

## PERSONAL INFORMATION

## Gabriel NĂSTASE



✉ [gabrielnastase@unitbv.ro](mailto:gabrielnastase@unitbv.ro)

**POSITION**  
IOSUD UTBV

PhD Coordinator  
Doctoral studies field: Mechanical Engineering  
Since: 2019

**EXPERTISE FIELD AND  
RESEARCH INTEREST AREAS**

Mechanical engineering, refrigeration, bioengineering, cryogenics, 3D printing

**WORK EXPERIENCE**  
October 2009-present**Assoc. Prof. at the Department of Building Services**

Transilvania University of Braşov, Civil Engineering Faculty, Romania

- Refrigeration, Cryogenics, Excel, AutoCAD

October 2017-present

**Type and sector of activity** Pedagogy, Research, Engineering

**Associate teacher Department of Thermotechnics, Engines, Thermal and Refrigeration Equipment**

Politehnica University Bucureşti, Faculty of Mechanical and Mechatronics Engineering, Romania

- Refrigeration Laboratory

**Type and sector of activity** Pedagogy, Research, Engineering

July 2007-Present

**Design Engineer Building Services**

SC HEAT TRANSFER SRL, Braşov, România

- Building Services design (plumbing, fire, heating, electrical, HVAC);
- Site tracking;
- Tendering;

**Type and sector of activity** Design and execution of building services

**EDUCATION AND TRAINING**

August 2016-June 2017

**Postdoc Mechanical Engineering**

Department of Mechanical Engineering, California University, Berkeley, USA

- Isochoric preservation systems;
- 3D printing;

October 2009-2014

**PhD Mechanical Engineering**

Building Services Faculty, Technical University of Civil Engineering, București, România

- Double skin façade Romania;

October 2007-February 2009

**Master Energy Modernization in the Built Environment**

Transilvania University of Braşov, Civil Engineering Faculty, România

- Design of energy efficient buildings and building services ;

October 2002-July 2007

**Bachelor's degree in Building Services**

Transilvania University of Braşov, Civil Engineering Faculty, România

- Design of buildings and building services;

September 1998-July 2002

**High School Diploma**

"Nicolae Titulescu" High School

- Mathematics – Physics

**PERSONAL SKILLS**

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Listening	
English	Good	Good	Good	Good	Good
Replace with name of language certificate. Enter level if known.					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills

- Ability to listen;
- Clarity and Conciseness.

Organisational / managerial skills

- Sets Clear Goals and Performance Expectations;
- Provides Ongoing and Constructive Feedback;
- Understands and Articulates a Clear Vision;
- Strategic Thinking and Business Development.

Job-related skills

- Well-organized and detail minded;
- Reliable and punctual with an excellent attendance record;
- Flexible;
- Able to work independently or in a team-oriented environment;
- Maintain a positive, professional attitude with students and colleagues;
- Dedicated to achieving personal and professional goals;
- Problem solver with the ability to prioritize tasks;
- Enthusiastic and enjoy meeting new people;
- Strong interest in helping and working with others;
- Motivated to learn new skills through on-the-job training;
- Quick learner.

- Digital Skills**
- Diagnostic, assembling, configuration, service hardware – Personal Computers;
  - Diagnostic and service for Microsoft Windows;
  - Operating Systems: Microsoft Windows;
  - Office Applications: Microsoft Office (Word, Excel, Power Point), Open Office;
  - Web Design: HTML;
  - Graphics: Corel Draw, Corel Photopaint;
  - Designing: AutoCAD (2D and 3D excellent), Pro Engineer, Catia, Inventor (basic);
  - Modeling and Simulation: ANSYS Mechanical, ANSYS CFX and COMSOL Multiphysics
  - Internet: Chrome, Microsoft Internet Explorer, Opera, Yahoo Email, GMail etc.;
  - Network: Configuration, Exploiting.
- Other skills**
- Reading, Sports, Music, Movies, Communications, Drawing and Fotography
- Driving license**
- B

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**ADDITIONAL INFORMATION**

- Publications
- Presentations
- Projects
- Conferences
- Seminars
- Honours and awards
- Memberships
- References
- Citations
- H Indexes
- Certifications

