



# Georgian-Cristian Lupu

**Nationality:** Romanian | **Gender:** Male | **Website:** [orcid.org/0000-0002-4615-836X](https://orcid.org/0000-0002-4615-836X) |

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## EDUCATION AND TRAINING

10/2018 – CURRENT Bucharest, Romania

**PH. D STUDENT** Faculty of Mechanical and Mechatronics Engineering, University POLITEHNICA of Bucharest

**Field of study** Mechanical Engineering | **Level in EQF** EQF level 8 |

**Thesis** Numerical and experimental analysis of static or dynamic compression behaviour of porous materials imbibed with liquids

09/01/2023 – 25/05/2023 Angoulême, France

**ERASMUS+ CERTIFICATE OF ATTENDANCE (RESEARCH STAGE)** Institute PPrime, Université de Poitiers

**Address** IUT Angoulême, 4 avenue de Varsovie, 16000, Angoulême, France

15/03/2021 – 15/07/2021 Angoulême, France

**ERASMUS+ CERTIFICATE OF ATTENDANCE (RESEARCH STAGE)** Institute PPrime, Université de Poitiers

**Address** IUT Angoulême, 4 avenue de Varsovie, 16000, Angoulême, France

10/2015 – 07/2017 Bucharest, Romania

**MASTER'S DEGREE** Faculty of Mechanical Engineering and Mechatronics, University POLITEHNICA of Bucharest

Programme of study: Integrated Design in Mechanical Engineering

Ranked 1st out of 23 graduates

**Field of study** Mechanical Engineering | **Level in EQF** EQF level 7 | **Type of credits** ECTS | **Number of credits** 120 |

**Thesis** The study of the effects of elastic deformations in hydrodynamic compliant bearings

03/2013 – 07/2014 Bucharest, Romania

**MASTER'S DEGREE** Faculty of Mechatronics and Integrated Armament Systems, Military Technical Academy

Programme of study: Maintenance of defense and security special mechanical systems

Ranked 10th out of 20 graduates

**Field of study** Weapons, Missiles and Ammunition Engineering | **Level in EQF** EQF level 7 | **Type of credits** ECTS |

**Number of credits** 90

08/2008 – 07/2012 Bucharest, Romania

**BACHELOR/ ENGINEER DEGREE** Faculty of Mechatronics and Integrated Armament Systems, Military Technical Academy

Programme of study: Weapons, artillery equipments and fire control systems

Ranked 3rd out of 7 graduates

**Field of study** Weapons, missiles and ammunition engineering | **Final grade** 8,52 | **Level in EQF** EQF level 6 |

**Type of credits** ECTS | **Number of credits** 240

03/2012 – 06/2012 Brest, France

**LLP ERASMUS: DIPLOMA PROJECT (BACHELOR)** École Nationale Supérieure de Techniques Avancées Bretagne

Numerical simulation of the detonation of cylindrical charges of emulsion in air

**Field of study** Mechanical engineering/ Pyrotechnics | **Final grade** 16/ 20 | **Type of credits** ECTS | **Number of credits** 20

2008 – 2012 Bucharest, Romania

**TEACHING STAFF - 1ST LEVEL (PRE-UNIVERSITY EDUCATION)** Faculty of Psychology and Educational Science, University of Bucharest

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2004 – 2008 Tulcea, Romania

**BACCALAUREATE DIPLOMA** Grigore Moisil Theoretical High School - Mathematics and informatics

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**Level in EQF** EQF level 5

## WORK EXPERIENCE

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05/2020 – CURRENT Clinceni, Romania

**JUNIOR RESEARCHER, ARMAMENT SYSTEMS DEPARTMENT** MILITARY EQUIPMENT AND TECHNOLOGIES RESEARCH AGENCY, MINISTRY OF NATIONAL DEFENCE

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05/2018 – 05/2020 Clinceni, Romania

**RESEARCH ASSISTANT, ARMAMENT SYSTEMS LABORATORY** MILITARY EQUIPMENT AND TECHNOLOGIES RESEARCH AGENCY, MINISTRY OF NATIONAL DEFENCE

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12/2012 – 05/2018 Bucharest, Romania

**ENGINEER, DESIGN AND TECHNOLOGICAL ENGINEERING OFFICE** MAINTENANCE CENTER, MINISTRY OF NATIONAL DEFENCE

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10/2016 – 04/2018 Bucharest, Romania

