

1. Personal information

Name and surname: Chiorean Cosmin-Gruia

Date and place of birth: 11 October 1971, Cluj-Napoca, Romania

Present academic position: Full Professor, Technical University of Cluj-Napoca

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2. Education

2013 Habilitation in civil engineering, Technical University of Construction, Bucharest.
2002 Postdoctoral fellow, New University of Lisbon,, Lisbon, Portugal (2002-2004)
2001 PhD in civil engineering, Technical University of Cluj-Napoca.
1997 MSc in civil engineering, Technical University of Cluj-Napoca.
1999 Babes-Bolyai University, Faculty of Mathematics, Computer Science Section, Cluj-Napoca
1995 Technical University of Cluj-Napoca, Faculty of Civil Engineering, Cluj-Napoca
1990 High School "Emil Racovita", Mathematics-Physics Section, Cluj-Napoca

3. Professional experience

2016-present Scientific researcher I - Babes-Bolyai university, Faculty of Science and Environmental Engineering, within the research project: "Intelligent systems on the safety of the population through the control and reduction of radon exposure correlated with the optimization of housing energetic efficiency from important urban areas from Romania" - *SMART-RAD-EN* contract no: 22/01.09.2016, code project: ID P_37_229, cod MySmis: 103427 <http://www.smartradon.ro/echipa>

2012-present Head of research group: "*Computational Modeling and Advance Simulation in Structural and Geotechnical Engineering*" <https://constructii.utcluj.ro/files/Departamente/Mecon/2019-2020/CMASGE.pdf>

2009-present Full professor, (2009-), Technical University o Cluj-Napoca, Faculty of Civil Engineering: Scientific research, PhD supervisor in the field of civil engineering (numerical modeling and mathematical formulations in advance analysis of structures), Didactic activities (Dynamic and Stability of Structures, Numerical Methods), academic management, academic and institutional assessment. Academic responsible of double-degree master-of-science study program in structural engineering (University of Bergamo, Italy).

2007-present Researcher software developer SC GeoStru Software (www.geostru.eu)- Software development in the field of geotechnical and structural engineering (GFAS-Finite element systems for geotechnical applications; RSLIII-2D-Local Seismic Response of Soils and Structures) <https://www.geostru.eu/product-category/software-en/geotechnical-software/>

2002-2004 Post-doctoral fellowship, Faculty of Science and Technology, Department of Civil Engineering, New University of Lisbon, Portugal (Advanced studies concerning the application of the finite element methods in ballistic impact of composite materials).

1996-2001 PhD fellowship, Technical University of Cluj-Napoca, Advanced nonlinear analysis of structures (nonlinear static and dynamic analysis of structures, finite element method, numerical methods, and applied informatics).

4. Ten selected publications

1. **Chiorean, C.G.**, Second-order Flexibility-Based Model for Nonlinear Inelastic Analysis of 3D Semi-Rigid Steel Frameworks, *Engineering Structures*, **136**: 547-579, Elsevier Science, 2017. FI: 3.084.

2. **Chiorean, C.G.**, Marchis, I.V., A Second-Order Flexibility-Based Model for Steel Frames of Tapered Members, *Journal of Constructional Steel Research*, **132**: 43-71, Elsevier Science, 2017. FI: 2.65

3. **Chiorean C.G.**, Buru S. Practical Nonlinear Inelastic Analysis Method of Composite Steel-Concrete Beams with Partial Composite Action, *Engineering Structures*, **134**:74-106, Elsevier, 2017. FI: 3.084

4. R. Moga, R. Cosgarea, S. Buru, **C.G. Chiorean**, Finite element analysis of the dental pulp under orthodontic forces, *American Journal of Orthodontics and Dentofacial Orthopedics*, Elsevier Science, **155**(4): 543-551, 2019. FI: 1.911.

