

ANNUAL REPORT 2017

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Faculty of Mechanical Engineering
Brno University of Technology

Brno, 17.1.2018



ÚSTAV
KONSTRUOVÁNÍ

CONTENT

- Human resources
- Budget
- Partners
- Projects
- Contracts
- 2018
- PR and promotion
- strojLAB



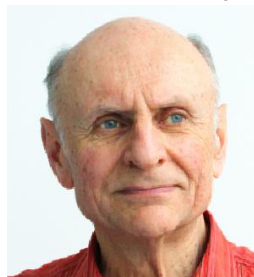
HUMAN RESOURCES

People 2017

David Paloušek



Josef Nevrlý



Jan Brandejs



Daniel Koutný
Super Ninja



Aneta Zatočilová



David Škaroupka



Tomáš Koutecký



Radek Vrána Jakub Hurník Martin Krčma Arnošt Vespalec Jan Suchý Malý Martin Ondra Vaverka

HUMAN RESOURCES

Open space or Close space - share your space



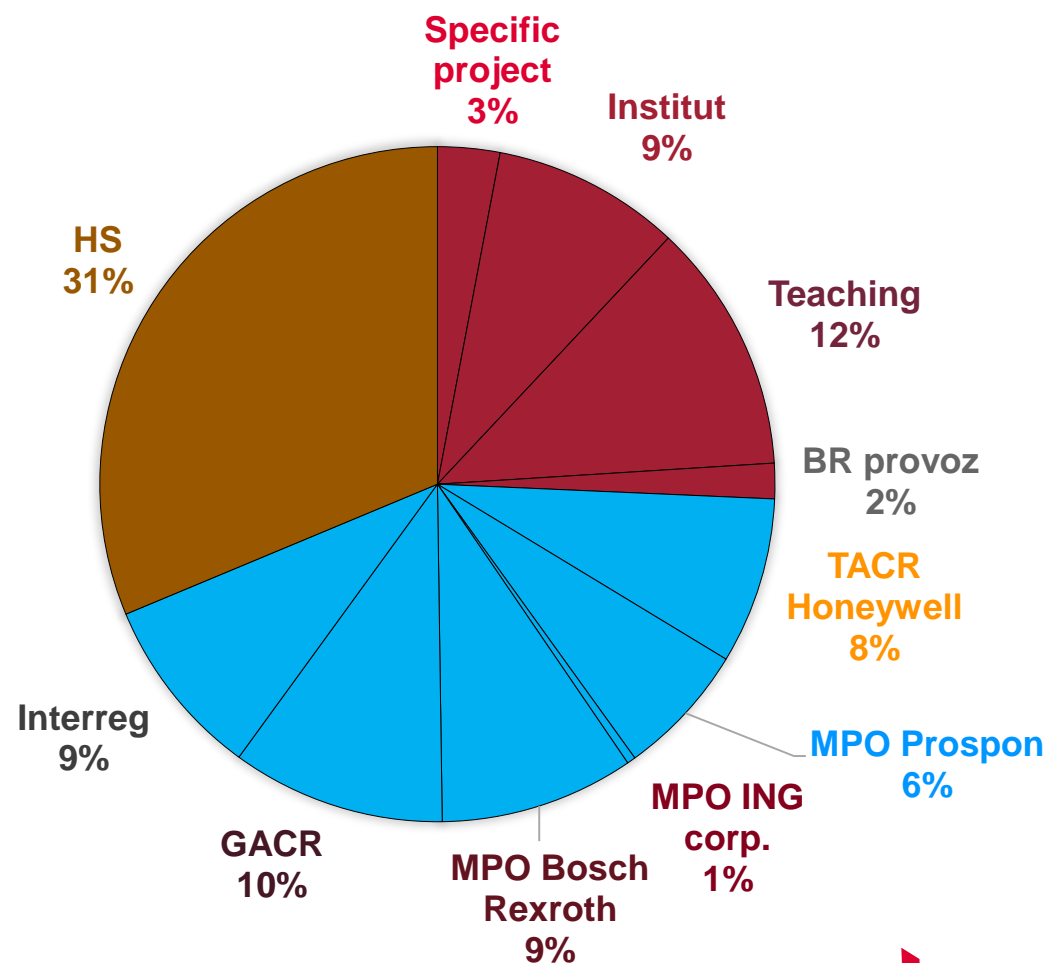
FUNDING OF DEPARTMENT

Budget

External projects

- TACR Honeywell
- MPO Proskon
- MPO ING corporation
- MPO Bosch Rexroth
- GACR
- Interreg CE - FABLABNET
- HS

