04-8615), Croatian Science Foundation, since 2019.
 - *Numerical modeling of FG composite beam-type structures* (uniri-tehnic-18-139-5637), University of Rijeka, since 2018.
 - *Assessment of structural behaviour in limit state operating conditions* (HRZZ-6876), Croatian Science Foundation, 2014-2018.
 - *Material properties, creep behavior, fracture toughness and microstructure of metal alloys: experimental analysis and numerical simulations*, Croatian-Chinese Scientific and Technological Cooperation, 2014-2015.
 - *Influence of Heat Affected Zone of electron beam welded steel casting GX4CrNi13-4 on the fatigue strength*, Croatian-Austrian bilateral project, 2014-2015.
 - *Metal alloys behaviour at different environmental conditions: testing and numerical simulations*, Croatian-Chinese Scientific and Technological Cooperation, 2009-2011.
 - *Numerical analysis of structural response for specific service conditions* (069-0691736-1737), Ministry of Science, Education and Sports, Republic of Croatia, 2007-2013.
 - Tempus Joint European Project: *Capacity Building for Research in Croatia*, Grant No. JEP-40086-2005, European Office, University of Split, Croatia, University of Bristol, Bristol, UK; Directorate-General Education and Culture, European Commission, 2007-2009.
 - *Numerical analysis of nonlinear problems in design and manufacturing* (0069-006), Ministry of Science and Technology, Republic of Croatia, 2002-2006.
 - *Numerical optimization in design and manufacturing* (069-001), Ministry of Science and Technology, Republic of Croatia, 1998-2001.
 - *Structural analysis of objects for optimal efficiency* (2-08-011), Ministry of Science and Technology, Republic of Croatia, 1993-1996.
- ❑ Memberships:
 - Ministry of Labor, Pension System, Family and Social Policy of the Republic of Croatia: *sector expert* in the field of *Basic Technical Sciences*, since 2021.
 - University of Rijeka: *Science Council*, 2018-2022.

- Ministry of Science and Technology of the Republic of Croatia: *Sectorial Council XVI. Fundamental Technical Sciences*, Croatian Qualifications Framework, 2017-2021.
 - University of Rijeka: *University Council*, 2016-2017.
 - National Council for Science of the Republic of Croatia: *Scientific Area Council for Engineering*, 2013-2017.
 - Deans' and Academic Directors' Honor Committee, DAAAM International Vienna, Vienna, Austria, since 2011.
 - University of Rijeka: *Senate*, 2010-2016.
 - EUROMECH, 2008-2013.
 - University of Rijeka: *Scientific Work Council*, 2007-2010.
 - IUTAM General Assembly, since 2006.
 - National Council for Science of the Republic of Croatia: *Scientific Field Committee for Engineering* – fields of mechanical engineering, naval architecture, traffic engineering and transportation, rocket and space techniques, 2005-2013.
 - Structural Stability Research Council (SSRC), since 2004.
 - Young Researchers' and Scientists' International Committee, DAAAM International Vienna, Vienna, Austria, 2001-2004.
 - Croatian Society of Mechanics, since 1993.
- Reviews – books, textbooks, manuals:
- Kravanja, S., Žula, T.: *Manual for work with the program for optimization of high-pressure steel penstocks with stiffener rings PIPEOPT-SR, version 1,0*, University of Maribor Press, Maribor, 2023.
 - Žula, T., Kravanja, S.: *Manual for work with the program for optimization of the composite floor system with the plastic resistance of the beam from the steel profiles IPE COMBOPT-PIPE, version 1,0*, University of Maribor Press, Maribor, 2023.
 - Alfirević, I.: *History of classical mechanics with reference to the history of related sciences* (in Croatian), University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb, 2021.
 - Brnić, J.: *Fundamentals of optimization of mechanical structures* (in Croatian), University of Rijeka, Faculty of Engineering, Rijeka, 2013.
 - Alfirević, I., Saucha, J., Tonković, Z., Kodvanj, J.: *Introduction to mechanics I: Statics of rigid bodies* (in Croatian), Golden marketing, Zagreb, 2010.
 - Alfirević, I., Saucha, J., Tonković, Z., Kodvanj, J.: *Introduction to mechanics II: Applied statics* (in Croatian), Golden marketing, Zagreb, 2010.
 - Brnić, J.: *Statics* (in Croatian), University of Rijeka, Faculty of Engineering, Rijeka, 2004.
- Reviews – journals:
- *Composite Structures*, Ferreira, A. (Ed.), Elsevier
 - *Thin-Walled Structures*, Silvestre, N. (Ed.), Elsevier. Computers & Structures, Bathe, K. J. & Topping, B. H. V. (Eds.), Elsevier Ltd.
 - *Structures*, Gardner, L. (Ed.), Elsevier.
 - *International Journal of Structural Stability and Dynamics*, Yang, Y. B., Wang, C. M. & Reddy, J. N. (Eds.), World Scientific Publishing.
 - *International Journal for Numerical Methods in Engineering*, Lewis, R. W. & Belytscko, T. (Eds.), John Wiley & Sons, Ltd.
 - *Communications in Numerical Methods in Engineering*, Lewis, R. W. & Carey G. F. (Eds.), John Wiley & Sons, Ltd.
 - *International Journal of Steel Structures*, Lee, E.-T., Gardner, L., Li, G., Roeder, C. (Eds.), Springer.
 - *Journal of Zhejiang University – SCIENCE A*, Wei Yang (Ed.), Zhejiang University Press & Springer-Verlag GmbH.
 - *Applied Mathematical Modelling*, Cross, M. (Ed.), Elsevier Ltd.
 - *Journal of Engineering Mechanics*, Willam, K. J. (Ed.), ASCE American Society of Civil Engineers.
 - *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, Chew, J. W. (Ed.), Sage Publications.

- *Transactions of FAMENA*, Alfirević, I., Filetin, T., Sorić, J. & Terze, Z. (Eds.), University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb.
- *Steel and Composite Structures*, Choi, C. K., Lam, D. & Uy, B. (Eds.), Techno-Press, Yuseong, Daejeon, Korea.
- *NED University Journal of Research – Structural Mechanics*, Rafi, M. M. (Ed.), NED University of Engineering and Technology, Karachi.

□ Invited lectures:

- Lanc, D., Turkalj, G., Banić, D., Kvaternik Simonetti, S.: FG model for global buckling analysis of composite beams, 25th International Conference on *Composites of Structures ICCS25*, Faculty of Engineering, University of Porto, Porto, Portugal, 19-21 July 2022.
- Lanc, D., Turkalj, G., Kvaternik Simonetti, S.: FG beam thermal buckling analysis, 7th International Conference on *Mechanics of Composites MECHCOMP7*, Book of Abstracts, Faculty of Engineering, University of Porto, Porto, Portugal, 1-3 September 2021.
- Lanc, D., Turkalj, G., Brnić, J., Pešić, I.: *Buckling analysis of laminated composite box beams*, The Eighth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS 2016, Seattle, Washington, USA, October 14-17, 2016.
- Turkalj, G.: *Updated Lagrangian formulation for large displacement analysis of beam-type structures*, School of Materials Science and Technology, Harbin Institute of Technology, Harbin, China, January 18-22, 2016.
- Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: *Behavior of high strength low-alloy (HSLA) steel at elevated temperatures*, The Fifth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS'2007, Zhengzhou, China, October 23-27, 2007.
- Lanc, D., Turkalj, G., Brnić, J.: *An algorithm for numerical creep buckling analysis of beam-type structures*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 31-June 3, 2007.
- Turkalj, G., Vizentin, G., Lanc, D.: *FE stability analysis of elastic frames accounting for connections flexibility*, The Eleventh Symposium of Mathematics and its Applications, Timoșoara, Romania, November 2-5, 2006.
- Turkalj, G., Brnić, J., Lanc, D.: *Shear flexible beam finite element analysis using Eulerian approach*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, June 1-4, 2006.
- Turkalj, G., Lanc, D., Brnić, J.: *Buckling analysis of beam structures using Eulerian approach*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 26-29, 2005.
- Turkalj, G., Lanc, D., Brnić, J.: *An algorithm in computer stability analysis of elastic thin-walled beam structures*, Pannonian Applied Mathematical Meetings PAMM, Göd-Budapest, Hungary, September 16-19, 2004.
- Brnić, J., Turkalj, G.: *New finite elements in shear stress analysis of Saint-Venant's torsional loaded beam structures*, The Fourth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS'2004, Shanghai, China, May 17-20, 2004.
- Brnić, J., Turkalj, G., Čanadija, M.: *Application of finite element structural optimization in naval architecture*, The 10th International Symposium of Mathematics and its Applications, "Politehnica" University of Timisoara, Timisoara, Romania, November 6-9, 2003.
- Turkalj, G., Brnić, J.: *Thin-walled beam element for analysis of large displacement problems*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 13-16, 1999.
- Turkalj, G., Brnić, J.: *Computational non-linear analysis of structural stability*, Pannonian Applied Mathematical Meetings, Göd-Budapest, Hungary, January 21-24, 1999.
- Brnić, J., Turkalj, G., Čanadija, M.: *Optimal design procedure based on the viscoplastic material behaviour*, The Third International Conference on Physical and Numerical Simulation of Materials and Hot Working ICPNS '99, Peking, China, 1999.
- Brnić, J., Turkalj, G.: *Finite element formulation of flattening process as a plane-strain problem*, Pannonian Applied Mathematical Meetings, Balatonalmadi, Hungary, 1998.

- Brnić, J., Čanadija, M., Turkalj, G.: *Finite element modelling of creep phenomenon of different materials*, International Conference on *Recent Advances in Metallurgical Processes* (ICRAMP '97), Bangalore, India, 1997.
- Brnić, J., Turkalj, G.: *Structural optimization via plastic design criteria*, Pannonian Applied Mathematical Meetings, Göd-Budapest, Hungary, 1996.
- ☐ Mentorship: 4 Ph.D., 2 M.Sc., 6 Mag.Eng./Univ.Dipl.Ing., 17 B.Sc.
- ☐ Member of Karate club TAD-Rijeka: black belt 2nd DAN.

ANNEXES Publication list

SIGNATURE



Prof. Goran TURKALJ, D.Sc. – PUBLICATION LIST

1. M.Sc. thesis:

Turkalj, G.: *Numerical analysis of plane frames stability*, (in Croatian), University of Rijeka, Faculty of Engineering, Rijeka, 1996.

2. D.Sc. thesis:

Turkalj, G.: *Non-linear stability analysis of thin-walled beam-type structures*, (in Croatian), University of Rijeka, Faculty of Engineering, Rijeka, 2000.

3. Books:

1. Brnić, J., Turkalj, G.: *Strength of Materials II*, (in Croatian), Zigo, Rijeka, 2006.
2. Brnić, J., Turkalj, G.: *Strength of Materials I*, (in Croatian), University of Rijeka, Faculty of Engineering, Rijeka, 2004.

4. Book chapters:

1. Turkalj, G., Brnić, J., Lanc, D.: Elastic-plastic large displacement analysis of thin-walled beam type structures, in Bontempi, F. (ed.): *System-based Vision for Strategic and Creative Design*, Vol. 1, A.A. Balkema Publisher, Swets & Zeitlinger, Lisse, 2003.
2. Turkalj, G., Brnić, J., Lanc, D.: Non-linear formulation for elastic stability analysis of thin-walled beam-type structures, in Jármay, K. & Farkas, J. (eds.): *Metal Structures: Design, Fabrication, Economy*, Millpress, Rotterdam, 2003.
3. Turkalj, G., Brnić, J.: Nonlinear finite element stability analysis of elastic thin-walled framed structures, in Katalinic, B. (ed.): *DAAAM International Scientific Book 2002*, DAAAM International Vienna, Vienna, 2002.
4. Brnić, J., Čanađija, M., Turkalj, G.: Finite elastoplasticity in plane strain cold rolling problem, in Kuljanić, E. (ed.): *Advanced Manufacturing Systems and Technology*, CISM Courses and Lectures No. 437, Springer-Verlag, Wien–New York, 2002.
5. Brnić, J., Čanađija, M., Turkalj, G.: Comparison of measured and computed contact pressure distribution in cold sheet rolling process, in Kuljanić, E. (ed.): *Advanced Manufacturing Systems and Technology*, CISM Courses and Lectures No. 406, Springer-Verlag, Wien–New York, 2002.