- 6 Cărți tehnice
- Năstase G., Șerban A. - „Proiectare 2D cu AutoCAD”, Editura Universității Transilvania din Brașov, 2012, 176 pag., ISBN: 978-606-19-0106-7
- Șerban A., Chiriac F., Năstase G. - “Instalații Frigorifice – Aplicații și probleme rezolvate”, Editura AGIR, București, 2011, 215 pag., ISBN: 978-973-720-425-7.
- Năstase G., Șerban A. - „Fațade duble de sticlă pentru cladiri de birouri. Studiu de caz Brașov”, Editura Napoca Star Cluj-Napoca, 2014, 203 pag., ISBN: 978-606-690-151-2
- Năstase G., Șerban A. - “LATEX. Ghid pentru scrierea articolelor ISI”, Editura Napoca Star Cluj-Napoca, 2016, 111 pag., ISBN: 978-606-690-507-7.
- Ionescu M., Năstase G. - “Programarea Calculatoarelor. Îndrumător de laborator Excel și Mathcad”, Editura Napoca Star Cluj-Napoca, 2017, 174 pag., ISBN: 978-606-690-588-6
- Dragomir G., Năstase G., Brezeanu A.I., Bolocan S. - Centrale termice. Îndrumător de proiectare, I. Brașov: Editura Universității Transilvania din Brașov, 2016, 131 pag, ISBN: 978-606-19-0772-4.
- Web of Science WOS ISI h-index = 5, Scopus h-index = 6, Google scholar h-index = 8
- 20 articole cu și fără factor de impact în jurnale recunoscute internațional, WOS

