



Ana-Gabriela BADEA

Place of birth: Pitesti, Romania | Gender: Female | Nationality: Romanian |
Email address: ana_gabriela.badea@upb.ro | Home address: Pitești
(Romania)

Language Skills

- **Romanian:** Mother tongue
- **English**
 - Listening: C1
 - Reading: C1
 - Spoken production: B2
 - Spoken interaction: B2
 - Writing: B2
- **French**
 - Listening: B1
 - Reading: B1
 - Spoken production: A2
 - Spoken interaction: A2
 - Writing: A2

Skills

- Microsoft Suite (Microsoft Word, Microsoft Excel, Microsoft PowerPoint)
- AutoCAD
- Good knowledge in Catia
- HTML
- MATLAB
- ANSYS

Driving Licence

- Driving licence B

Work experience

Engineer

03/10/2025 – Current

Romanian Automotive Register | Pitesti

- certifies the conformity of new products and operating materials, used in road vehicles, from the category of those related to traffic safety, environmental protection, energy efficiency and protection against theft of road vehicles provided in the list from Chapter V of RNTR 4, approved by OMTI 152 /2022
- authorizes the partitioning and packaging processes of operating materials certified by RAR.

Department: The General Directorate of Type Approval and Products Certification | **Website:** www.rarom.ro

Assistant lecturer in University

03/11/2021 – 29/09/2025

National University of Science and Technology Politehnica
Bucharest | Pitesti, Romania

Didactical activities to support the laboratories of the following subjects: Vehicle Dynamics, Vehicle Calculation and Construction, Vehicle Testing and Homologation, Structural Analysis, Bodies and Load-bearing Structures.

Associated university assistant

30/09/2021 – 03/11/2021

University of Pitesti, Faculty of Mechanics and Technology | Pitesti, Romania

Didactical activities to support the laboratories of the following subjects: Vehicle Dynamics and Automatic Transmissions.

Internship- Powertrain Tuning OBD

28/02/2018 – 30/05/2018

Automobile Dacia S.A. | Pitesti, Romania

Calibration and validation of the torque meters strategy and misfire strategy.

Education & Training

PhD Student

30/09/2020 – Current

Doctoral School "AUTOMOTIVE ENGINEERING", University of Pitesti | Pitesti, Romania

Field(s) of study: Motor vehicles, ships and aircraft | **Level in EQF:** 8 |

Thesis: Intelligent materials and structures used to increase the passive safety performance of automobiles | **Address:** str. Doaga, nr.1110440 |

Website: <https://www.upit.ro/>

Student mobility for traineeships in higher education

04/09/2023 – 29/09/2023

Universite Polytechnique Hauts-de-France | Valenciennes, France

Field(s) of study: Motor vehicles, ships and aircraft | **Website:** www.uphf.fr

Master Degree– Concept and Management of Automotive Designing

30/09/2018 – 31/05/2020

University of Pitesti, Faculty of Mechanics and Technology | Pitesti, Romania

Address: str. Targu din Vale, nr.1110040 | **Website:** https://www.upit.ro/

Student mobility for traineeships in higher education

09/02/2020 – 08/05/2020

University of Ruse "Anghel Kanchev" | Ruse, Bulgaria

Address: 8 Studentska 7004 | **Website:** www.uni-ruse.bg

Training Program for the Teaching Career I and II

30/09/2014 – 31/05/2020

University of Pitesti, Department for Training the Academic Staff | Pitesti, Romania

Address: Târgu din Vale, nr.1110040 | **Website:** https://www.upit.ro/

Engineer– Road Vehicles

30/09/2014 – 31/05/2018

University of Pitesti, Faculty of Mechanics and Technology | Pitesti, Romania

Address: Str. Targu din Vale, nr. 1110040 | **Website:** https://www.upit.ro/

High school graduate in mathematics and computer science

14/09/2010 – 31/05/2014

National College "Ion C. Brătianu" | Pitesti, Romania

Address: Str. Armand Călinescu, nr. 1410047 | **Website:** http://www.colegiulbratianu.ro/

 **Publications**

Mechanical Charact. and Numerical Modeling of 316Stainless Steel Specimens Fabricated Using SLM

Badea A. G., Tabacu S. L., Aparaschivei I. A., Negrea A. D., Moga S. G., Ducu M. C. (2026) | 10(1); 29 | Journal of Manufacturing and MaterialsProcessing | MDPI

<https://doi.org/10.3390/jmmp10010029>

Parametric Analysis of Auxetic Honeycombs

Stefan Tabacu, Ana Badea, Alina Aparaschivei, Daniel

<https://doi.org/10.3390/math13101676>

Complex Analysis of an Auxetic Structure under Compressive Loads

Stefan Tabacu, Ana Badea, Alina Sandu (2023) | 15(8), 6805 | Sustainability | MDPI

<https://doi.org/10.3390/su15086805>

Development of a coupled process–design numerical model for an automotive assembly

Mihai Stirosu, Ana Badea, Alina Sandu, Stefan Tabacu (2024) | IOP Conference Series Materials Science and Engineering 1311(1):012038

[10.1088/1757-899X/1311/1/012038](https://doi.org/10.1088/1757-899X/1311/1/012038)

Comparative analysis of the manufacturing processes for 316L material

Alina Sandu, Ana Badea, Stefan Tabacu (2024) | IOP Conference Series Materials Science and Engineering 1311(1):012037

https://www.researchgate.net/publication/384185789_Comparative_analysis_of_the_316L_material

CFD STUDY ON THE AERODYNAMIC CHARACTERISTICS OF THE AUREL PERSU's CAR

Iorga-Siman Victor; Clenci Adrian; Niculescu Rodica; Badea Ana (2022) | 64, 12-20 | INGINERIA AUTOMOBILULUI

Networks and Memberships

Member of the Society of Automotive Engineers from Romania (SIAR)

31/10/2017 – Current

Teaching placements abroad

Université Polytechnique Hauts-de-France de Valenciennes, October 2022

Projects

Member CIPCS Project 2023 'Research on mechanical properties of metal parts obtained by additive manufacturing methods compared to conventional methods'

10/01/2023 – 20/12/2023

University 4.0- Open and connected university to increase institutional resilience

17/06/2022 - Current

Responsible for Target Group 3- Students
Cod e-PNRR 1550262842

Interdisciplinary scientific research of excellence within the University of Pitesti- CNFIS-FDI-2023-F-0411

01/05/2023 - 01/09/2023

 Hobbies and Interests

Psychology, Movies, Music, Biology, Boardgames, Gardening

 Organisational skills

Analytical thinking, Attention to detail, Working under pressure

 Communication and interpersonal skills

Active listening, Teamwork, Motivation, Flexibility, Patience, Emphatic, Quick learner, Emotional Intelligence