5. Journal papers:

a) journals indexed in CC, SCI and/or SCI Exp

1. Banić, D., Turkalj, G., Lanc, D.: Stability analysis of shear deformable cross-ply laminated composite beam-type structures, *Composite Structures*, **303**, 2023, art. no. 116270.
2. Pešić, I., Turkalj, G.: Large displacement analysis of laminated beam-type structures, *Engineering Review*, **43** (2), 2023, doi.org/10.30765/er.2184.
3. Kvaternik Simonetti, S., Turkalj, G., Lanc, D.: Thermal buckling analysis of thin-walled closed section FG beam-type structures, *Thin-walled structures*, **181**, 2022, art. no. 110075.
4. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Numerical model for geometrically nonlinear analysis of beams with composite cross-section, *Journal of Composites Science*, **6**, 377, 2022.
5. Kvaternik Simonetti, S., Turkalj, G., Lanc, D., Banić, D.: Bimetallic thin-walled box beam thermal buckling response, *Materials*, **15**, 7535, 2022.
6. Randić, M., Pavletić, D., Turkalj, G.: Multiparametric investigation of welding techniques on toe radius of high strength steel at low-temperature levels using 3D-scanning techniques, *Metals*, **9**, 1355, 2019.

7. Kvaternik, S., Filippi, M., Lanc, D., Turkalj, G., Carrera, E.: Comparison of classical and refined beam models applied on isotropic and FG thin-walled beams in nonlinear buckling response, *Composite Structures*, **229**, 2019, art. no. 111490.
8. Turkalj, G., Lanc, D., Banić, D., Brnić, J., Vo, T. P.: A shear-deformable beam model for stability analysis of orthotropic composite semi-rigid frames, *Composite Structures*, **189**, 2018, pp. 648-660.
9. Kvaternik, S., Turkalj, G., Lanc, D.: Analysis of flexure, torsion and buckling of thin-walled frames with a focus on the joint warping behaviour, *Transactions of FAMENA*, **41** (4), 2017, pp. 1-10.
10. Brnić, J., Krščanski, S., Lanc, D., Brčić, M., Turkalj, G., Čanadija, M., Niu, J.: Analysis of the mechanical behavior, creep resistance and uniaxial fatigue strength of martensitic steel X46Cr13, *Materials*, **10**, 2017, doi:10.3390/ma10040388.
11. Brnić, J., Turkalj, G., Krščanski, S., Vukelić, G., Čanadija, M.: Uniaxial properties versus temperature, creep and impact energy of an austenitic steel, *High Temperature Materials and Processes*, **36** (2), 2017, pp. 135-143.
12. Lanc, D., Turkalj, G., Vo, T. P., Brnić, J.: Nonlinear buckling behaviours of thin-walled functionally graded open section beams, *Composite Structures*, **152**, 2016, pp. 829-839.
13. Pešić, I., Lanc, D., Turkalj, G.: Non-linear global stability analysis of thin-walled laminated beam-type structures, *Computers & Structures*, **173**, 2016, pp. 19-30.
14. Banić, D., Turkalj, G., Brnić, J.: Finite element stress analysis of elastic beams under non-uniform torsion, *Transactions of FAMENA*, **40** (2), 2016, pp. 71-82.
15. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D., Krščanski, S., Brčić, M., Li, Q., Niu, J.: Mechanical properties, short time creep and fatigue of an austenitic steel, *Materials*, **9**, 2016, doi:10.3390/ma9040298.
16. Brnić, J., Turkalj, G., Krščanski, S., Niu, J., Li, Q.: Changes in the Material Properties of Steel 1.4762 Depending on the Temperature, *High Temperature Materials and Processes*, **35** (8), 2016, pp. 761-767.
17. Turkalj, G., Lanc, D., Brnić, J., Pešić, I.: A beam formulation for large displacement analysis of composite frames with semi-rigid connections, *Composite Structures*, **134**, 2015, pp. 237-246.
18. Brnić, J., Turkalj, G., Čanadija, M., Krščanski, S., Brčić, M., Lanc, D.: Deformation behavior and material properties of austenitic heat – resistant steel X15CrNiSi25-20 subjected to high temperatures and creep, *Materials and Design*, **69**, 2015, pp. 219-229.
19. Lanc, D., Vo, T. P., Turkalj, G., Lee, J.: Buckling analysis of thin-walled functionally graded sandwich box beams, *Thin-Walled Structures*, **86**, 2015, pp. 148-156.
20. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D., Brčić, M.: Study of the effects of high temperatures on the engineering properties of steel 42CrMo4, *High Temperature Materials and Processes*, **34** (1), 2015, pp. 27-34.
21. Lanc, D., Turkalj, G., Pešić, I.: Global buckling analysis model for thin-walled composite laminated beam type structures, *Composite Structures*, **111**, 2014, pp. 371-380.
22. Brnić, J., Turkalj, G., Krščanski, S., Lanc, D., Čanadija, M., Brčić, M.: Information relevant for the design of structure: Ferritic – Heat resistant high chromium steel X10CrAlSi25, *Materials and Design*, **63**, 2014, pp. 508-518.
23. Brnić, J., Turkalj, G., Lanc, D., Čanadija, M., Brčić, M., Vukelić, G.: Comparison of material properties: Steel 20MnCr5 and similar steels, *Journal of Constructional Steel Research*, **95** (1), 2014, pp. 81-89.
24. Brnić, J., Turkalj, G., Niu, J., Čanadija, M., Lanc, D.: Significance of experimental data in the design of structures made from 1.4057 steel, *Journal of Wuhan University of Technology-Mater. Sci. Ed.*, **29** (1), 2014, pp. 131-136.
25. Brnić, J., Turkalj, G., Čanadija, M., Niu, J.: Experimental determination and prediction of the mechanical properties of steel 1.7225, *Materials Science and Engineering: A*, **600**, 2014, pp. 47-52.
26. Brnić, J., Turkalj, G., Krščanski, S.: Experimental research and analysis of non-alloy structural steel response exposed to high temperature conditions, *High Temperature Materials and Processes*, **32** (2), 2013, pp. 163-169.
27. Kravanja, S., Turkalj, G., Šilih, S., Žula T.: Optimal design of single-story steel building structures based on parametric MINLP optimization, *Journal of Constructional Steel Research*, **81** (1), 2013, pp. 86-103.
28. Brnić, J., Turkalj, G., Lanc, D., Čanadija, M., Brčić, M., Vukelić, G., Munjas, N.: Testing and analysis of X39CrMo17-1 steel properties, *Construction and Building Materials*, **44**, 2013, pp. 393-301.

29. Brnić, J., Turkalj, G., Niu, J., Čanadija, M., Lanc, D.: Analysis of experimental data on the behavior of steel S275JR – Reliability of modern design, *Materials and Design*, **47**, 2013, pp. 497–504.
30. Turkalj, G., Brnić, J., Lanc, D., Kravanja, S.: Updated Lagrangian formulation for nonlinear stability analysis of thin-walled frames with semi-rigid connections, *International Journal of Structural Stability and Dynamics*, **12** (3), 2012, art. no. 1250013 (23).
31. Brnić, J., Turkalj, G., Vukelić, G., Brčić, M.: Analysis of the dependence of material properties on temperature – steel 1.4122, *High Temperature Materials and Processes*, **31** (3), 2012, pp. 259-266.
32. Brnić, J., Vukelić, G., Turkalj, G.: Crack driving force prediction based on finite element analysis using standard models, *Structural Engineering and Mechanics*, **44** (5), 2012, pp. 601-609.
33. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D., Krščanski, S.: Responses of austenitic stainless steel American Iron and Steel Institute (AISI) 303 (1.4305) subjected to different environmental conditions, *Journal of Testing and Evaluation*, **40** (2), 2012, pp. 319-328.
34. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Loading and responses of austenitic stainless steels at elevated temperatures, *High Temperature Materials and Processes*, **30** (6) 2011, pp. 579-586.
35. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Brčić, M., Vukelić, G.: Effect of elevated temperatures on behavior of structural steel 50CrMo4, *High Temperature Materials and Processes*, **30** (1/2) 2011, pp. 121-125.
36. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D., Krščanski, S.: Martensitic stainless steel AISI 420 – mechanical properties, creep and fracture toughness, *Mechanics of Time-Dependent Materials*, **15** (4), 2011, pp. 341-352.
37. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: AISI 316Ti (1.4571) steel – Mechanical, creep and fracture properties versus temperature, *Journal of Constructional Steel Research*, **67** (12), 2011, pp. 1948-1952.
38. Turkalj, G., Brnić, J., Kravanja, S.: A beam model for large displacement analysis of flexibly connected thin-walled beam-type structures, *Thin-Walled Structures*, **49** (8), 2011, pp. 1007-1016.
39. Brnić, J., Niu, J., Turkalj, G., Čanadija, M., Lanc, D.: Behavior of HSLA A709 Steel at Different Environmental Conditions, *Journal of Wuhan University of Technology-Mater. Sci. Ed.*, **25** (6), 2010, pp. 897-902.
40. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Behavior of S355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep, *Bulletin of Materials Science*, **33** (4), 2010, pp. 475-481.
41. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Structural steel ASTM A709-behavior at uniaxial tests conducted at lowered and elevated temperatures, short-time creep response and fracture toughness calculation, *Journal of Engineering Mechanics*, **136** (9), 2010, pp. 1083-1089.
42. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: 50CrMo4 steel-determination of mechanical properties at lowered and elevated temperatures, Creep Behavior and Fracture Toughness Calculation, *Journal of Engineering Materials and Technology*, **132** (2), 2010, pp. 021004-1-021004-6.
43. Brnić, J., Turkalj, G., Čanadija: Shear stress analysis in engineering beams using deplanation field of special 2-D finite elements, *Meccanica*, **45** (2), 2010, pp. 227-235.
44. Brnić, J., Niu, J.; Turkalj, G., Čanadija, M., Lanc, D.: Experimental determination of mechanical properties and short-time creep of AISI 304 steel at elevated temperatures, *International Journal of Minerals, Metallurgy and Materials*, **17** (1), 2010, pp. 39-45.
45. Turkalj, G., Lanc, D., Brnić, J.: Large displacement beam model for creep buckling analysis of framed structures, *International Journal of Structural Stability and Dynamics*, **9** (1), 2009, pp. 1-23.
46. Lanc, D., Turkalj, G., Brnić, J.: Large displacement analysis of beam-type structures considering elastic-plastic material behaviour, *Materials Science and Engineering: A*, **499** (1-2), 2009, pp. 142-146.
47. Brnić, J., Lanc, D., Turkalj, G., Čanadija, M.: Comparison of both creep resistance and material properties of HSLA steel and stainless steel, *Journal of Testing and Evaluation*, **37** (4), 2009, pp. 358-363.
48. Turkalj, G., Brnić, J., Vizentin, G., Lanc, D.: Numerical simulation of instability behaviour of thin-walled frames with flexible connections, *Materials Science and Engineering: A*, **499** (1-2), 2009, pp. 74-77.
49. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Comparison of mechanical properties and creep responses of HSLA steels, *Transactions of FAMENA*, **33** (1), 2009, pp. 23-30.
50. Brnić, J., Niu, J., Čanadija, M., Turkalj, G., Lanc, D.: Behavior of AISI 316L steel subjected to uniaxial state of stress at elevated temperatures, *Journal of Materials Science and Technology*, 2009, **25** (2), 2009, pp. 175-180.

51. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Creep behavior of high strength low-alloy (HSLA) steel at elevated temperatures, *Materials Science and Engineering: A*, **499** (1-2), 2009, pp. 23-27.
52. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Pepelnjak, T., Barišić, B., Vukelić, G., Brčić, M.: Tools Material Behavior at Elevated Temperatures, *Materials and Manufacturing Processes*, **24** (7 & 8), 2009, pp. 758-762.
53. Lanc, D., Turkalj, G., Brnić, J.: Finite element model for creep buckling analysis of beam-type structures, *Communications in Numerical Methods in Engineering*, **24** (11), 2008, pp. 989-1008.
54. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Krščanski, S.: Response of AISI 304 steel subjected to uniaxial stress at elevated temperatures, *Transactions of FAMENA*, **32** (2), 2008, pp. 3-10.
55. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Finite element modeling and shear stress analysis of engineering structural elements, *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **222** (G6), 2008, pp. 861-872.
56. Vukelić, G., Brnić, J., Čanadija, M., Turkalj, G., Brčić, M., Pešić, I.: Two-dimensional numerical modeling of high pressure pipelines with axial flaws, *Transactions of FAMENA*, **32** (1), 2008, pp. 1-7.
57. Turkalj, G., Vizentin, G., Lanc, D.: Finite element modelling of the behaviour of connections in the stability analysis of thin-walled beam-type structures, *Transactions of FAMENA*, **31** (1), 2007, pp. 25-36.
58. Turkalj, G., Brnić, J., Prpić-Oršić, J.: ESA formulation for large displacement analysis of framed structures with elastic-plasticity, *Computers & Structures*, **82** (23-26), 2004, pp. 2001-2013.
59. Turkalj, G., Brnić, J.: Non-linear stability analysis of thin-walled frames using UL-ESA formulation, *International Journal of Structural Stability and Dynamics*, **4** (1), 2004, pp. 45-67.
60. Brnić, J., Turkalj, G.: New finite elements in shear stress analysis of Saint-Venant's torsional loaded beam structures, *Journal of Materials Science and Technology*, **19** (1), 2003, pp. 151-153.
61. Turkalj, G., Brnić, J., Prpić-Oršić, J.: Large rotation analysis of elastic thin-walled beam-type structures using ESA approach, *Computers & Structures*, **81** (18-19), 2003, pp. 1851-1864.
62. Brnić, J., Turkalj, G., Čanadija, M.: Optimal design procedure based on viscoplastic material behaviour, *Acta Metallurgica Sinica*, **13** (2), 2000, pp. 587-592.
63. Turkalj, G., Brnić, J.: Large rotations elastic buckling analysis of thin-walled beam structures, (in Croatian), *Strojarstvo*, **42** (5, 6), 2000, pp. 217-230.

b) journals indexed in other bases:

1. Turkalj, G., Banić, D., Lanc, D.: Stability analysis of shear-deformable composite beam-type structures, *Structural Stability Research Council Newsletter*, April 2021, pp. 20-22.
2. Kvaternik, S., Turkalj, G., Banić, D.: Finite element analysis of torsional-flexural behaviour of thin-walled frame considering joint warping conditions, *Trans & Motauto World*, **II** (5), 2017, pp. 181-183.
3. Lanc, D., Turkalj, G., Pešić, I.: Effect of shear flexibility in buckling analysis of beam structures, *International virtual journal for science, technics and innovations for the industry MACHINES, TECHNOLOGIES, MATERIALS*, **7**, 2015, pp. 58-61.
4. Brnić, J., Niu, J., Turkalj, G., Čanadija, M., Lanc, D., Brčić, M., Krščanski, S., Vukelić, G.: Comparison of material properties and creep behavior of 20MnCr5 and S275JR steels, *Materials Science Forum*, **762**, 2013, pp. 47-54.
5. Krščanski, S., Turkalj, G.: FEM stress concentration factors for fillet welded CHS-plate T-joint, *Engineering Review*, **32** (3), 2012, pp. 147-155.
6. Štimac, G., Turkalj, G., Žigulić, R.: Dynamic analysis of a cantilever column subjected to compressive force, *Engineering Review*, **28** (1), 2008 pp. 1-10.
7. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Response of stainless steel at elevated temperature – short time creep test, *Bulletins for Applied & Computer Mathematics*, **CX** (BAM-2306), PAMM-Centre, Budapest University of Technology and Economics, 2007, pp. 81-86.
8. Pešić, I., Turkalj, G.: Analiza izvijanja roštiljne konstrukcije metodom konačnih elemenata, *Engineering Review*, **27** (1), 2007, pp. 39-47.
9. Lanc, D., Turkalj, G., Brnić, J.: An algorithm for numerical creep buckling analysis of beam-type structures, *Bulletins for Applied & Computer Mathematics*, **CX** (BAM-2302), PAMM-Centre, Budapest University of Technology and Economics, 2007, pp. 55-60.

10. Turkalj, G., Vizentin, G., Lanc, D.: FE stability analysis of elastic frames accounting for connections flexibility, *Scientific Bulletin of the "Politehnica" University of Timisoara, Transactions on Mathematics & Physics*, **51(65)** (2), 2006, pp. 41-49.
11. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Finite element panel method in beam shearing stress analysis, *Mashinostroene*, **LV** (7-8), 2006, pp. 76-78.
12. Turkalj, G., Vizentin, G., Brnić, J., Lanc, D.: Finite element buckling analysis of frames with flexible connections, *Mashinostroene*, **LV** (7-8), 2006, pp. 72-75.
13. Rončević, B., Turkalj, G.: Primjena plastičnih zglobova u analizi okvirnih konstrukcija metodom konačnih elemenata, *Engineering Review*, **26**, 2006, pp. 75-87.
14. Turkalj, G., Čehić, Z., Brnić, J.: A beam model for the buckling analysis of curved beam-type structures considering curvature effects, *Transactions of FAMENA*, **30** (1), 2006, pp. 1-16.
15. Turkalj, G., Brnić, J., Vizentin, G., Lanc, D.: Modelling of connections in FE stability analysis of framed structures, *Bulletins for Applied & Computer Mathematics*, **CIX** (BAM-2284), PAMM-Centre, Budapest University of Technology and Economics, 2006, pp. 91-96.
16. Brnić, J., Čanadija, M., Turkalj, G., Vukelić, G.: Comparison of numerical and analytical solutions in bulkheads plastification, *Bulletins for Applied & Computer Mathematics*, **CIX** (BAM-2281), PAMM-Centre, Budapest University of Technology and Economics, 2006, pp. 68-75.
17. Turkalj, G., Brnić, J., Lanc, D.: Shear flexible beam finite element analysis using Eulerian approach, *Bulletins for Applied & Computer Mathematics*, **CIX** (BAM-2285), PAMM-Centre, Budapest University of Technology and Economics, 2006, pp. 97-104.
18. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Application of special 2-D triangular finite elements in analysis and design of thin-walled beam-type structures, *Mashinostroene*, **LIV** (5), 2005, pp. 37-40.
19. Turkalj, G., Lanc, D., Brnić, J.: Buckling analysis of beam structures using Eulerian approach, *Bulletins for Applied & Computer Mathematics*, **CVIII**, PAMM-Centre, Budapest University of Technology and Economics, 2005, pp. 15-20.
20. Čehić, Z., Turkalj, G., Vizentin, G.: Buckling analysis of curved beam considering curvature effects, *Bulletins for Applied & Computer Mathematics*, **CVIII**, PAMM-Centre, Budapest University of Technology and Economics, 2005, pp. 29-34.
21. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Structure life time prediction based on fracture mechanics concept, *Bulletins for Applied & Computer Mathematics*, **CVIII**, PAMM-Centre, Budapest University of Technology and Economics, 2005, pp. 1-6.
22. Lanc, D., Turkalj, G., Brnić, J.: Linear stability analysis of shear flexible thin-walled beams, *Proceedings of the Estonian Academy of Sciences: Engineering*, **10** (4), 2004, pp. 1-9.
23. Turkalj, G., Lanc, D., Brnić, J.: An algorithm in computer stability analysis of elastic thin-walled beam structures, *Bulletins for Applied & Computer Mathematics*, **CVII** (BAM-2227), PAMM-Centre, Budapest University of Technology and Economics, 2004, pp. 39-46.
24. Turkalj, G., Brnić, J., Vizentin, G.: Finite element model for initial stability analysis of semi-rigid frames, *Bulletins for Applied & Computer Mathematics*, **CVII** (BAM-2226), PAMM-Centre, Budapest University of Technology and Economics, 2004, pp. 31-38.
25. Turkalj, G., Brnić, J., Čehić, Z.: Finite element analysis of curved beam stability problems, *Bulletins for Applied & Computer Mathematics*, **CVII** (BAM-2225), PAMM-Centre, Budapest University of Technology and Economics, 2004, pp. 23-30.
26. Brnić, J., Turkalj, G., Čanadija, M.: Structural optimization based on viscoplastic constraints, *Bulletins for Applied & Computer Mathematics*, **CV** (BAM-2076B/2003), PAMM-Centre, Budapest University of Technology and Economics, 2003, pp. 451-460.
27. Turkalj, G., Čanadija, M., Vizentin, G.: Free vibration of biclamped beam-type structures, *Bulletins for Applied & Computer Mathematics*, **CIII** (BAM-2078/2003), PAMM-Centre, Technical University of Budapest, 2003, pp. 35-42.
28. Brnić, J., Turkalj, G., Čanadija, M.: Application of finite element structural optimization in naval architecture, *Scientific Bulletin of the "Politehnica" University of Timisoara, Transactions on Mathematics & Physics*, 2003, pp. 353-365.
29. Brnić, J., Turkalj, G., Roščić, S.: A general framework of a unique optimum, *Bulletins for Applied & Computer Mathematics*, **CIII** (BAM-2075/2003), PAMM-Centre, Technical University of Budapest, 2003, pp. 7-16. [Zentralblatt MATH]