Nr. Crt.	Informații articol	WOS	Factor de impact
[1]	<b>Gabriel Năstase</b> , Pedro Alejandro PEREZ, Alexandru ȘERBAN*, Alexandru DOBROVICESCU, Mariana-Florentina ȘTEFĂNESCU and Boris RUBINSKY - Advantages of isochoric freezing for food preservation: a preliminary analysis, International Communications in Heat and Mass Transfer, ISSN: 0735-1933, 78 (2016) pp. 95-100, 10.1016/j.icheatmasstransfer.2016.08.026	WOS:000388050900012	3,718
[2]	G. Dragomir, A. Șerban, <b>G. Năstase</b> , and A. I. Brezeanu, "Wind energy in Romania: A review from 2009 to 2016," Renew. Sustain. Energy Rev., vol. 64, pp. 129–143, 2016, ISSN: 1364-0321.	WOS:000381833200009	8,050
[3]	H. Mikus, A. Miller, <b>G. Năstase</b> *, A. Șerban, M. Shapira, and B. Rubinsky, "The nematode Caenorhabditis elegans survives subfreezing temperatures in an isochoric system," Biochem. Biophys. Res. Commun., vol. 477, no. 3, pp. 401–405, 2016, ISSN: 0006-291X.	WOS:000380732000015	2,466
[4]	<b>G. Năstase</b> *, A. Șerban, G. Dragomir, S. Bolocan, and A. I. Brezeanu, "Box window double skin façade. Steady state heat transfer model proposal for energetic audits," Energy Build., vol. 112, pp. 12–20, Jan. 2016, ISSN: 0378-7788.	WOS:000371557400002	4,067
[5]	<b>G. Năstase</b> *, A. Șerban, A. F. Năstase, G. Dragomir, A. I. Brezeanu and N. Ioardan, "Hydropower development in Romania. A review from its beginning to the present", Renew. Sustain. Energy Rev., vol. 80, pp. 297–312, 2017, ISSN: 1364-0321.	WOS: 000412787600023	9,184
[6]	Chenang Lyu, <b>Gabriel Năstase</b> *, Gideon Ukpai, Alexandru Șerban and Boris Rubinsky, "A comparison of freezing-damage during isochoric and isobaric freezing of the potato", PeerJ, 2017, DOI 10.7717/peerj.3322, ISSN: 2167-8359	WOS:000401846100007	2,118
[7]	<b>Gabriel Năstase</b> *, Chenang Lyu, Gideon Ukpai, Alexandru Șerban and Boris Rubinsky "Isochoric and isobaric freezing of fish muscle" Biochem. Biophys. Res. Commun., vol. 485, no. 2, pp. 279–283, 2017, ISSN: 0006-291X.	WOS:000396798300010	2,466
[8]	Gideon Ukpai, <b>Gabriel Năstase</b> *, Alexandru Șerban and Boris Rubinsky "Pressure in isochoric system containing aqueous solutions at subzero Centigrade temperatures" PLoS ONE, vol. 12, no. 8, pp. 1–16, 2017, ISSN: 1932-6203	WOS:000407856600114	2,766
[9]	<b>G. Năstase</b> * and A. Șerban, "EXPERIMENTAL STUDY ON CO2 CAPTURE IN A RESIDENTIAL SPACE," Environ. Eng. Manag. J., vol. 18, no. 5, pp. 1001–1011, 2019, ISSN: 1582-9596	WOS:000473511200006	1,186
[10]	G. Năstase*, A. Șerban*, G. Dragomir, A. I. Brezeanu and I. Bucur, "Photovoltaic development in Romania. Reviewing what has been done", Renew. Sustain. Energy Rev., vol. 80, pp. 297–312, 2018, ISSN: 1364-0321.	WOS:000446310000040	10,556
[11]	<b>Gabriel Năstase</b> *, Alexandru Șerban*, Alina Florentina Năstase, George Dragomir, Alin Ionuț Brezeanu "Air quality, primary air pollutants and ambient concentration inventory for Romania", Atmospheric Environment, vol.184C, 2018, pp.292-303, ISSN: 1352-2310	WOS:000433652300029	3,708
[12]	S. Bolocan*, F. Chiriac, A. Șerban, G. Dragomir, and <b>G. Năstase</b> , "Development of a Small Capacity Solar Cooling Absorption Plant," Energy Procedia, vol. 74, pp. 624–632, 2015, ISSN: 1876-6102.	WOS:000360574400070	-
[13]	A. Șerban, <b>G. Năstase</b> , G. Dragomir and A. I. Brezeanu, "Interactive whiteboard teaching and online learning cryogenics," SGEM2016, Book 5, vol. III, pp. 857–862, ISBN 978-619-7105-67-4 / ISSN 1314-2704, DOI: 10.5593/sgem2016B53, 2016	WOS:000391520200109	-
[14]	A. Șerban, <b>G. Năstase</b> , G. Dragomir and A. I. Brezeanu, "Heat Transfer and vapor diffusion through contemporary walls," SGEM2016, Book 6, vol. II, pp. 121–128, ISBN 978-619-7105-69-8 / ISSN 1314-2704, DOI: 10.5593/sgem2016B62, 2016	WOS:000391650000017	-
[15]	<b>G. Năstase</b> , A. Șerban, G. Dragomir and A. I. Brezeanu, "Box double-skin façade. Experimental research in heat transfer in temperate continental climate," SGEM2016, Book 6, vol. II, pp. 493–500, ISBN 978-619-7105-69-8 / ISSN 1314-2704 DOI: 10.5593/sgem2016B62, 2016.	WOS:000391650000065	-
[16]	A. I. Brezeanu, G. Dragomir, A. Șerban and <b>G. Năstase</b> , "Evaluation of heat pump efficiency in real-life conditions. A case study," SGEM2016, Book 4, vol. I, pp. 355–360, ISBN 978-619-7105-63-6 / ISSN 1314-2704, DOI: 10.5593/sgem2016B41, 2016.	WOS:000391348600045	-
[17]	G. Dragomir, A. I. Brezeanu, A. Șerban and <b>G. Năstase</b> , "Heat pumps energy potential for heating in industrial buildings," SGEM2016, Book 4, vol. I, pp. 389–396, ISBN 978-619-7105-63-6 / ISSN 1314-2704, DOI: 10.5593/sgem2016B41, 2016.	WOS:000391348600050	-
[18]	A. Dobrovicescu, <b>G. Năstase</b> , M. F. Ștefănescu, A. Șerban, "Exergy Analysis of a vapour compression Heat Pump", SGEM2018, Volume 18, Issue 6.3, pp. 181-188, ISBN 978-619-7408-52-2 / ISSN 1314-2704, DOI: 10.5593/sgem2018/6.3	-	-
[19]	C.F. Buicu, <b>G. Năstase</b> , A. Șerban, M. F. Ștefănescu, A. Dobrovicescu, "Isochoric-Isobaric preservation in water", SGEM2018, Volume 18, Issue 6.2, pp. 181-188, ISBN 978-619-7408-51-5 / ISSN 1314-2704, DOI: 10.5593/sgem2018/6.2	-	-
[20]	Alexandru DOBROVICESCU, Alexandru SERBAN, Ciprian FILIPOIU, <b>Gabriel NASTASE</b> , Florea CHIRIAC - Heat Pump Operating With NH3 Or Co2 – A Comparative Study; The 24th IIR International Congress of Refrigeration, Yokohama-Japan, 2015;	-	-