5. **Chiorean, C.G.**, A Computer Method for Nonlinear Inelastic Analysis of 3D Composite Steel-Concrete Frame Structures, *Engineering Structures*, **57**: 125-152, *Elsevier Science*, 2013. FI: 3.084.
6. **Chiorean, C.G.**, Computerised Interaction Diagrams and Moment Capacity Contours for Composite Steel-Concrete Cross-Sections, *Engineering Structures*, **32(11)**: 3734-57, *Elsevier Science*, 2010. FI: 3.084.
7. **Chiorean, C.G.**, A Computer Method for Nonlinear Inelastic Analysis of 3D Semi-Rigid Steel Frameworks, *Engineering Structures*, **31(12)**: 3016-33, *Elsevier Science*, 2009. FI: 3.084.
8. **Chiorean, C.G.**, Barsan, G.M., Large Deflection Distributed Plasticity Analysis of 3D Steel Frameworks, *Computers & Structures*, **83 (19-20)**:1555-71, *Elsevier Science*, 2005. FI: 3.354.
9. Silva, M.A.G., Cismasiu, C., **Chiorean, C.G.**, Numerical Simulation of Ballistic Impact on Composite Laminates, *International Journal of Impact Engineering*, **31 (3)**:289-306, *Elsevier Science*, 2005. FI: 3.173.
10. Barsan, G.M., **Chiorean, CG.** Computer Program for Large Deflection Elasto-Plastic Analysis of Semi-Rigid Steel Frameworks, *Computers & Structures*, **72(6)**: 699-711, *Elsevier Science*, 1999. FI: 3.354.

5. Research grants (selection)

1. The grant POC-A1-A1.1.4-E-2015 (P-37-229) financed by ANCSI “Smart Systems for Public Safety through Control and Mitigation of Residential Radon linked with Energy Efficiency Optimization of Buildings in Romanian Major Urban Agglomerations (director Prof. Carlos Sainz Univ. Cantabria, Spain – Babes-Bolyai University) – Coordinator of task: Advanced numerical models configuration for prediction assisted by experiment, numerical simulations. 2016-2020. <http://www.smartradon.ro/echipa>
2. The grant PNII-IDEI/193/2008 (Exploratory research projects) finance by CNCSIS-UEFISCDI “Design and seismic performance evaluation of spatial frame structures using advanced nonlinear static analysis” 2009-2012. <http://users.utcluj.ro/~ccosmin/RESEARCHPROJECT.htm>
3. The grant POCTI/36055/ECM/2000 financed by Foundation for Science and Technology, (FCT), Portugal, "Aplicacao de Algoritmos Geneticos e Redes Neurais a Optimizacao e Fiabilidade Estrutural", 2004.- New University of Lisbon (director Prof. J.R. Almeida), Faculty of Science and Technology, Department of Civil Engineering, New University of Lisbon, Portugal, 2004.
4. The grant POCTI 43228/EME/2001- financed by Foundation for Science and Technology, (FCT), Portugal, "Impact on Plates of Composite Materials Protected with Polymeric Mortar", 2002-2004- (director prof. MAG Silva), Faculty of Science and Technology, Department of Civil Engineering, New University of Lisbon, Portugal: 2002-2004.

6. Synergistic activities (selection)

Member of National Council for Attestation of University Titles, Diplomas and Certificates, Civil Engineering Panel, 2011-2012, (2011-2012; 2016-2019); Member of National Research Council (CNCS), Engineering Science Panel (CNCS), Engineering Science Panel (2012-2013); Head of Structural Mechanics Department, Faculty of Civil Engineering, Cluj-Napoca (2011-2015; 2015-2020). Member of Research Council and CSUD (Council of University Doctoral Studies) from Technical University of Cluj-Napoca (2012-2016) and Technical University of Constructions Bucharest (2016-2020); Editor in chief of the journal Acta Technica Napocensis: Civil Engineering & Architecture (2011-); Editorial board member of: Open Civil Engineering Journal, Bentham Science; International Journal of Earthquake and Impact Engineering, InderScience Publisher; Editorial board member of the International Conference on Computational Structures Technology (CST), (2012-2020), Civil Comp Press, UK; Member of the scientific committee of “The international colloquium on stability and ductility of steel structures – SDSS 2016, 2019”; Reviewer for the Young Researcher Best Paper Competition in the framework of “The International Conference on Civil, Structural and Environmental Engineering, Civil Comp Press, UK; Organizer/Chairman International Conferences for PhD Students in Civil Engineering and Architecture, (2012,2014); Reviewer for international journals (selection): Computers & Structures (Elsevier); Advances in Engineering Software (Elsevier); Finite Elements in Analysis and Design (Elsevier); Engineering Structures (Elsevier); Journal of Constructional Steel Research (Elsevier); Composite Structures (Elsevier); Steel and Composite Structures (Techno Press).

Prof. Cosmin G Chiorean

Cluj-Napoca, Aprilie 2020