30. Lanc, D., Brnić, J., Turkalj, G.: Finite element modeling of creep material behaviour, *Bulletins for Applied & Computer Mathematics*, **C** (BAM-2032/2002), PAMM-Centre, Technical University of Budapest, 2002, pp. 481-488.
31. Brnić, J., Turkalj, G., Roščić, S.: Numerical modeling of free vibration response of open thin walled structures, *Bulletins for Applied & Computer Mathematics*, **C** (BAM-2033/2002), PAMM-Centre, Technical University of Budapest, 2002, pp. 489-496.
32. Turkalj, G., Brnić, J.: Thin-walled beam element for analysis of large displacement problems, *Bulletins for Applied & Computer Mathematics*, **LXXXIX** (BAM-1634/99), PAMM-Centre, Technical University of Budapest, 1999, pp. 15-24.
33. Turkalj, G., Brnić, J.: Computational non-linear analysis of structural stability, *Bulletins for Applied & Computer Mathematics*, **LXXXVIII** (BAM-1613/99), PAMM-Centre, Technical University of Budapest, 1999, pp. 15-24.
34. Brnić, J., Turkalj, G.: Finite element formulation of flattening process as a plane-strain problem, *Bulletins for Applied & Computer Mathematics*, **LXXXV-A** (BAM-1471/98), PAMM-Centre, Technical University of Budapest, 1998, pp. 249-260.
35. Turkalj, G., Brnić, J.: Finite element analysis of purely torsional buckling of thin-walled structures caused by uniform axial compression, *Bulletins for Applied & Computer Mathematics*, **LXXXV-A** (BAM-1453/98), PAMM-Centre, Technical University of Budapest, 1998, pp. 79-86.
36. Turkalj, G., Brnić, J.: Numerical comparable stability analysis of thin-walled beam structures for different cross-sectional shapes, *Bulletins for Applied & Computer Mathematics*, **LXXXIV** (BAM-1431/98), PAMM-Centre, Technical University of Budapest, 1998, pp. 91-98.
37. Brnić, J., Turkalj, G.: Wrinkling and Euler buckling, *Bulletins for Applied & Computer Mathematics*, **LXXXI-A** (BAM-1293/97), PAMM-Centre, Technical University of Budapest, 1997, pp. 11-20.
38. Brnić, J., Turkalj, G., Čanadija, M.: Numerical determination of geometrical properties based on creep behaviour prediction, *Bulletins for Applied & Computer Mathematics*, **LXXXI-A** (BAM-1294/97), PAMM-Centre, Technical University of Budapest, 1997, pp. 21-28.
39. Brnić, J., Turkalj, G.: Structural optimization via plastic design criteria, *Bulletins for Applied Mathematics*, **LXXIX** (BAM-1199/96), PAMM-Centre, Technical University of Budapest, 1996, pp. 19-28.
40. Brnić, J., Turkalj, G.: Numerical and experimental stability analysis of frames with freely rotate members about the pin axis, *Bulletins for Applied Mathematics*, **LXXVIII** (BAM-1190/96), PAMM-Centre, Technical University of Budapest, 1996, pp. 115-124.
41. Turkalj, G., Brnić, J.: Numerical analysis of the initial stability of plane frames, *Bulletins for Applied Mathematics*, **LXXVI** (BAM-1121/95), PAMM-Centre, Technical University of Budapest, 1995, pp. 53-62.
42. Brnić, J., Turkalj, G.: Plastic zones and limit load, *Bulletins for Applied Mathematics*, **LXXV** (BAM-1101/95), PAMM-Centre, Technical University of Budapest, 1995, pp. 331-340.
43. Brnić, J., Turkalj, G.: Algorithm for plane frame structures initial stability analysis based on the finite element method, *Engineering Review*, **15**, 1995, pp. 1-8.
44. Turkalj, G.: The "oil-cushion" lubrication of hemispherical bearing in hydrostatic machines, *Bulletins for Applied Mathematics*, **LXXII** (BAM-1014/94), PAMM-Centre, Technical University of Budapest, 1994, pp. 259-270.
45. Turkalj, G., Obsieger, J.: Oil squeeze film analysis of spherical bearing, *Zbornik Tehničkog fakulteta Rijeka*, **14**, 1994, pp. 75-82.
46. Turkalj, G.: Influence of mass distribution on eigenvalues of free undamped vibration of planar frames (in Croatian), *Zbornik Tehničkog fakulteta Rijeka*, **13**, 1993, pp. 151-160.

6. Conference papers:

a) foreign meetings:

1. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Shear deformable beam model for stability analysis of laminated beam-type structures, 3rd International Conference on Computations for Science and Engineering, Proceedings, Pegaso University, Naples, Italy, 20-23 September 2023.
2. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Beam model for thermal buckling analysis of thin-walled functionally graded open section beams, 3rd International Conference on Computations for Science and Engineering, Proceedings, Pegaso University, Naples, Italy, 20-23 September 2023.

3. Turkalj, G., Banić, D., Lanc, D., Kvaternik Simonetti, S.: Shear deformable beam model for buckling analysis of laminated beam-type structures, 17th International Conference on Civil, Structural and Environmental Engineering Computing, Proceedings, Pécs, Hungary, 28-31 August 2023.
4. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: A beam model for the buckling of functionally graded open-section beams under thermal loads, 17th International Conference on Civil, Structural and Environmental Engineering Computing, Proceedings, Pécs, Hungary, 28-31 August 2023.
5. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Shear deformable beam model for stability analysis of beam-type structures with composite thin-walled cross sections, 14th International Conference on Computational Structures Technology CST 2022, Proceedings, Montpellier, France, 22-25 August 2022.
6. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Beam model for thermal buckling of thin-walled functionally graded box-beam, 14th International Conference on Computational Structures Technology CST 2022, Proceedings, Montpellier, France, 22-25 August 2022.
7. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Stability analysis of beam-type structures with composite cross-section considering coupled shear deformation effects, 2nd International Conference on Computations for Science and Engineering ICCSE2, Proceedings, Rimini Riviera, Italy, 30 August - 2 September 2022.
8. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Thermal buckling analysis of thin-walled functionally graded closed section beams, 2nd International Conference on Computations for Science and Engineering ICCSE2, Proceedings, Rimini Riviera, Italy, 30 August - 2 September 2022.
9. Turkalj, G., Banić, D., Lanc, D.: Numerical stability analysis of composite beam-type structures considering coupled shear deformation effects, 25th International Conference on *Composites of Structures* ICCS25, Book of Abstracts, Faculty of Engineering, University of Porto, Porto, Portugal, 19-21 July 2022.
10. Lanc, D., Turkalj, G., Banić, D., Kvaternik Simonetti, S.: FG model for global buckling analysis of composite beams, 25th International Conference on *Composites of Structures* ICCS25, Book of Abstracts, Faculty of Engineering, University of Porto, Porto, Portugal, 19-21 July 2022.
11. Lanc, D., Turkalj, G., Kvaternik Simonetti, S.: FG beam thermal buckling analysis, 7th International Conference on *Mechanics of Composites* MECHCOMP7, Book of Abstracts, Faculty of Engineering, University of Porto, Porto, Portugal, 1-3 September 2021.
12. Banić, D., Turkalj, G., Lanc, D., Kvaternik, S.: Shear deformable beam model for stability analysis of beam type structures with composite cross sections, 5th International Conference on *Mechanics of Composites* MECHCOMP 2019, Book of Abstracts, Instituto Superior Técnico, Lisbon, Portugal, 1-4 July 2019.
13. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Beam model for thermal buckling analysis of thin-walled functionally graded open section beams, 5th International Conference on *Mechanics of Composites* MECHCOMP 2019, Book of Abstracts, Instituto Superior Técnico, Lisbon, Portugal, 1-4 July 2019.
14. Lanc, D., Turkalj, G., Krščanski, S.: Behaviour of axially loaded FG column in creep regime, 5th International Conference on *Mechanics of Composites* MECHCOMP 2019, Book of Abstracts, Instituto Superior Técnico, Lisbon, Portugal, 1-4 July 2019.
15. Lanc, D., Turkalj, G., Kvaternik, S., Pešić, I.: Buckling analysis of thermally loaded FG box beams, Proceedings of Eight International Conference: Thin walled structures ICTWS 2018, Lisbon, Portugal, 24-27 July 2018.
16. Turkalj, G., Lanc, D., Banić, D., Kvaternik, S.: Finite element analysis of thin-walled functionally graded open section beams exposed to thermal loading, 4th International Conference on *Mechanics of Composites*, Book of Abstracts, Universidad Carlos III de Madrid, Spain, 9-12 July 2018.
17. Lanc, D., Krščanski, S., Turkalj, G.: Creep buckling analysis of the functionally graded beam, 4th International Conference on *Mechanics of Composites* MECHCOMP 2018, Book of Abstracts, Universidad Carlos III de Madrid, Spain, 9-12 July 2018.
18. Banić, D., Turkalj, G., Lanc, D.: Large displacement analysis of laminated composite frames considering shear deformation effects, 4th International Conference on *Mechanics of Composites* MECHCOMP 2018, Book of Abstracts, Universidad Carlos III de Madrid, Spain, 9-12 July 2018.
19. Randić, M., Pavletić, D., Turkalj, G.: The measurement of weld surface geometry, 17th International Congress, International Maritime Association of Mediterranean, IMAM2017, *Maritime Transportation and Harvesting of Sea Resources*, C. Guedes Soares, Angelo P. Teixeira (Eds.), Lisbon, Portugal, October 9-11, 2017, pp. 655-662.
20. Torić, Neno; Brnić, J., Boko, I., Čanadija, M., Turkalj, G., Lanc, D., Brčić, M., Burgess, I., Harapin, A., Divić, V., Uzelac, I.: Creep properties of grade S275JR steel at high temperature, 8th European Conference on Steel and Composite Structures, Copenhagen, Denmark, September 13-15, 2017.
21. Torić, N., Boko, I., Uzelac, I., Harapin, A., Divić, V., Galić, M., Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Brčić, M., Burgess, I.: High-temperature properties of aluminum alloy EN6082AW T6, Applications of Fire Engineering:

Proceedings of the International Conference of Applications of Structural Fire Engineering ASFE 2017, CRC Press/Balkema, Manchester, UK, September 7-8, 2017, pp. 31-35.

22. Turkalj, G., Lanc, D., Banić, D., Brnić, J.: A shear-flexible beam model for large displacement analysis of composite beam-type structures, Proceedings of the 3rd International Conference on Mechanics of Composites MECHCOMP3, Bologna, Italy, July 4-7, 2017, pp. 18-19.
23. Lanc, D., Turkalj, G., Kvaternik, S.: Thermal buckling analysis of thin-walled functionally graded box beams, Proceedings of the 3rd International Conference on Mechanics of Composites MECHCOMP3, Bologna, Italy, July 4-7, 2017, pp. 18.
24. Lanc, D., Turkalj, G., Brnić, J., Pešić, I.: Buckling analysis of laminated composite box beams, The Eighth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS 2016, Seattle, Washington, USA, October 14-17, 2016, (ON-LINE).
25. Torić, N., Burgess, I. W., Brnić, J., Boko, I., Turkalj, G., Čanadija, M., Harapin, A., Divić, V., Uzelac, I.: A unified rheological model for analysis of steel behaviour at high temperature, Structures in Fire: Proceedings of the Ninth International Conference, Princeton University, New Jersey, USA, June 8-10, 2016, Moreyra Garlock, M.E. and Kodur, V.K.R. (Eds), DEStech Publications, Inc., Lancaster, Pennsylvania, 2016, pp. 1008-1015
26. Turkalj, G., Lanc, D., Brnić, J., Banić, D., Numerical simulation of instability behaviour of composite semi-rigid frames using a shear flexible thin-walled beam element, Proceedings of the 2th International Conference on Mechanics of Composites MECHCOMP2, Faculty of Engineering, University of Porto, Porto, Portugal, 11-14 July 2016.
27. Pešić, I., Lanc, D., Turkalj, G.: Thermal buckling analysis of thin-walled beam structures, Proceedings of the Twelfth International Conference on Computational Structures Technology, Naples, Italy, September 2-5, 2014, Topping, B. H. V. and P. Iványi (Eds.), Civil-Comp Press, Stirlingshire, Scotland, 2014, paper 254, (CD-ROM).
28. Turkalj, G., Kravanja, S., Merdanović, E.: Numerical simulation of large-displacement behaviour of thin-walled frames incorporating joint action, *Design, Fabrication and Economy of Metal Structures*, International Conference Proceedings 2013, Miskolc, Hungary, April 24-26, 2013, pp. 127-132.
29. Turkalj, G., Brnić, J., Merdanović, E., Munjas, N.: Numerical model for nonlinear stability analysis of spatial frames with semi-rigid connections, Proceedings of the 23rd International Congress of Theoretical and Applied Mechanics ICTAM 2012, Beijing, China, August 19-24, 2012, (CD-ROM).
30. Turkalj, G., Merdanović, E., Brnić, J.: Large displacement analysis of flexibly connected framed structures, Proceedings of the 8th European Solid Mechanics Conference ESMC 2012, Graz, Austria, July 9-13, 2012, (CD-ROM).
31. Pešić, I., Lanc, D., Turkalj, G.: Nonlinear buckling analysis of thin-walled laminated composite beams, Proceedings of the 8th European Solid Mechanics Conference ESMC 2012, Graz, Austria, July 9-13, 2012, (CD-ROM).
32. Merdanović, E., Lanc, D., Turkalj, G.: Numerical creep buckling analysis of thin-walled steel frame, Annals of DAAAM for 2011 & Proceedings of the 22nd International DAAAM Symposium *Intelligent Manufacturing & Automation: Power of Knowledge and Creativity*, Vienna, Austria, November 23-26, 2011, pp. 1165-1166.
33. Lanc, D., Pešić, I., Turkalj, G., Brnić, J.: FE model for composite beam-type structure buckling analysis, The Sixth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS 2010, Guilin, China, November 16-19, 2010, (CD-ROM).
34. Turkalj, G., Brnić, J., Lanc, D.: Numerical model for large displacement analysis of elastic-plastic frames with semi-rigid connections, The Sixth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS 2010, Guilin, China, November 16-19, 2010, (CD-ROM).
35. Turkalj, G., Merdanović, E., Lanc, D.: A beam model for nonlinear stability analysis of beam-type, Proceedings of the IV European Congress on Computational Mechanics (ECCM IV): *Solids, Structures and Coupled Problems in Engineering*, Palais des Congrès, Paris, France, May 16-21, 2010, Abstract 263, (CD ROM).
36. Lanc, D., Pešić, I., Turkalj, G.: Stability analysis of beam-type structures with thin-walled laminated composite cross section, Proceedings of the IV European Congress on Computational Mechanics (ECCM IV): *Solids, Structures and Coupled Problems in Engineering*, Palais des Congrès, Paris, France, May 16-21, 2010, Abstract 176, (CD ROM).
37. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Uniaxial Tests of 50CrMo4 Steel at Lowered and Elevated Temperatures and Impact Notch Energy Determination, Proceedings of the 7th EUROMECH Solid Mechanics Conference ESMC 2009, Lisbon, Portugal, September 7-11, 2009, (CD-ROM).
38. Turkalj, G., Brnić, J., Lanc, D.: Updated Lagrangian formulation for nonlinear stability analysis of flexibly connected thin-walled frames, Proceedings of the Twelfth International Conference on Civil, Structural and Environmental Engineering Computing, Funchal, Madeira, Portugal, September 1-4, 2009, Topping, B. H. V., Costa Neves, L. F. and Barros, R. C. (Eds.), Civil-Comp Press, Stirlingshire, Scotland, 2009, (CD-ROM).