**PRODUCTION ENGINEERING MANAGER, MANUFACTURING DEPARTMENT** MAINTENANCE CENTER, MINISTRY OF NATIONAL DEFENCE

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## LANGUAGE SKILLS

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Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C1	B2	B2	B2
<b>FRENCH</b>	B1	B2	A2	B1	B1

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Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## DIGITAL SKILLS

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Microsoft Office (Good) | Mathcad (Intermediate)

### CAD

SolidWorks (Intermediate) | AutoDesk Fusion 360 (Intermediate) | AutoCAD (intermediate) | Autodesk Inventor (Beginner) | Catia V5 (Beginner)

### CAE

ANSYS Workbench (Intermediate) | Optimal knowledge of ANSYS Fluent | Autodesk MoldFlow (Beginner) | Altair Hyperworks (Beginner) | Ansys Fluent (Beginner)

### Computer programming

Matlab (Beginner) | Fortran (Beginner)

## ADDITIONAL INFORMATION

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### PUBLICATIONS

**Experimental investigation of imbibed open-cell foams under repetitive compression – 2023**

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Lupu GC, Fătu A, Henry Y, Nechita RI, Cicone T - UPB Sci. Bull. Series D - accepted for publishing

Lupu G, Fătu A, Henry Y, Turtoi P, Cicone T - IOP Conf. Ser.: Mater. Sci. Eng., vol. 1262, 012024

[Experimental investigation of the limits of fluid squeeze out from an imbibed porous material](#) – 2020

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Turtoi P, Lupu GC, Cicone T, Apostol D - IOP Conf. Ser.: Mater. Sci. and Eng., vol. 997, 012019

[Evaluation of inertia effects in planar squeeze flow inside soft, porous layers](#) – 2020

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Lupu G, Turtoi P, Cicone T - IOP Conf. Ser.: Mater. Sci. and Eng., vol. 724, 012042

## NETWORKS AND MEMBERSHIPS

**Memberships** Romanian Tribology Association

## CONFERENCES AND SEMINARS

12/10/2023 – 13/10/2023 – Poitiers, France

**22nd Tribo-Prime workshop "How can hydrodynamic bearings be used in low-speed applications?"** Couderc B, Lupu GC, Henry Y, Fătu A, Bouyer J - *Characterization of soaked soft porous materials under cyclic compression*

Link [triboprime.sciencesconf.org/](http://triboprime.sciencesconf.org/)

09/06/2022 – 10/06/2022 – Iași, Romania

**The 10th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2022)**

Link [mec.tuiasi.ro/acme2022/](http://mec.tuiasi.ro/acme2022/)

04/06/2020 – 05/06/2020 – Iași, Romania

**The 9th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2020)**

Link [mec.legacy.tuiasi.ro/acme2020/](http://mec.legacy.tuiasi.ro/acme2020/)

19/09/2019 – 21/09/2019 – Cluj-Napoca, Romania

**The 14th International Conference on Tribology ROTRIB'19**

Link [minas.utcluj.ro/rotrib2019.html](http://minas.utcluj.ro/rotrib2019.html)

## PROJECTS

2020 – 2022

**DAMPCEL - Protective helmets equipped with damping elements based on porous materials imbibed with nanofluids (PN-III-P2-2.1-PTE-2019-0432)** Affiliation: POLITEHNICA University of Bucharest

Role: member in the research team

Link <https://stimpex.ro/research/casti-de-protectie-echipate-cu-componente-de-amortizare-din-materialeporoase-imbibate-cu-nanofluid/>

2020 – 2022

**SAAR - Assault rifle with self adaptive firing mechanism (PN-III-P2-2.1-PED-2019-1981)** Affiliation: Romanian Ministry of National Defence through Military Equipment and Research Agency

Role: member in the research team

Link [acttm.ro/saar/](http://acttm.ro/saar/)

2020 – 2022

**GUNDETECT - System for identification and location by air and soil of the position of guns in firing fields (PN-III-P2-2.1-PED-2019-0100)** Affiliation: Romanian Ministry of National Defence through Military Equipment and Research Agency

Role: member in the research team

Link [gundetec.inf.ro](http://gundetec.inf.ro)

## HONOURS AND AWARDS

2017

**2nd place "Nicolae Tipei Award" – INCAS Bucharest in partnership with Illinois University, USA**