



Olivia-Laura Petrașcu

Nationality: Romanian **Date of birth:** 19/01/1995 **Gender:** Female

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📍 **Work:** Emil Cioran, No. 4, 550025 Sibiu (Romania)

WORK EXPERIENCE

🏢 "Lucian Blaga" University from Sibiu – Sibiu, Romania

Address: Emil Cioran, No. 4, 550025 Sibiu (Romania) | **Website:** <https://www.ulbsibiu.ro/ro/> | **Name of unit or department:** Machinery and Industrial Equipment - **Business or sector:** Education

Assistant Professor Engineer

[01/03/2021 – Current]

- Preparation and support of seminars and laboratories for the subjects "Strength of Materials 1, Strength of Materials 2" (Year II - Mechatronics, Robotics, Electromechanics, Economic Engineering in the Mechanical Field, Engineering and Environmental Protection in Industry, Digital Production Systems, Transportation and Transport Engineering Traffic Engineering, Knitwear and Clothing Technology);
- Supporting scientific research activities;

🏢 S.C. Continental Automotive Systems Sibiu S.R.L – Sibiu, Romania

City: Sibiu | **Country:** Romania

Intern Process Engineer

[11/07/2016 – 31/07/2018]

- Support to the process team on the preparation of work instructions and maintenance manuals of equipment;
- Participate and perform maintenance on production equipment;
- Making pin gauges;
- Making inventories required for the team;
- Using SAP program to confirm maintenance schedules;
- Realization of the project "Broken components on Pin Insertion Island", by researching the defects caused on products involving pin insertion and finding a solution;
- Participating in production improvement and development through Initial Cleanig audits;
- Implementing the 5S concept in the maintenance workshop and documentation cabinets;

🏢 S.C. Continental Automotive Systems Sibiu S.R.L – Sibiu, Romania

City: Sibiu | **Country:** Romania | **Website:** <https://www.continental.com/ro-ro/> | **Business or sector:** Manufacturing

Total Production Maintenance Engineer

[01/08/2018 – 31/12/2020]

- Create production lines with related equipment in SAP;
- Creating corrective / preventive maintenance strategies;
- Support maintenance and SAP trainings;
- Participating in Initial Cleaning audits;
- Conduct TPM trainings for operators;
- Using SAP program to confirm maintenance schedules, close orders;
- Using PULSE and SAP data to create monthly reports;
- Preparation of work instructions and equipment maintenance manuals;
- Complex TPM responsibilities for a production module;

EDUCATION AND TRAINING

Doctoral Studies - Mechanical Engineering

"Lucian Blaga" University from Sibiu [01/10/2020 – Current]

Address: Emil Cioran, No. 4, 550025 Sibiu (Romania) | Website: <https://doctorate.ulbsibiu.ro/ro/> | Field(s) of study: Engineering, manufacturing and construction | Level in EQF: EQF level 8 | Thesis: "Studies and research on the influence of external (environmental) factors on polymeric materials"

Master's Degree - Industrial Engineering and Management

"Lucian Blaga" University from Sibiu [01/10/2018 – 15/07/2020]

City: Sibiu | Website: <https://inginerie.ulbsibiu.ro/> | Field(s) of study: Engineering, manufacturing and construction | Final grade: 10 | Level in EQF: EQF level 7 | Thesis: "Design of a device for PCB assembly / Climatic testing and their deformation"

- Finite Element Design;
- Collaborative Design 3D Experience;
- Designing with CREO;
- Design using CATIA V5;
- Project Management;

Bachelor Degree - Industrial Engineering and Management

"Lucian Blaga" University from Sibiu [01/10/2014 – 02/07/2018]

City: Sibiu | Country: Romania | Website: <https://inginerie.ulbsibiu.ro/> | Field(s) of study: Engineering, manufacturing and construction | Final grade: 10 | Level in EQF: EQF level 6 | Thesis: "Design of the technology and the SDV-urilot necessary for the execution of the MANSON CHAPE landmark; Development of S.C Continental automotive Systems S.R.L. by optimizing internal logistics actions using specific project management methods"