39. Pešić, I., Lanc, D., Turkalj, G.: Linear buckling analysis of laminated composite thin-walled beams, Proceedings of the 15th International Conference on Composite Structures ICCS 15, Porto, Portugal, June 15-17, 2009, (CD-ROM).
40. Turkalj, G., Alfirević, I.: A beam element for stability analysis of thin-walled frames with flexible connections, Proceedings of the 22nd International Congress of Theoretical and Applied Mechanics ICTAM2008, Adelaide, Australia, August 24-29, 2008, (CD-ROM).
41. Turkalj, G., Brnić, J., Lanc, D.: Numerical model for buckling analysis of flexibly connected beam-type structures, Proceedings of the International Conference *Design, Fabrication and Economy of Welded Structures* DFE 2008, Miskolc, Hungary, April 24-26, 2008, Jármaj, K. and Farkas, J. (Eds.), Horwood Publishing, Chichester, UK, pp. 353-360.
42. Lanc, D., Turkalj, G., Brnić, J.: Large displacement analysis of spatial frames under creep regime, Proceedings of the International Conference *Design, Fabrication and Economy of Welded Structures* DFE 2008, Miskolc, Hungary, April 24-26, 2008, Jármaj, K. and Farkas, J. (Eds.), Horwood Publishing, Chichester, UK, pp. 229-236.
43. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Vukelić, G., Brčić, M., Krščanski, S., Pešić, I.: Behavior comparison of stainless steel and tool steel materials at elevated temperatures, Proceedings of the 6th International Conference of DAAAM Baltic Industrial Engineering, Tallinn, Estonia, April 24-26, 2008, pp. 425-429.
44. Turkalj, G., Vizentin, G., Lanc, D.: Buckling analysis of elastic thin-walled beam-type structures considering joints behaviour, Proceedings of the Eleventh International Conference on Civil, Structural and Environmental Engineering Computing, St. Julians, Malta, September 18-21, 2007, Topping, B. H. V. (Ed.), Civil-Comp Press, Stirlingshire, Scotland, 2007, (CD-ROM).
45. Lanc, D., Turkalj, G., Brnić, J.: Beam element for creep analysis under large displacement regime, Proceedings of the Eighth International Conference on Computational Structures Technology, Las Palmas de Gran Canaria, Spain, September 12-15, 2006, Topping, B. H. V., Montero, G. and Montenegro, R. (Eds.), Civil-Comp Press, Stirlingshire, Scotland, 2006, (CD-ROM).
46. Čehić, Z., Turkalj, G.: FEM model for lateral buckling analysis of curved beams considering curvature effects, Proceedings of the 6th European Solid Mechanics Conference ESMC 2006, Budapest, Hungary, August 28-September 1, 2006, (CD-ROM).
47. Lanc, D., Turkalj, G., Brnić, J.: Geometrically nonlinear analysis of elastic thin-walled beam structures using Eulerian approach, Proceedings of the Third International Conference on Advanced Computational Methods in Engineering ACOMEN 2005, Ghent, Belgium, May 30- June 2, 2005, (CD-ROM).
48. Turkalj, G., Lanc, D., Brnić, J.: Stability analysis of thin-walled frames using a shear-flexible beam element, Proceedings of the Seventh International Conference on Computational Structures Technology, Lisbon, Portugal, September 7-9, 2004, Topping, B. H. V. and Mota Soares, C. A. (Eds.), Civil-Comp Press, Stirling, Scotland, 2004, (CD-ROM).
49. Turkalj, J., Brnić, J., Lanc, D.: Flexural-torsional stability analysis of thin-walled beams, Proceedings of the Fourth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS'2004, Shanghai, China, May 17-20, 2004, (CD-ROM).
50. Brnić, J., Turkalj, G., Čanadija, M., Roščić, S.: Pressure vessel optimal design based on viscoplastic material response, Proceedings of the Workshop: *Optimal Design*, Laboratoire de Mecanique des Solides, Ecole Polytechnique, Palaiseau, France, November 26-28, 2003, (CD-ROM).
51. Brnić, J., Turkalj, G., Čanadija, M.: Optimal design of dump truck body based on finite element model, Proceedings of the Tenth International Scientific – Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'03, Vol. II: *Automobile Technics and Transport*, Sofia, Bulgaria, October 01-03, 2003, pp. 6-8.
52. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Shape and layout optimisation of plate girders, Annals of DAAAM for 2003 & Proceedings of the 14th International DAAAM Symposium *Intelligent Manufacturing & Automation: Focus on Reconstruction and Development*, Bosnia and Herzegovina, Sarajevo, October 22-25, 2003, pp. 067-068.
53. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Finite strain elastoplasticity in isothermal metal forming processes, Proceedings of the 4th International Conference on Industrial Tools ICIT 2003, Bled, Slovenia, April 8-12, 2003.
54. Čehić, Z., Turkalj, G., Roščić, S.: Mathematical modelling of vibrations of vehicle plate structures, Proceedings of the Ninth International Scientific – Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'02, Vol. II: *Automobiles, Tractors and Industrial Trucks*, Russe, Bulgaria, October 29-31, 2002, pp. 36-40.
55. Brnić, J., Turkalj, G., Roščić, S.: Optimization of thin-walled beam cross-section dimensions using stability criteria, Proceedings of the Workshop *Optimal Design of Materials and Structures*, Laboratoire de Mecanique des Solides, Ecole Polytechnique, Palaiseau, France, November 25-27, 2002, (CD-ROM).

56. Čanadija, M., Brnić, J., Turkalj, G.: Shape optimisation in structural thermomechanics with application to pipeline layout problems, *Annals of DAAAM for 2002 & Proceedings of the 13th International DAAAM Symposium Intelligent Manufacturing & Automation: Learning from Nature*, Vienna, Austria, October 23-26, 2002, pp. 077-078.
57. Turkalj, G., Brnić, J.: Finite element model for pre- & post-spatial buckling analysis of elastic beams and frames accounting for restrained warping and large rotations, *Proceedings of the 15th Nordic Seminar on Computational Mechanics NSCM 15*, Aalborg, Denmark, October 18-19, 2002, pp. 233-236.
58. Turkalj, G., Brnić, J., Prpić-Oršić, J.: External stiffness approach for thin-walled frames with elastic-plasticity, *Proceedings of the Sixth International Conference on Computational Structures Technology*, Prague, Czech Republic, September 4-6, 2002, Topping, B. H. V. and Bittnar, Z. (Eds.), Civil-Comp Press, Stirling, Scotland, 2002, (CD-ROM).
59. Turkalj, G., Brnić, J.: Incremental stability analysis of elastic thin-walled beam structures using updated Lagrangian formulation, *Proceedings of the Second International Conference on Advanced Computational Methods in Engineering ACOMEN 2002*, Liege, Belgium, May 28-31, 2002, (CD-ROM).
60. Turkalj, G., Brnić, J., Čanadija, M.: Incremental formulation in finite element stability analysis of thin-walled framed structures, *Annals of DAAAM for 2001 & Proceedings of the 12th International DAAAM Symposium Intelligent Manufacturing & Automation: Focus on Precision Engineering*, Jena, Germany, October 24-27, 2001, pp. 489-490.
61. Turkalj, G., Brnić, J., Prpić-Oršić, J.: Updated Lagrangian formulation using ESA approach in large rotation problems of thin-walled beam-type structures, *Proceedings of the Eighth International Conference on Civil & Structural Engineering Computing*, Eisenstadt-Vienna, Austria, September 19-21, 2001, Topping, B. H. V. (Ed.), Civil-Comp Press, Stirling, Scotland, 2001, (CD-ROM).
62. Turkalj, G., Brnić, J., Prpić-Oršić, J.: Lateral buckling analysis using finite element method, 8th International Scientific Conference CO-MAT-TECH 2000, Trnava, Slovakia, 19-20 October 2000, pp. 185-190.
63. Turkalj, G., Brnić, J., Čanadija, M.: Non-linear stability analysis of vehicle thin-walled beam members, *Proceedings of the Sixth International Scientific – Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'99, Vol. II: Vehicles*, Plovdiv, Bulgaria, October 13-15, 1999, pp. 171-175.
64. Čanadija, M., Brnić, J., Turkalj, G.: Friction simulation in design of cold rolled products used in vehicle industry, *Proceedings of the Sixth International Scientific – Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'99, Vol. V: Technology*, Plovdiv, Bulgaria, October 13-15, 1999, pp. 1-4.
65. Turkalj, G., Brnić, J., Čanadija, M.: Finite element spatial stability analysis of thin-walled structures, *Annals of DAAAM for 1999 & Proceedings of the 10th International DAAAM Symposium Intelligent Manufacturing & Automation: Past – Present - Future*, Vienna, Austria, October 21-23, 1999, pp. 555-556.
66. Brnić, J., Čanadija, M., Turkalj, G.: Friction layer technique in rolling manufacturing problem, *Annals of DAAAM for 1999 & Proceedings of the 10th International DAAAM Symposium Intelligent Manufacturing & Automation: Past – Present - Future*, Vienna, Austria, October 21-23, 1999, pp. 061-062.
67. Turkalj, G., Brnić, J.: Geometric non-linear analysis of thin-walled beams, *Proceedings of the 4th International Scientific Colloquium CAx Techniques*, Bielefeld, Germany, September 13-15, 1999, pp. 265-272.
68. Turkalj, G., Brnić, J., Lanc, D.: Basic classification of metal forming processes and their numerical simulation, *Proceedings of the 2nd International Conference on Industrial Tools ICIT '99, Vol. II*, Maribor – Rogaška Slatina, Slovenia, April 18-22, 1999, pp. 498-501.
69. Turkalj, G., Brnić, J.: Numerical analysis of buckling by torsion and buckling by torsion and flexure, *Annals of DAAAM for 1998 & Proceedings of the 9th International DAAAM Symposium Intelligent Manufacturing, Automation & Networking, Vol. 2*, Cluj-Napoca, Romania, October 22-24, 1998, pp. 469-470.
70. Brnić, J., Turkalj, G.: Finite elements based computed results in the plane strain rolling problem, *Proceedings of the 6th International Scientific Conference CO-MAT-TECH '98*, Trnava, Slovakia, October 22-23, 1998, pp. 335-339.
71. Turkalj, G., Brnić, J.: Torsional buckling analysis of special thin-walled opened cross-section columns used in vehicle design, *Proceedings of the Fifth International Scientific-Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'98, Vol. IV*, Sophia - Vitosha, Bulgaria, October 14-16, 1998, pp. 187-192.
72. Brnić, J., Turkalj, G.: Numerical simulation of a forming process in vehicle metal-forming industry, *Proceedings of the Fifth International Scientific – Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'98, Vol. I*, Sophia - Vitosha, Bulgaria, October 14-16, 1998, pp. 65-68.