BUDGET



PUBLICATION

- KOUTECKÝ, T.; ZIKMUND, T.; GLITTOVÁ, D.; PALOUŠEK, D.; ŽIVČÁK, J.; KAISER, J. X-ray micro-CT measurement of large parts at very low temperature. Review of Scientific Instruments, 2017, vol. 88, no. 3, p. 033707-1 (033707-6 p.)ISSN: 0034-6748.
- Pavel Manas, Radek Vrana, Zdenek Hejmal, Branislav Dubec. Determination of the Material Properties of Recycled Rubber for Explicit FEM Simulation. Key Engineering Materials (CD), 2017, no. 755, p. 1-7. ISSN: 1662-9809.)
- KRATOCHVÍLOVÁ, V.; VLAŠIC, F.; MAZAL, P.; PALOUŠEK, D.; PANTĚLEJEV, L. Analysis of fatigue processes of SLM materials by acoustic emission. International Journal of Microstructure and Materials Properties, 2017, vol. 17, no. 3, p. 63-74. ISSN: 1741-8410.
- KRATOCHVÍLOVÁ, V.; VLAŠIC, F.; MAZAL, P.; PALOUŠEK, D. Fatigue Behaviour Evaluation of Additively and Conventionally Produced Materials by Acoustic Emission Method. In 2nd International Conference on Structural Integrity, ICSI 2017, 4-7 September 2017. Procedia Structural Integrity. Funchal, Madeira, Portugal: Elsevier B.V., 2017. p. 393-400. ISSN: 2452-3216.
- PANTĚLEJEV, L.; KOUTNÝ, D.; PALOUŠEK, D.; KAISER, J. Mechanical and microstructural properties of 2618 Al-alloy processed by SLM remelting strategy. In Metallography XVI. Materials Science Forum. Switzerland: Trans Tech Publications, 2017. p. 343-349. ISBN: 978-3-0357-1018-2. ISSN: 0255-5476.
- PALOUŠEK, D.; PANTĚLEJEV, L.; ZIKMUND, T.; KOUTNÝ, D. PROCESSING OF NEARLY PURE IRON USING 400W SELECTIVE LASER MELTING – INITIAL STUDY. MM Science Journal, 2017, vol. 2017, no. 1, p. 1-6. ISSN: 1803-1269.

MAIN PARTNERS



YEAR 2018

Budget 2018

External projects

- **ESA GE**
- **PAV ARMADIT**
- **TACR ViaAlta - Epsilon**
- **TACR ViaAlta - ZETA (Dáda)**
- **TACR ZDAS - ZETA (Aneta)**
- TACR Honeywell
- MPO Prospon
- MPO ING corporation
- Interreg CE – FABLABNET
- MPO Bosch Rexroth