- Finite element design;
- Machining technologies;
- Strength of materials;
- Mechanisms and machine parts;
- Fundamentals of surface machining and cutting tools;
- Quality management;
- Maintenance management;
- Automation in industry;

Baccalaureat Diploma, Series A, NR. 0053118, Nr. 09/06/2015

"Ion Codru Dragusanu" Theoretical High School [15/09/2010 – 17/07/2014]

Address: 1 Decembrie 1918, No. 8, Victoria (Romania) | Field(s) of study: Natural sciences, mathematics and statistics | Level in EQF: EQF level 5

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

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

CONFERENCES AND SEMINARS

[21/09/2021 – 24/09/2021] Linz, Austria

"37th Danubia Adria Symposium on Advances in Experimental Mechanics"

Participation in the symposium with the paper "Behavior of polyurethane resin composite materials subjected to the uniaxial tensile test"

[06/02/2022 – 10/02/2022] Brno, Czech Republic

"2nd winter school on "Trends on Additive Manufacturing for Engineering Applications"

[20/09/2022 – 24/09/2022] Poros, Greece

"38th Danubia Adria Symposium on Advances in Experimental Mechanics"

Participation in the symposium with the paper "Comparative study of polyamide 6 (PA6) and polyamide 6 reinforced with 30% glass fibers (PA6GF30)"

[26/09/2023 – 29/09/2023] Siofok, Hungary

"39th Danubia Adria Symposium on Advances in Experimental Mechanics"

Participation in the symposium with the papers:

"Comparative analysis on the influence of 3D printing strategies on the compressibility of elastomeric materials"

"Analysis on the impact of industrial agents on 3D printed polymeric materials in soft robotics"

[24/09/2024 – 27/09/2024] Gdansk, Poland

"40th Danubia Adria Symposium on Advances in Experimental Mechanics"

Participation in the symposium with the paper: "The influence of industrial and environmental factors on polyoxymethylene"

PUBLICATIONS

Publications

1. **Olivia-Laura Petraşcu**, Dan-Mihai Rusu, Adrian Pascu (2025): *The influence of industrial and environmental factors on the polyoxymethylene*. Journal of Theoretical and Applied Mechanics, 2025, vol. XX, Issue YY, pp. ZZ, ISSN 1429-2955, (Q4, factor de impact 0.7)
2. Dan-Mihai Rusu, **Olivia-Laura Petraşcu**, Alexandru Bârsan, Timotei Morariu, Fineas Morariu, Adrian Pascu (2024): *Analysis on the Impact of Industrial Agents on 3D-printed Polymeric Materials in Soft Robotics*. Materiale Plastice, 2024, vol. 61, Issue 4, pp. 52-62, ISSN 0025-5289, e-ISSN 2668-8220, (Q4, factor de impact 0.6). <https://doi.org/10.37358/MP.24.4.5743>, WOS:001399755900005
3. Dan Mihai Rusu, **Olivia Laura Petraşcu**, Adrian Marius Pascu, Silviu Dan Mândru (2023): *The Influence of Industrial Environmental Factors on Soft Robot Materials*. Materials, April 2023, vol. 16, Issue 8, pp. 2948, eISSN 1996-1944, (Q2, factor de impact 3.1) <https://doi.org/10.3390/ma16082948>, WOS:000983142400001
4. Alexandru Ianosi-Andreeva-Dimitrova, Dan-Mihai Rusu, Silviu-Dan Mândru, Cristina-Maria Biriş, **Olivia-Laura Petraşcu**, Fineas Morariu (2023): *Soft robotics: A systematic review and bibliometric analysis*, Micromachines, January 2023, vol. 14, Issue 2, pp. 359, eISSN 2072-666X, (Q2, factor de impact 3.0) <https://doi.org/10.3390/mi14020359>, WOS:000940554800001
5. **Olivia-Laura Petraşcu**, Raluca Manole, Adrian-Marius Pascu (2022): *The behavior of composite materials based on polyurethane resin subjected at uniaxial tensile test*. Materials Today: Proceedings, volume 62, part 5, pp. 2673-2678 (2022), Online available since 31 May 2022, <https://doi.org/10.1016/j.matpr.2022.05.308> (ISI Conference Proceedings) WOS:000819228900005
6. Pascu Adrian-Marius, **Petraşcu Olivia-Laura** (2024): *Evaluating the Flexural Properties of Polyoxymethylene Under Aggressive Environmental Conditions*. Acta Universitatis Cibiniensis - Technical Series, vol. 76, Issue 1, Decembrie 2024, Sibiu, eISSN 2668-6449, pp. 34-39 DOI: [10.2478/aucts-2024-0005](https://doi.org/10.2478/aucts-2024-0005) (BDI Index Sciendo) – autor corespondent