73. Brnić, J., Turkalj, G.: Load capacity determination of thin-walled beam-type structures based on numerical prediction of structure stability, Proceedings of the VIIth International Conference on Numerical Methods in Continuum Mechanics NMCM '98, High Tatras, Slovakia, October 6-9, 1998, pp. 159-164.
74. Brnić, J., Turkalj, G.: Finite element stability analysis of thin-walled space frames in vehicle design, Proceedings of the Fourth International Scientific - Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'97, Vol. II, Russe, Bulgaria, October 15-17, 1997, pp. 31-36.
75. Brnić, J., Turkalj, G.: Shear stress intensity analysis of different vehicle members using new finite elements, Proceedings of the Fourth International Scientific - Technical Conference on Internal Combustion Engines and Motor Vehicles MOTAUTO'97, Vol. II, Russe, Bulgaria, October 15-17, 1997, pp. 26-30.
76. Brnić, J., Čanadija, M., Turkalj, G.: Determination of pressure vessel wall thickness based on the numerical simulation of viscoplastic material behaviour, Proceedings of the 1st International Conference BSM'97, Mostar, Bosnia and Herzegovina, September 26-27, 1997, pp. 29-33.
77. Brnić, J., Turkalj G., Čanadija M.: Shear stress analysis using new special general quadrilateral finite elements, Proceedings of the 3rd EUROMECH Solid Mechanics Conference, (Book of Abstracts), Stockholm, Sweden, August 18-22, 1997, p. 45.
78. Brnić, J., Čanadija, M., Turkalj, G.: Finite element modelling of creep phenomenon of different materials, Proceedings of the International Conference on Recent Advances in Metallurgical Processes ICRAMP-97, Vol. II, Bangalore, India, July 16-19, 1997., pp. 1091-1096.
79. Brnić, J., Turkalj G.: Computational stability analysis in optimal design procedure of a special type of plane frame structure, Proceedings of the 7th International DAAAM Symposium *Product & Manufacturing: Flexibility, Integration, Intelligence*, Vienna, Austria, October 17-19, 1996, pp. 65-66.

b) domestic meetings:

1. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Stability analysis of composite beam-type structures including shear deformation effects, 10th International Congress of Croatian society of mechanics ICCSM 2022, Book of Abstract, Pula, 28-30 Septembar 2022.
2. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Thermal buckling analysis of thin-walled FG closed section beams, 10th International Congress of Croatian society of mechanics ICCSM 2022, Book of Abstract, Pula, 28-30 Septembar 2022.
3. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Nelinearna analiza stabilnosti grednih konstrukcija s kompozitnim poprečnim presjekom, 11. susreta Hrvatskog društva za mehaniku, Rijeka, 16-17. rujna 2021., pp. 25-31.
4. Kvaternik Simonetti, S., Lanc, D., Turkalj, G.: Gredni model za numeričku analizu toplinskog izvijanja FG grednih nosača, Zbornik radova 11. susreta Hrvatskog društva za mehaniku, Rijeka, 16-17. rujna 2021., pp. 151-155.
5. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Posmično deformabilni gredni model za analizu stabilnosti tankostjenih grednih konstrukcija s kompozitnim poprečnim presjekom, Zbornik radova 10. susreta Hrvatskog društva za mehaniku, Slavonski Brod, 1-2. listopada 2020., pp. 25-30.
6. Kvaternik Simonetti, S., Zlatić, M., Lanc, D., Turkalj, G.: Konačnoelementni model za analizu toplinskog izvijanja tankostjenih zatvorenih FG greda, Zbornik radova 10. susreta Hrvatskog društva za mehaniku, Slavonski Brod, 1-2. listopada 2020., pp. 147-150.
7. Banić, D., Turkalj, G., Lanc, D., Kvaternik Simonetti, S.: Posmično deformabilni gredni element za analizu stabilnosti kompozitnih grednih konstrukcija, Zbornik radova 9. susreta Hrvatskog društva za mehaniku, Zagreb, 11-12. srpnja 2019., pp. 67-70.
8. Kvaternik Simonetti, S., Lanc, D., Turkalj, G., Banić, D.: Gredni element za analizu toplinskog uzvijanja tankostjenih otvorenih FG greda, Zbornik radova 9. susreta Hrvatskog društva za mehaniku, Zagreb, 11-12. srpnja 2019., pp. 193-195.
9. Randić, M., Pavletić, D., Turkalj, G., Vidolin, T., Šuper, M.: Mjerenje geometrijskih značajki površine zavarenog spoja, 9. međunarodno znanstveno-stručno savjetovanje: *Strojarske tehnologije u izradi zavarenih konstrukcija i proizvoda*, SBZ 2017, Slavonski Brod, 25.-27. listopada 2017., pp. 95-105.
10. Kvaternik, S., Turkalj, G., Lanc, D.: Numerical buckling analysis of thin-walled frames with joint effect, *My First Conference 2017*, Book of Extended Abstracts, Rijeka, 28. rujna 2017., pp. 29-30.
11. Banić, D., Turkalj, G., Lanc, D.: Analiza elasto-plastičnih grednih nosača pri uvijanju s ograničenim vitoperenjem, Zbornik radova *Sedmog susreta Hrvatskoga društva za mehaniku*, Split, 16.-17. lipnja 2016., pp. 19-24.

12. Pešić, I., Lanc, D., Turkalj, G.: Nelinearna analiza toplinskog izvijanja tankostjenih greda, Zbornik radova *Sedmog susreta Hrvatskoga društva za mehaniku*, Split, 16.-17. lipnja 2016., pp. 19-24.
13. Lanc, D., Turkalj, G., Pešić, I., Jurki, B.: Model izvijanja grednih nosača kompozitnih kutijastih profila, Zbornik radova *Šestog susreta Hrvatskoga društva za mehaniku*, Rijeka, 29.-30. svibnja 2014., pp. 117-122.
14. Merdanović, E., Turkalj, G.: Numerička analiza krutosti spoja okvirne konstrukcije, Zbornik radova *Petog susreta Hrvatskoga društva za mehaniku*, Jezerčica, 6.-7. lipnja 2013., pp. 125-129.
15. Brnić, J., Turkalj, G., Vukelić, G.: Importance of experimental research in the design of structures, *Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium*, Zadar, Croatia, October 24-27, 2012, pp. 147-150.
16. Lanc, D., Pešić, I., Turkalj, G.: Stability analysis of laminated composite thin-walled beam structures, *Proceedings of the Eleventh International Conference on Computational Structures Technology*, Dubrovnik, Croatia, September 4-7, 2012, Topping, B. H. V. (Ed.), Civil-Comp Press, Stirlingshire, Scotland, 2012, paper 224, (CD-ROM).
17. Merdanović, E., Lanc, D., Turkalj, G.: Numerička analiza izvijanja čeličnog okvira zbog puzanja, Zbornik radova *Četvrtog susreta Hrvatskoga društva za mehaniku*, Slavonski Brod, 10. lipnja 2011., pp. 99-104.
18. Pešić, I., Lanc, D., Turkalj, G.: Analiza izvijanja grednih nosača uslijed promjene temperature, Zbornik radova *Četvrtog susreta Hrvatskoga društva za mehaniku*, Slavonski Brod, 10. lipnja 2011., pp. 125-128.
19. Turkalj, G., Merdanović, E., Munjas, N.: Numerička analiza spoja gredne konstrukcije opterećenog na savijanje i aksijalno opterećenje, Zbornik radova *Trećeg susreta Hrvatskoga društva za mehaniku*, Osijek, 18. lipnja 2010., pp. 127-133.
20. Lanc, D., Turkalj, G., Pešić, I.: Analiza izvijanja grednih nosača tankostjenih kompozitnih poprečnih presjeka, Zbornik radova *Trećeg susreta Hrvatskoga društva za mehaniku*, Osijek, 18. lipnja 2010., pp. 41-46.
21. Turkalj, G., Lanc, D., Pešić, I.: A beam element for the large displacement analysis of semi-rigid frames, *Proceedings of the 6th International Congress of Croatian Society of Mechanics*, Dubrovnik, September 31 – October 3, 2009, (CD-ROM).
22. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D., Vukelić, G., Brčić, M.: Response of structural steel subjected to uniaxial stress at lowered and elevated temperatures, *Proceedings of the 6th International Congress of Croatian Society of Mechanics*, Dubrovnik, September 31 – October 3, 2009, (CD-ROM).
23. Turkalj, G., Lanc, D.: Gredni element za nelinearnu analizu tankostjenih okvira s polukrutim vezama, Zbornik radova *Drugog susreta Hrvatskoga društva za mehaniku*, Split, 12-13. rujna 2008., pp. 97-102.
24. Lanc, D., Turkalj, G., Brnić, J., Vizentin, G.: Numerički model za analizu stabilnosti materijalno nelinearnih okvira, Zbornik radova *Prvog susreta Hrvatskoga društva za mehaniku*, Rijeka, 29. lipnja 2007., pp. 133-138.
25. Turkalj, G., Vizentin, G., Brnić, J.: Hybrid beam element for stability analysis of semi-rigid frames, *Proceedings of the 5th International Congress of Croatian Society of Mechanics*, Trogir, September 21-23, 2006, (CD-ROM).
26. Lanc, D., Turkalj, G., Brnić, J.: Beam model for creep buckling analysis, *Proceedings of the 5th International Congress of Croatian Society of Mechanics*, Trogir, September 21-23, 2006, (CD-ROM).
27. Turkalj, G., Brnić, J., Lanc, D.: Large displacement formulation for elastic-plastic space frames, *Proceedings of the 4th International Congress of Croatian Society of Mechanics*, Bizovac, Croatia, September 18-20, 2003, pp. 317-324.
28. Čanadija, M., Brnić, J., Turkalj, G.: Finite element analysis of rolling process, *Annals of DAAAM for 2000 & Proceedings of the 11th International DAAAM Symposium Intelligent Manufacturing & Automation: Man – Machine – Nature*, Opatija, October 19-21, 2000, pp. 059-060.
29. Turkalj, G., Brnić, J., Čanadija, M.: Non-linear thin-walled beam model for torsional-flexural analysis, *Proceedings of the 3rd International Congress of Croatian Society of Mechanics*, Cavtat – Dubrovnik, September 28-30, 2000, pp. 317-324.
30. Brnić, J., Lanc, D., Turkalj, G., Čanadija, M.: Viscoplastic analysis of energetic equipment members using finite element method, Zbornik radova 5. međunarodnog simpozija *Dijagnostika električnih strojeva, transformatora i uređaja & Kvaliteta električne energije EEDEEQ'2000*, Rovinj, 2-3. listopada 2000., pp. 3-6.
31. Brnić, J., Turkalj, G., Prpić-Oršić, J.: Numerical modelling of buckling of thin-walled beam members considering large rotations, *Proceedings of the 6th International Design Conference DESIGN 2000*, Dubrovnik, May 23-26, 2000, pp. 275-280.
32. Brnić, J., Turkalj, G.: Numerical analysis of elastic and viscoplastic failure modes of energetic service applications, *Proceedings of the International Congress Energy and the Environment*, Vol. 1, 16th Scientific Conference on Energy and the Environment, Opatija, October 28-30, 1998, pp. 393-398.