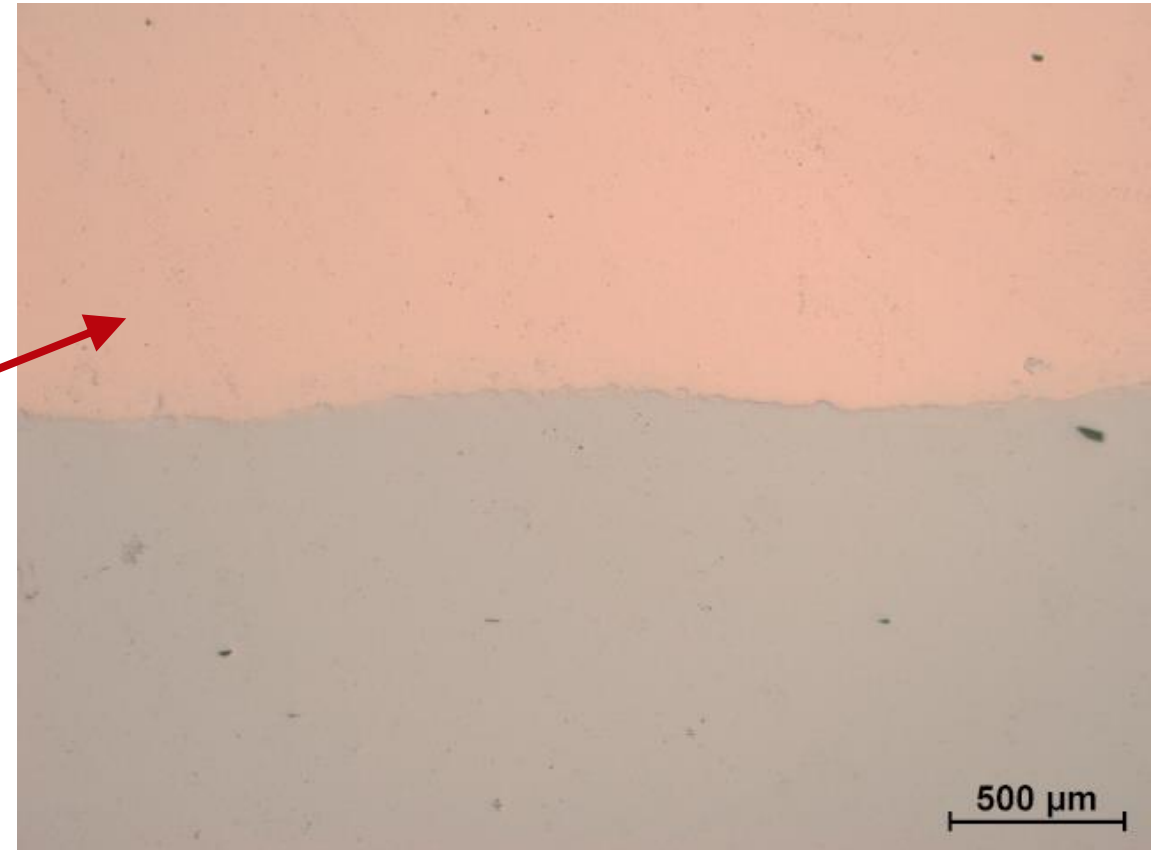
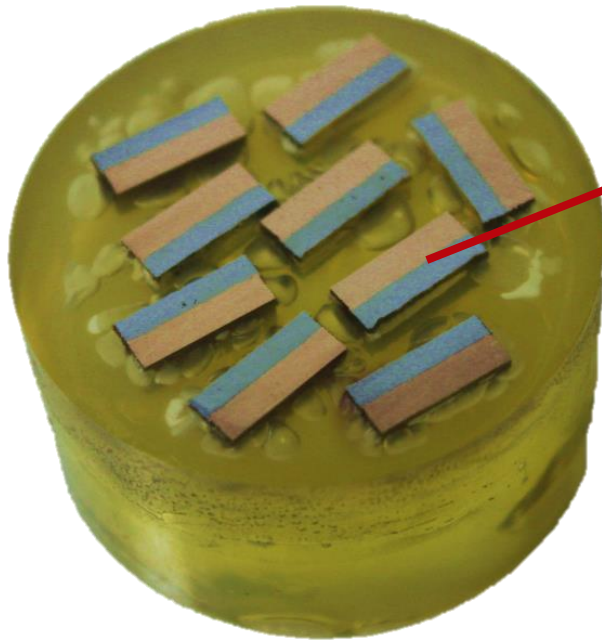
YEAR 2018

TACR ViaAlta - Epsilon



PROJECT ArMAdit

- Multimaterials
- Lattice structure parts
- New mechanical properties
- Cold spray