7. **Petrașcu Olivia-Laura**, Morariu Timotei, Morariu Fineas, Bârsan Alexandru, Rusu Dan-Mihai, Pascu Adrian-Marius (2024): *Influence of 3D-Printing Strategies on the Compressibility of TPU 85A Elastomeric Material*. Acta Universitatis Cibiniensis - Technical Series, vol. 76, Issue 1, Decembrie 2024, Sibiu, eISSN 2668-6449, pp. 28-33
DOI: 10.2478/aucts-2024-0004 (BDI Index Sciendo)
8. **Olivia Petrașcu**, Adrian Pascu (2023): *Comparative study of polyamide 6 (PA6) and polyamide 6 reinforced with 30% of glass fiber (PA6GF30)*. Materials Today: Proceedings, volume 93, part 4, pp. 625-629 (2023), Online available since 17 April 2023, <https://doi.org/10.1016/j.matpr.2023.04.112> (Scopus Conference Proceedings)

TECHNICAL/PROFESSIONAL DEVELOPMENT COURSES

TECHNICAL/PROFESSIONAL DEVELOPMENT COURSES

- Catia V5 design course at S.C. Continental Automotive Systems S.R.L;
- Course of "Injection molding of plastics" at S.C Marquardt S.R.L. ;
- Third place in this competition by realizing the design of a multimedia display, joy stick and two related buttons to support electrical functions of the handbrake, but also necessary automotive functions;
- Participation in the Student Scientific Communication Session, ULBS, 2016, Construction Technology Section of Machinery and Unconventional Technologies, with the topic "Research on hardening by solid solution formation";
- Participation in the Student Scientific Communication Session, ULBS, 2015, Materials Science Department, with "Specific methods used in obtaining various types of metal foams".

VOLUNTEERING

Courses / Volunteering

- Volunteering with the Solidus Student Society, thus building a minimum experience in several fields, providing a range of knowledge and acquiring skills communication skills;
- Participating in the European project "Today's Students, Tomorrow's Professionals", in which I took part in several career management conferences, as well as visiting the company Thimm Packaging;
- Volunteering in the organization of the Career Fair in the autumn season of 2015, the Spring season of 2016 and both seasons of 2017;
- Attending the "Train de Trainer" training and obtaining the trainer diploma;

MANAGEMENT AND LEADERSHIP SKILLS

Management and leadership skills

- Organizational, flexible person;
- Constant quality orientation;
- Ability to make decisions under stress and meet deadlines;
- Ability to work cooperatively within a team;
- Very good time and resource management;

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- Good communication skills gained from my experience in the Solidus Student Association;
- The ability to formulate my own arguments in a convincing manner and to take into account other points of view expressed both verbally and in writing, acquired during the courses and seminars in
- Professional Communication;
- Team spirit acquired through participation in the activities involved in practical and practical projects research projects during high school and university;
- Adaptability;

DRIVING LICENCE

Driving Licence: AM

Driving Licence: B1

Driving Licence: B