33. Turkalj, G., Brnić, J.: Numerical stability analysis of thin-walled equipment members, Proceedings of the 3rd International Conference Maintenance of Electrical Machines, Transformers and Equipment & Electrical Energy Quality EEDEEQ '98, Rovinj, October 5-7, 1998, pp. 5-8.
34. Brnić, J., Turkalj, G.: Numerical modelling of forming process of thin-plate workpiece used in equipment manufacturing, Proceedings of the 3rd International Conference Maintenance of Electrical Machines, Transformers and Equipment & Electrical Energy Quality EEDEEQ '98, Rovinj, October 5-7, 1998, pp. 1-4.
35. Turkalj, G., Brnić, J.: Basic concept of numerical optimization model in design and manufacturing, Proceedings of the 5th International Design Conference DESIGN '98, Dubrovnik, May 19-22, 1998, pp. 609-614.
36. Brnić, J., Čanadija, M., Turkalj, G.: Numerical procedure basic concept of cold rolling process, Proceedings of the 8th International DAAAM Symposium *Intelligent Manufacturing & Automation*, Dubrovnik, October 23-25, 1997, pp. 039-040.
37. Brnić, J., Turkalj, G., Čanadija, M.: Numerical and experimental local and global buckling analysis of opened thin-walled beam type structures, Proceedings of the 8th International DAAAM Symposium *Intelligent Manufacturing & Automation*, Dubrovnik, October 23-25, 1997, pp. 041-042.
38. Brnić, J., Turkalj, G., Čanadija, M.: Numerical prediction of material behaviour in energetic systems at high temperature conditions, Proceedings of the 2nd International Conference Electrical Equipment Diagnosis and Electrical Energy Quality EEDEEQ '97, Pula, September 29 – October 1, 1997, pp. 15-18.
39. Brnić, J., Čanadija, M., Turkalj, G.: The possibility of analytical and numerical prediction of equipment material behaviour in energetic systems at special environment conditions, Zbornik radova 14. međunarodnog simpozija o grijanju, hlađenju i klimatizaciji INTERKLIMA '97, Zagreb, 24-25. travnja 1997., pp. 159-166.
40. Turkalj, G., Brnić, J., Čanadija, M.: Experimental investigations and finite element procedure of thin-walled local and global stability problems, Proceedings of the 2nd Congress of Croatian Society of Mechanics, Supetar – Brač, September 18-20, 1997, pp. 125-132.
41. Čanadija, M., Brnić, J., Turkalj, G.: Finite element formulations for cold rolling process, Proceedings of the 2nd Congress of Croatian Society of Mechanics, Supetar – Brač, September 18-20, 1997, pp. 305-312.
42. Brnić, J., Čanadija, M., Turkalj, G.: An algorithm for modelling elasto-viscoplastic effects in energetic systems, Proceedings of the International Congress *Energy and the Environment*, Vol. 1, 15th Scientific Conference on Energy and the Environment, Opatija, October 23-25, 1996, pp. 217-222.
43. Brnić, J., Turkalj, G.: Design of maritime construction elements using limit stress analysis, Zbornik radova međunarodne konferencije *Priobalje i podmorje Jadrana* (ACZS), Opatija, 1-4. ožujka 1995., pp. 136-146.
44. Turkalj, G.: Load carrying capacity of hydrostatic squeeze film, Zbornik radova 1. kongresa Hrvatskog društva za mehaniku, Pula, 14-17. rujna 1994., pp. 447-454.

7. Invited lectures:

1. Lanc, D., Turkalj, G., Brnić, J., Pešić, I.: The Eighth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS 2016, Seattle, Washington, USA, October 14-17, 2016.
2. Turkalj, G.: *Updated Lagrangian formulation for large displacement analysis of beam-type structures*, School of Materials Science and Technology, Harbin Institute of Technology, Harbin, China, January 18-22, 2016.
3. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: *Behavior of high strength low-alloy (HSLA) steel at elevated temperatures*, The Fifth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS'2007, Zhengzhou, China, October 23-27, 2007.
4. Lanc, D., Turkalj, G., Brnić, J.: *An algorithm for numerical creep buckling analysis of beam-type structures*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 31-June 3, 2007.
5. Turkalj, G., Vizentin, G., Lanc, D.: *FE stability analysis of elastic frames accounting for connections flexibility*, The Eleventh Symposium of Mathematics and its Applications, Timoșoara, Budapest, November 2-5, 2006.
6. Turkalj, G., Brnić, J., Lanc, D.: *Shear flexible beam finite element analysis using Eulerian approach*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, June 1-4, 2006.
7. Turkalj, G., Lanc, D., Brnić, J.: *Buckling analysis of beam structures using Eulerian approach*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 26-29, 2005.

8. Brnić, J., Turkalj, G.: *New finite elements in shear stress analysis of Saint-Venant's torsional loaded beam structures*, The Fourth International Conference on Physical and Numerical Simulation of Materials Processing ICPNS'2004, Shanghai, China, May 17-20, 2004.
9. Turkalj, G., Lanc, D., Brnić, J.: *An algorithm in computer stability analysis of elastic thin-walled beam structures*, Pannonian Applied Mathematical Meetings PAMM, Göd-Budapest, Hungary, September 16-19, 2004.
10. Brnić, J., Turkalj, G., Čanadija, M.: *Application of finite element structural optimization in naval architecture*, The 10th International Symposium of Mathematics and its Applications, "Politehnica" University of Timisoara, Timisoara, Romania, November 6-9, 2003.
11. Turkalj, G., Brnić, J.: *Computational non-linear analysis of structural stability*, Pannonian Applied Mathematical Meetings, Göd-Budapest, Hungary, January 21-24, 1999.
12. Turkalj, G., Brnić, J.: *Thin-walled beam element for analysis of large displacement problems*, Pannonian Applied Mathematical Meetings PAMM, Balatonalmadi, Hungary, May 13-16, 1999.
13. Brnić, J., Turkalj, G., Čanadija, M.: *Optimal design procedure based on the viscoplastic material behaviour*, The Third International Conference on Physical and Numerical Simulation of Materials and Hot Working ICPNS '99, Peking, China, 1999.
14. Brnić, J., Turkalj, G.: *Finite element formulation of flattening process as a plane-strain problem*, Pannonian Applied Mathematical Meetings, Balatonalmadi, Hungary, 1998.
15. Brnić, J., Čanadija, M., Turkalj, G.: *Finite element modelling of creep phenomenon of different materials*, International Conference on Recent Advances in Metallurgical Processes (ICRAMP'97), Bangalore, India, 1997.
16. Brnić, J., Turkalj, G.: *Structural optimization via plastic design criteria*, Pannonian Applied Mathematical Meetings, Göd-Budapest, Hungary, 1996.

8. Engineering studies:

1. Turkalj, G., Lanc, Banić, D., Kvaternik Simonetti, S.: Tensile testing of steel specimens, P.B.S. d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2023.
2. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Tensile and Charpy impact tests of steel materials: S355J2G3, 42CrMo4, X17CrNi16-2, X5CrNiMo-17-12-2 and X4CrNiMo16-5, Dalstroj d.d, Split, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
3. Turkalj, G., Lanc, Banić, D., Kvaternik Simonetti, S.: Tensile testing of CU-3 bronze material, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
4. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of 34CrNiMo6 steel material, VEBA d.o.o., Krk, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
5. Turkalj, G., Lanc: Mechanical testing of Al-strips material for DA09, Dalmont d.o.o., Kraljevica, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
6. Turkalj, G., Banić, D.: Testing of mechanical properties of *Steel Casting-Carbon* and *Carbon Manganese/WCB* materials, Brodoarmatura d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
7. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel materials: S355J2+AR, S355J2+N, 42CrMo4, 34CrNiMo6 and X4CrNiMo16-5-1, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
8. Turkalj, G., Lanc, D.: Tensile testing os seamless pipe material (dias. 76.1×12.5, 60.3×8.84 and 406.4×12.7), Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2022.
9. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of steel material for: building no.066 (Radež d.d.), building no. 372 (Brodotrogir Cruise) and building no. 067 (CRS no. 95118), M/J APLBATROS II and boat STARI HRID (CRS no. 80123), Strojbravarski obrt "Florin", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
10. Turkalj, G., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of steel sheet material for boat IBN BATTUTA, material S355J2H for steel pipe 355.6×22.2 mm and material ASTM A370 for steel pipe 609.6×30,96 mm, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2022.

11. Turkalj, G., Lanc, D.: Tensile testing of bronze material Rg5, KOMPAS NOVA d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
12. Turkalj, G., Lanc, D.: Tensile testing of steel silo material, Holcim d.o.o., Koromačno, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
13. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel materials: 1.4057+QT, 18CrNiMo7-6+FP and 42CrMo4+QT, JLM-Perković d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
14. Turkalj, G., Lanc, D., Brčić, M., Braut, S.: Deformation measurement on mining tool NRE Roof Botler, DOK-ING d.o.o., Zagreb, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
15. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of steel material 41CrMo4+A, TEMA d.o.o., Pula, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
16. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of steel materials: AISI 316L, P355 NL2, S355J2+N, S355J2H, 34CrNiMo6, 34CrNiMo6+QT, X4CrNiMo16-5-1 and X17CrNi16-2, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
17. Turkalj, G., Lanc, D., Brčić, M.: Measurement of the force of pushing out a pharmaceutical dilution from a plastic bottle, JADRAN – GALENSKI LABORATORIJ d.d., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
18. Turkalj, G., Lanc, D., Banić, D.: Tensile testing of AISI 10MnMg – Silafont 36 material, CIMOS – TCH Group P.P.C. Buzet d.o.o., Buzet, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
19. Turkalj, G., Lanc, D., Banić, D.: Testing of material of building no. 067: tensile test and Charpy impact test, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
20. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of material for making the main parts of the clutch (project HPTO 4600), JLM-Perković d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
21. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of steel materials X5CrNiMo17-12-2 and X4CrNiMo16-5: tensile test and Charpy impact test, Dalstroj d.d, Split, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
22. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of S355J2+M material: tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
23. Turkalj, G., Lanc, D.: Tensile testing of CU-3 bronze and INOX 316 materials, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
24. Turkalj, G., Lanc, D.: Testing of mechanical properties of steel profiles for DOK 11, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
25. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel material of $\phi 219,1 \times 22,5$ pipe and $10 \times 1500 \times 6000$ and $25 \times 1500 \times 6000$ sheets, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
26. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Tensile testing of $\phi 130 \times 10$ aluminium pipe material, SCAM Marine d.o.o., Viškovo, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
27. Turkalj, G., Banić, D.: Charpy impact testing at -55°C of welding connection WTP 11/21 (NAVIGATOR GUSTO), Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
28. Turkalj, G., Lanc, D.: Testing of mechanical properties of steel L-profile $60 \times 60 \times 6$ specimens, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
29. Turkalj, G., Lanc, D.: Testing of AISI 316 Ti and AISI 630 (17/4 PH) materials: tensile test and Charpy impact test, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
30. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Re-certification of steel pipe materials, TUBUS d.o.o., Galizana, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
31. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Re-certification of 42CrMo4+QT and S355J2+N materials, SCAM Marine d.o.o., Viškovo, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
32. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Re-certification of Inox AISI 630 material of building HRB no. 11654, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2021.

33. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Tensile testing of CU-3 bronze material, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
34. Turkalj, G., Lanc, D.: Testing of mechanical properties of GROVA 2 specimen, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
35. Turkalj, G., Lanc, D.: Tensile testing of S355J2H material, Strojopromet-Zagreb d.o.o., University of Rijeka, Faculty of Engineering, Rijeka, 2021.
36. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of 42CrMo4+QT material: tensile test and Charpy impact test, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2021.
37. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of 42CrMo4+QT material: tensile test and Charpy impact test, JLM-Perković d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
38. Turkalj, G., Lanc, D., Brčić, M., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of 42CrMo4+QT and AISI 630 materials: tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2021.
39. Turkalj, G., Lanc, D., Brčić, M., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of 42CrMo4+QT and AISI 630 materials: tensile test and Charpy impact test, JLM-Perković d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
40. Turkalj, G., Banić, D.: Charpy impact testing at -20°C of Q345B steel material for object MSC SANDRA, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2020.
41. Turkalj, G., Brčić, M.: Tensile testing of materials composite materials, University of Rijeka, Faculty of Maritime Studies, Faculty of Engineering, Rijeka, 2020.
42. Turkalj, G., Banić, D.: Re-certification of steel material P235GHTC1, LMB Kotlovski inženjering, Zagreb, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
43. Turkalj, G., Lanc, D.: Tensile testing of material S275JR+AR, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2020.
44. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Ispitivanje mehaničkih osobina materijala S355J2H: tensile test and Charpy impact test, Strojopromet-Zagreb d.o.o., University of Rijeka, Faculty of Engineering, Rijeka, 2020.
45. Turkalj, G., Brčić, M., Lanc, D.: Tensile testing of materials AISI 316 i AISI 630, SCAM Marine d.o.o., Viškovo, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
46. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Testing of mechanical properties of steel materials: tensile test and Charpy impact test, Dalstroj d.d, Split, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
47. Turkalj, G., Lanc, D., Banić, D.: Re-certification of steel material of building no. 048, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
48. Turkalj, G., Brčić, M., Lanc, D.: Tensile testing of material Inconel 690, INETEC, Institut za Nuclear Technology, Lučko-Zagreb, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
49. Turkalj, G., Lanc, D., Banić, D.: Re-certification of steel material AISI 316L for propeller shaft of building no. 043, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
50. Turkalj, G., Lanc, D., Banić, D., Kvaternik Simonetti, S.: Re-certification of steel materials for objects *Lady Rina* and Dok-5, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2020.
51. Turkalj, G., Lanc, D.: 3.2 certification of S355J2+N material, Dalmont d.o.o., Kraljevica, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
52. Turkalj, G., Lanc, D.: Re-certification of steel material DUPLEX 1.4462 for building no. 360, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
53. Turkalj, G., Lanc, D., Banić, D.: Re-certification of S355J2+N and 30CrNiMo8 materials, SCAM Marine d.o.o., Viškovo, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
54. Turkalj, G., Brčić, M., Lanc, D., Banić, D., Kvaternik, S.: Re-certification of sheet material S355J2+N, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2020.

55. Turkalj, G., Lanc, D.: Experimental investigation of mechanical properties of material S355J2+AR of steel profiles L60×60×8, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
56. Turkalj, G., Lanc, D., Banić, D., Kvaternik, S.: Re-certification of S355J2H material of stern tube and INOX AISI 316L material of propeller shaft and rudder stock for building no. 056, StrojobravarSKI obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
57. Turkalj, G., Lanc, D., Banić, D., Kvaternik, S.: Testing of mechanical properties of steel materials: S355J2+M, S355J2+AR, S355J2H and X4CrNiMo16-5-1, tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
58. Turkalj, G., Lanc, D., Brčić, M., Banić, D.: Testing of mechanical properties of steel materials: S355J2+N, S355J2+M and S355J2H, tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
59. Turkalj, G., Lanc, D., Banić, D.: Re-certification of rudder stock flange materials for buildings no. 360, 043 and 056; re-certification of materials propeller shaft materials for passenger ships ex. KŠ 775 (HRB:16677) and IRMA, StrojobravarSKI obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
60. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel 32CrNiMoHH: tensile test and Charpy impact test, VEBA d.o.o., Krk, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
61. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel materials; 42CrMoS4HH, 42CrMo4+QT, S355J2H, S355J2+M and 42CrMoS4+QT: tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
62. Turkalj, G., Lanc, D., Banić, D.: Experimental investigation of tensile properties of steel sheet 1.4302 and cold rolled steel strips, TTO Thermotechnick d.o.o., Dražice, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
63. Turkalj, G., Lanc, D., Brčić, M., Banić, D.: Testing of mechanical properties of steel 32CrNiMo6-55: tensile test and Charpy impact test, VEBA d.o.o., Krk, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
64. Turkalj, G., Lanc, D., Banić, D.: Testing of mechanical properties of steel material for the propeller shaft of *Sveti Martin* ferry: tensile test and Charpy impact test, Brodoremont Punat d.o.o., Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
65. Turkalj, G., Lanc, D., Brčić, M.: Testing of mechanical properties of structural steel S355J2+N: tensile test and Charpy impact test, Vulkan-Nova d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
66. Turkalj, G., Lanc, D., Banić, D., Krščanski, S.: Re-certification of *CU-3 bronze* materials, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
67. Turkalj, G., Lanc, D. Banić, D., Krščanski, S.: Re-certification of *AISI 316L*, *S355J2H* and *42CrMo4+QT* materials for buildings no. 051, 052 and 056, StrojobravarSKI obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2020.
68. Turkalj, G., Brčić, M., Lanc, D., Krščanski, S.: Re-certification of materials of steel profiles for DOK-11, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
69. Turkalj, G., Lanc, D., Krščanski, S.: Re-certification of steel materials for IPE, UNP and angle-profiles, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
70. Turkalj, G., Lanc, D. Banić, D., Krščanski, S.: Re-certification of *AISI 316L*, *S355J2H* and *S355J2C* materials for buildings no. 040, 051 and 052, StrojobravarSKI obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
71. Turkalj, G., Lanc, D., Banić, D., Krščanski, S.: Re-certification of *TB53353 PGR* aluminium profile material, ITAQUA S.R.L., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
72. Turkalj, G., Lanc, D., Banić, D.: Re-certification of pape materials for outer hull DN125, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
73. Turkalj, G., Lanc, D. Banić, D., Krščanski, S.: Restresting of *S355J2H* material for stern tube and rudder, StrojobravarSKI obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
74. Turkalj, G., Lanc, D., Banić, D., Krščanski, S.: Reatresting of *CU-3 bronze* materials, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2019.

75. Turkalj, G., Lanc, D., Brčić, M.: Reatresting of *AISI 316, 42CrMo4+QT* and *S355J2* (St.52) materials, JLM-Perković d.o.o., Matulji, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
76. Turkalj, G., Lanc, D., Brčić, M.: Reatresting of angle profiles *CRS15-25* for object Dok-5, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
77. Turkalj, G., Lanc, D., Krščanski, S.: Rettesting of *CU-3 bronze* materials, Propeler servis d.o.o., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
78. Turkalj, G., Lanc, D., Brčić, M.: Rettesting of *AISI 316L i AISI 630* materials, SCAM Marine d.o.o., Viškovo, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
79. Turkalj, G., Lanc, D., Brčić, M.: Re-certification of *2205 Duplex Stainless Steel Plates* for object IEVOLI SPEED, RN 19130071, TS 12006 and BTU F.02.02, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
80. Turkalj, G., Lanc, D., Krščanski, S.: Re-certification of *Duplex EN 1.4462* material for building no. 045 and *S355J2C* material for buildings no. 040, 045, 046, 047, Strojbravarski obrt "Floris", Punat, University of Rijeka, Faculty of Engineering, Rijeka, 2019.
81. Turkalj, G., Lanc, D., Krščanski, S., Banić, D.: Re-certification of *Plate db 50 mm S355J2+N* material for Dock 11, Shipyard "Viktor Lenac", University of Rijeka, Faculty of Engineering, Rijeka, 2019.
82. Brnić, J., Čanadija, M., Lanc, D., Turkalj, G.: Measurement of the force of pushing out a pharmaceutical dilution from a plastic bottle, JADRAN – GALENSKI LABORATORIJ d.d., Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2022.
83. Brnić, J., Čanadija, M., Lanc, D., Brčić, M., Turkalj, G.: Experimental investigation of material properties and evaluation of the mechanical behaviour of a part of the 110 kV switchyard in EVP Vrata, Hrvatski operator prijenosnog sustava d.o.o., Prijenosno područje Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2014.
84. Turkalj, G., Lanc, D., Merdanović, E.: Fatigue testing of injector-holder fixing bracket, CIMOS R&D, Koper, University of Rijeka, Faculty of Engineering, Rijeka, 2011.
85. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building nos. 30145, 30707, 30708, 30709, 30147, 30150 and 30151, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2009.
86. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Experimental determination of mechanical properties of materials at elevated temperatures, "Đuro Đaković" Termoenergetska postrojenja d.o.o., University of Rijeka, Faculty of Engineering, Rijeka, 2009.
87. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D., Vukelić, G.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building nos. 30700, 30701, 30704, 30706, 30707, 30708, 32023 and 30144, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2008.
88. Brnić, J., Čanadija, M., Turkalj, G., Brčić, M., Vizentin, G.: Tensile test of flat specimens made of material CR-A, "Brodogradilište Kraljevica" d.d., University of Rijeka, Faculty of Engineering, Rijeka, 2007.
89. Brnić, J., Čanadija, M., Turkalj, G., Lanc, D.: Tensile test of circular specimens made of material E355, Semwick d.o.o. Rijeka, University of Rijeka, Faculty of Engineering, Rijeka, 2007.
90. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Investigation of elastomechanical properties of steel specimen S355J2G3N, MICK d.o.o. Kukuljanovo-Škrljevo, University of Rijeka, Faculty of Engineering, Rijeka, 2007.
91. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building no. 117, 705 i 30131, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2007.
92. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building nos. 111, 112, 113, 114, 118 and 119, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2006.
93. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building nos. 110, 111, 690, 693, 695, 696 and 697, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2005.

94. Brnić, J., Turkalj, G., Čanadija, M., Lanc, D.: Analysis and testing of tensile strength of GJL-250 material specimens of marine engine cylinder liners for building nos. 686, 690, 691 and 692, MID "3. Maj", University of Rijeka, Faculty of Engineering, Rijeka, 2004.
95. Turkalj, G., Čanadija, M., Butković, M., Žigulić, R., Lanc, D., Vizentin, G.: Analysis of stresses and vibrations of diagonal pipe on rail mounted quayside crane 50t (RMQC), SAMSUNG Fab. No. 008539-001, Port of Rijeka, Report No. ZTM 01/03, Rijeka, 2003.
96. Brnić, J., Turkalj, G.: Experimental determination of load-carrying capacity of ordinary hooks, University of Rijeka, Faculty of Engineering, Rijeka, 1998.
97. Brnić, J., Turkalj, G.: Analysis and experimental determination of elasto-mechanical characteristics of carrying strips for transportation of small floating units, University of Rijeka, Faculty of Engineering, Rijeka, 1997.
98. Turkalj, G.: Design of special puller of roller bearing inner ring on traction motor 2640 kW/3000 V of electric locomotives from series 362, Croatian Railways, Rijeka, 1992.
99. Turkalj, G.: Wearing analysis of traction motor journal bearings on railway vehicles from series 362 and 315/320: Proposal for bearing casting improvement with notional solution of casting machine, Croatian Railways, Zagreb, 1991.