

# Publications

**Dr. Mihai Nedelcu, Associate Professor**

## International Journal Papers:

1. **Nedelcu M.**, Hortensiu L. Cucu, *Buckling modes identification from FEA of thin-walled members using only GBT cross-sectional deformation modes*, Thin-Walled Structures, *Article in Press*, 2013, <http://dx.doi.org/10.1016/j.tws.2013.06.007>, Scor relativ de influență: 1.409
2. **Nedelcu M.**, *GBT-based buckling mode decomposition from Finite Element Analysis of thin-walled members*, Thin-Walled Structures, vol. 54, pag. 156-163, Elsevier Science Publisher, UK, 2012, <http://dx.doi.org/10.1016/j.tws.2012.02.009>
3. **Nedelcu M.**, *GBT formulation to analyse the buckling behaviour of isotropic conical shells*, Thin-Walled Structures, vol. 49, nr.7, pag. 812-818, Elsevier Science Publisher, UK, 2011, [doi:10.1016/j.tws.2011.02.006](http://dx.doi.org/10.1016/j.tws.2011.02.006)
4. **Nedelcu M.**, *GBT formulation to analyse the behaviour of thin-walled members with variable cross-section*, Thin-Walled Structures, vol. 48, nr.8, pag. 629-638, Elsevier Science Publisher, UK, 2010, <http://dx.doi.org/10.1016/j.tws.2010.03.001>

## National Journal Papers:

1. **Nedelcu M.**, Emil Frățiță, Mihai Iliescu, *Experimental modal testing of a concrete bridge*, Acta Tech. Napocensis: Applied Mathematics and Mechanics, vol. 55, nr. 3, UTCN, Cluj-Napoca, ISSN 121-5872, 2012
2. **Nedelcu M.**, Paula Groza, Hortensiu L. Cucu, *The estimation of dynamic properties of a fixed beam using experimental modal testing*, Acta Tech. Napocensis: Applied Mathematics and Mechanics, vol. 55, nr. 3, UTCN, Cluj-Napoca, ISSN 121-5872, 2012
3. **Nedelcu M.**, *GBT-based Analysis of Tapered Thin-Walled Members: Recent Developments*, Acta Tech. Napocensis: Civil Eng. & Arch., vol. 54, nr.1, UTCN, Cluj-Napoca, 2011, [http://constructii.utcluj.ro/ActaCivilEng/download/atn/ATN2011\\_4.pdf](http://constructii.utcluj.ro/ActaCivilEng/download/atn/ATN2011_4.pdf)
4. Olariu I., **Nedelcu M.** ș.a., *Sistem de izolare de tip cinematic-disipativ pentru planșeele construcțiilor (i)*, Acta Technica Napocensis, UTCN, Cluj-Napoca, nr.44/2001
5. Olariu I., **Nedelcu M.** ș.a., *Sistem de izolare de tip cinematic-disipativ pentru planșeele construcțiilor (ii)*, Acta Technica Napocensis, UTCN, Cluj-Napoca nr.45/2002

### **National/International Conference Papers:**

1. **Nedelcu M.**, Popa A.G., Cucu H.L., Chira N., *Vibration mode decomposition from finite element analysis of thin-walled members with holes*, 11th International Conference on Vibration Problems, Lisbon, Portugal, 9-12 September 2013
2. **Nedelcu M.**, Chira N., Cucu H.L., Popa A.G., *Buckling mode decomposition of thin-walled members with holes*, 5th International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 2-4 September 2013
3. **Nedelcu M.**, Moen, C.D., *Automated elastic buckling mode identification of thin-walled steel columns with perforations employing a generalized beam theory approach*, Engineering Mechanics Institute Conference (EMI2013), Evanston, IL, USA, 4-7 August 2013
4. **Nedelcu M.**, Chira N., Cucu H.L., *Vibration mode decomposition from finite element analysis of axially compressed thin-walled members*, Design Fabrication and Economy of Metal Structures 2013, Miskolc, Hungary, 24-26 Aprilie, 2013
5. **Nedelcu M.**, Cucu H.L., *Buckling modes identification from FEA of thin-walled members using only GBT cross-sectional deformation modes*, 6th International Conference on Coupled Instabilities in Metal Structures, Glasgow, Scotland, UK, 3-5 December, 2012
6. **Nedelcu M.**, Chira N., Popa A.G., Cucu H.L., *GBT-based buckling mode identification from Finite Element Analysis of thin-walled members*, European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012), Viena, Austria, 10-14 September, 2012
7. Köllö G., **Nedelcu M.**, Kocsig G., *Dynamic measurements on a railway section*, 16<sup>th</sup> International Conference on Civil Engineering and Architecture, Sumuleu-Ciuc, Romania, 7-10 June 2012
8. Chiorean C.G., Tarta G., Barsan G.M., Gobesz F.Z., **Nedelcu M.**, *Computer based nonlinear analysis method for seismic performance assesment of 3D frameworks*, International Conference STESSA, Chile, 2012
9. Chiorean C.G., Barsan G.M., **Nedelcu M.**, Varga S., Ciplea C., *Large deflection distributed plasticity analysis pf 3D composite steel-concrete frameworks*, Proceedings of International Symposium IABSE-IASS, Taller, Longer, Lighter, London, UK, 20-23 September 2011
10. **Nedelcu M.**, Popa A.G., *New GBT approach for tapered thin-walled members with closed cross-sections*, Proceedings of International Symposium IABSE-IASS, Taller, Longer, Lighter, London, UK, 20-23 September 2011

