

PERSONAL INFORMATION

Dorin Ioan CATANA

✉ catana.dorin@unitbv.ro

POSITION
IOSUD UTBV

Transilvania University of Brasov
PhD Coordinator
Doctoral studies field: Industrial engineering
Since: 2016

EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

Plastic deformation, modelling of technological processes, tool materials, technologies for advanced materials processing

WORK EXPERIENCE

2016 - present

European Commission's expert

European Commission, B-1049, Brussels, Belgium, <http://ec.europa.eu>

- Research, innovation

[Research, innovation](#)

1990 - present

Professor (2017 – present), assoc. professor (1998 – 2017), lecturer (1993 – 1998), assistant (1990 – 1993)

Transilvania University of Brasov, B-dul Eroilor no. 29, Brasov, 500036, Romania, <http://www.unitbv.ro>

- Education, research

1985 - 1990

[Education, research](#)

Process engineer

Mechanical Enterprise, Str. Rampei no. 1, Codlea, 505100, Romania, <http://www.mecod.ro>

- Maintenance engineer, Process engineer, Design engineer, Production tracking engineer

[Industrial manufacturing](#)

EDUCATION AND TRAINING

2016

Habilitated Doctor

Transilvania University of Brasov, Faculty of Materials Science and Engineering, Romania

- Habilitation as PhD supervisor, in the Industrial engineering field

March - April 1999

Businesses valuator

Training

The National Association of Romanian Valuers, Bucharest, Romania

- Businesses valuations, economics and management skills

1993 - 1997

PhD Title in the field of Engineering Sciences

EQF level 8

Transilvania University of Brasov, Brasov, Romania

- Cutting tools design, Plastic deformations, Thermomechanical treatments

1980 - 1985

B. Sc. Diploma, Mechanical engineer – Machine-tools specialization

EQF level 7

University of Brasov, Faculty of Machines Construction Technology, Romania

- Maintenance and management of the machine tools, Skills for the machine tools design and development

PERSONAL SKILLS

Mother tongue(s) Romanian

| Other language(s) | UNDERSTANDING | | SPEAKING | | WRITING |
|--|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | B2 | B2 | B2 | B2 | B2 |
| Certificate of linguistic competences no. 264/2008. B2 | | | | | |
| Italian | B2 | B2 | B2 | B2 | B2 |
| French | A2 | A2 | A2 | A2 | A2 |

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

Communication skills ▪ Good communication skills gained through my experience as member in faculty council, tutor, vice-Dean, research projects and through collaboration with industrial enterprises

Organisational / managerial skills ▪ Vice-Dean Faculty of Materials Science and Engineering, vice-head of department, manager of NX (Unigraphics) and Solid Edge training centre of Faculty of Materials Science and Engineering, research management skills acquired as coordinator in international project

Job-related skills ▪ Knowledge and description of the primary technological processes, characterization methods of the materials properties, cutting tools, thermomechanical treatments, processing technologies for advanced materials, computer aided design (CAD), finite element analysis (FEA)

| Digital skills | SELF-ASSESSMENT | | | | |
|----------------|------------------------|-----------------|------------------|------------------|------------------|
| | Information processing | Communication | Content creation | Safety | Problem solving |
| | Independent user | Proficient user | Proficient user | Independent user | Independent user |

Levels: Basic user - Independent user - Proficient user
[Digital competences – Self-assessment grid](#)

- Very good command of Microsoft Windows and Office™ tools
- Very good command of Siemens-Solid Edge
- Good command of simulation software MSC – SuperForm and FEMAP

Other skills ▪ Property valuer (real estate and movable properties)

ADDITIONAL INFORMATION

Publications 1 book published in international publishing house
 6 books published in national publishing house
 7 papers in ISI Journals
 6 papers in ISI Proceedings
 8 papers in BDI Journals
 32 papers in Romanian Journals

Projects 1 international research grant as coordinator
 2 national research grants as coordinator
 10 national research projects as member

Presentations 47 presentations at international and national conferences
 H Indexes h-index – 2 Web of Science – Clarivate Analytics

ANNEXES

ANNEX to CV

LIST OF RELEVANT PUBLICATIONS /RESEARCH (selection)

1. Catana D. et al. *Aspects of thermal transfer in heat treatment of alloy steels using concentrated solar energy*, Journal of Thermal Analysis and Calorimetry, Vol. 138, nr. 4, pp. 2541-2553, 2019, ISSN 1388-6150, WOS:000499703500017, DOI: 10.1007/s10973-019-08525-w
2. Catana D. *Influence of heat treatments with concentrated energy sources on the alloy steels mechanical properties*, Nonconventional Technologies Review, Vol. XXI, No. 2 (June), 2017, pp. 22-29, ISSN 2359-8646 print, ISSN 2359-8654 on-line, http://www.revtn.ro/pdf2-2017/3%20CatanaD_NTR.pdf
3. Catana D. *Influence of heat treatments with concentrated energy sources on the cast irons mechanical properties*, Nonconventional Technologies Review, Vol. XXI, No. 1, 2017, pp. 11-17, ISSN 2359-8646 (print), ISSN 2359-8654, http://www.revtn.ro/pdf1-2017/2_Catana.pdf
4. Catana D. *Thermomechanical treatment influence on the cutting behaviour of the HSS tools*, Universal Journal of Mechanical Engineering, Vol. 4 (4), 2016, pp. 83-87, ISSN 2332-3353 print, ISSN 2332-3361 online, DOI:10.13189/ujme.2016.040402
5. Catana D. *Study regarding cryogenic temperatures resilience of the bearings steel*, Metalurgia International, vol. 18, nr. 4, 2013, pp. 80-82, ISSN 1582-2214, WOS: 000315177400017
6. Catana D. *Plastic deformation speed influence on HS2-9-1-8 high-speed steel plastic deformation strength* Metalurgia International, Vol. 17, nr. 5, 2012, pp. 21-24, ISSN 1582-2214, WOS:000302202400003
7. Catana D. *Dependence between deformation speeds and high-speed steel plastic deformation strength*, Metalurgia International, Vol. 16, no. 3, 2011, pp. 68-70, ISSN 1582-2214, WOS:000287889300016
8. Catana D. *High speed steel HS 2-9-1-8 (W 1.3247) plastic deformation strength*, Metalurgia International, Vol. 16, nr. 2, 2011, pp. 80-83, ISSN 1582-2214, WOS:000289816700014
9. Catana D, Catana D-A *Thermo-mechanic treatment influence on microstructure and mechanical properties of high speed steel*, Metalurgia International, Vol. 15, nr. 9, 2010, pp. 44-46, ISSN 1582-2214, WOS:000278729100008

March 2020

Prof. dr. eng. Dorin Ioan CATANA