11. **Nedelcu M.**, Chiorean C.G., *GBT formulation to analyse the stability of isotropic conical shells*, Proceedings of the 6th International Conference on Thin Walled Structures Timisoara, Romania, 05 – 07 September 2011
12. **Nedelcu M.**, Chira N, *GBT buckling analysis of tapered thin-walled members subjected to non-uniform bending*, Proceedings of the International Conference Eurosteel 2011, Budapest, Hungary, August 31 - September 2, 2011
13. Chiorean C.G., Petran I., **Nedelcu, M.**, Varga Sz., *Analiza Statica Neliniara A Structurilor Compozite Otel-Beton Spatiale*, A 12-a Conferința Națională de Construcții Metalice, Timișoara, Romania, 26-27 Noiembrie 2010
14. **Nedelcu M.**, *Seismic analysis using Robot Millennium*, Computational Civil Engineering, Universitatea Tehnică “Gh. Asachi” Iași, Romania, 30 mai 2008
15. **Nedelcu M.** *Applications of the generalized beam theory*, Sesiunea Aniversară a Facultății de Construcții din Cluj-Napoca - C55 / Conferința Internațională "Construcții 2008" - C2008, Cluj-Napoca, Romania, 9-10 Mai 2008
16. **Nedelcu M.**, Socaciu N. ș.a., *Stability loss for a cylindrical tube with transversal and longitudinal stiffeners*, Proceedings of the International Symposium: Composite materials, elements and structures for construction, Timișoara Academic Days, 10-th Edition, pag. 327-339, ISSN: 1843-0910, 24-25 Mai 2007
17. Brișan C., **Nedelcu M.**, *Parallel robots used in passive and active protection of the buildings*, 22nd International Symposium on Automation and Robotics in Construction ISARC 2005 , Ferrara (Italy), 11-14 septembrie, 2005
18. Brișan C., **Nedelcu M.**, *Aspects of passive and active protection of the buildings using parallel mechanisms*, Conferința Internațională de robotică, Timisoara, Romania, pag.33-34, ISBN 937-97258-3, 2004
19. Olariu I., **Nedelcu M.** ș.a., *Experimental study and inelastic analysis of a r/c line pole*, International conference Constructions, vol.1, Cluj-Napoca, Romania. 2003

**Books:**

1. Panțel, E., Ioani, A., Popa, A., **Nedelcu, M.**, *Strength of materials – theory and problems*, Ed. Napoca Star, ISBN 978-973-647-689-1, 261 pag., 2009
2. Mathe, A.E., **Nedelcu M.**, *Aplicații AutoCad și Programare AutoLisp – Îndrumător de laborator*, Ed. U.T.PRES, Cluj-Napoca, ISBN 978-973-662-398-1, 143 pag., 2008

3. Petrina, M., **Nedelcu, M.** ș.a., *Programarea calculatoarelor în construcții. aplicații în fortran, excel și mathcad*, Ed. U.T.PRES, Cluj-Napoca, ISBN 978-973-662-291-5, 194 pag., 2007
4. Petrina, M., **Nedelcu, M.** ș.a., *Utilizarea mediului grafic autocad și programare în autolisp, aplicații în construcții*, Ed. U.T.PRES, Cluj-Napoca, ISBN (10) 973-662-261-4, ISBN (13) 978-973-662-261-8, 291 pag., 2006

**PhD Thesis:**

*Stability aspects for metallic structures*, supervisor prof. dr. eng. **Cornel Bia**, Technical University of Cluj-Napoca, 107 pages, 2009

Data

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