YEAR 2018

TACR ZETA - ZDAS



EXHIBITIONS, FAIRS

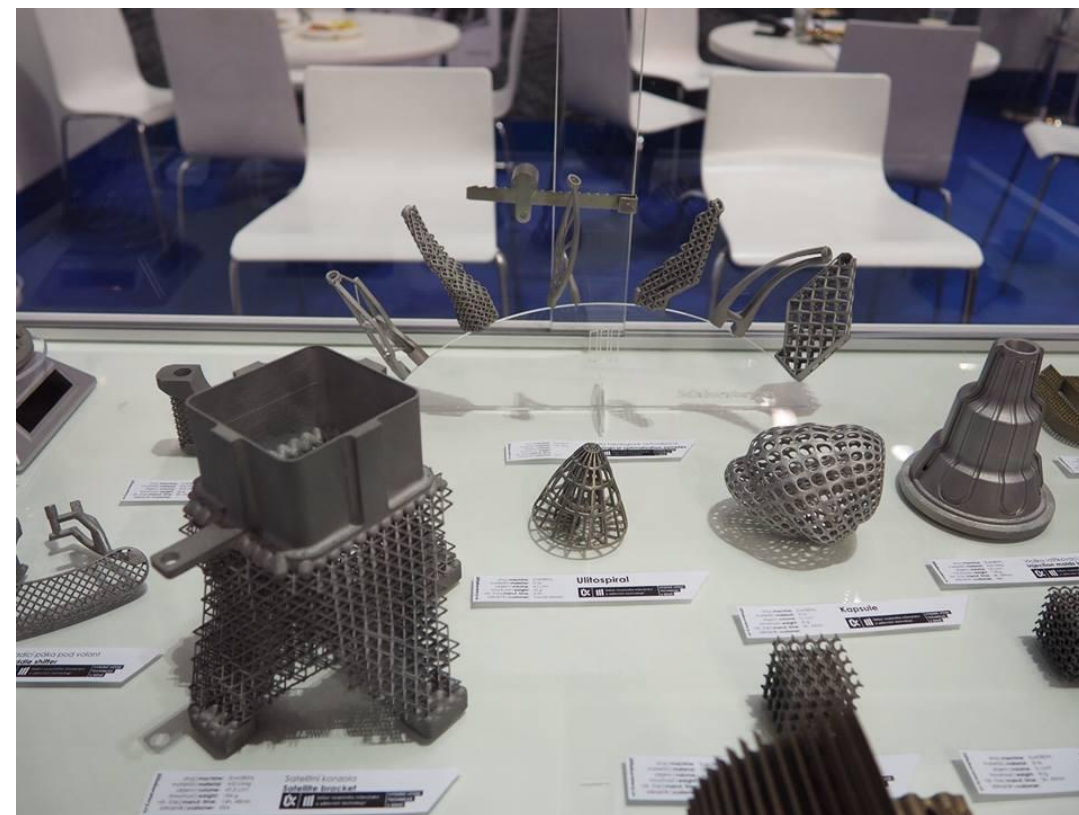
Formnext 2017



PR AND PROMOTION

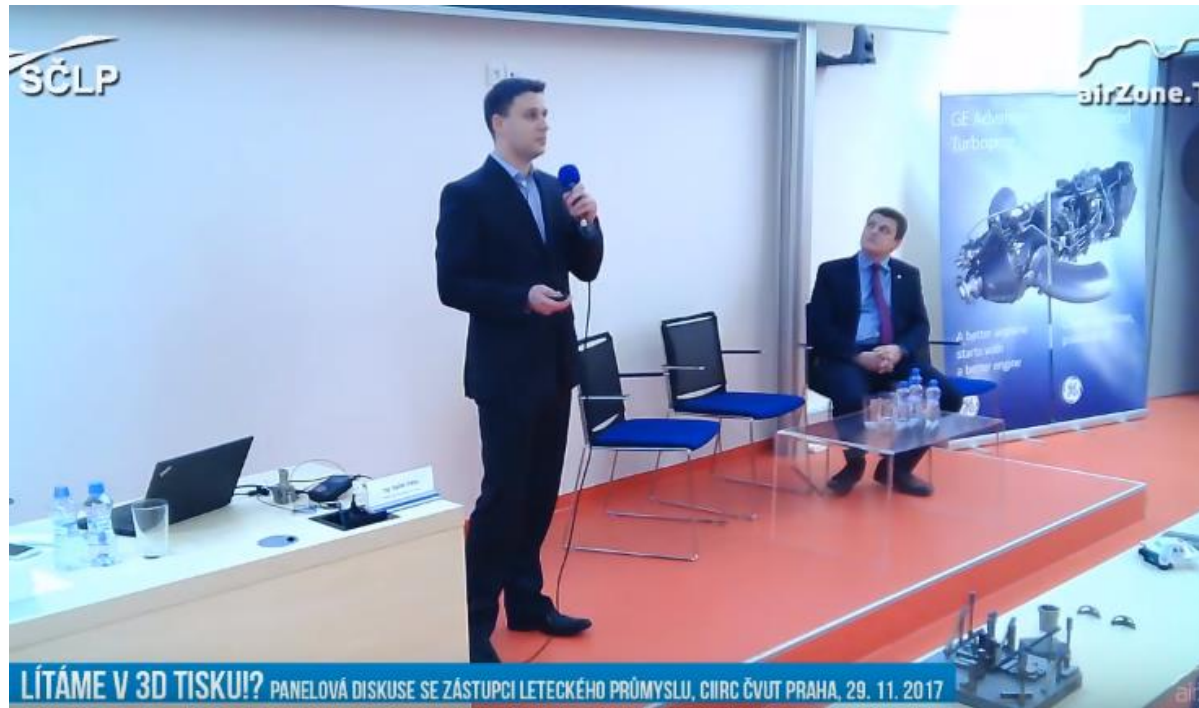
Fórum of additive manufacturing 2017

10. 10. 2017 presentation on MSV



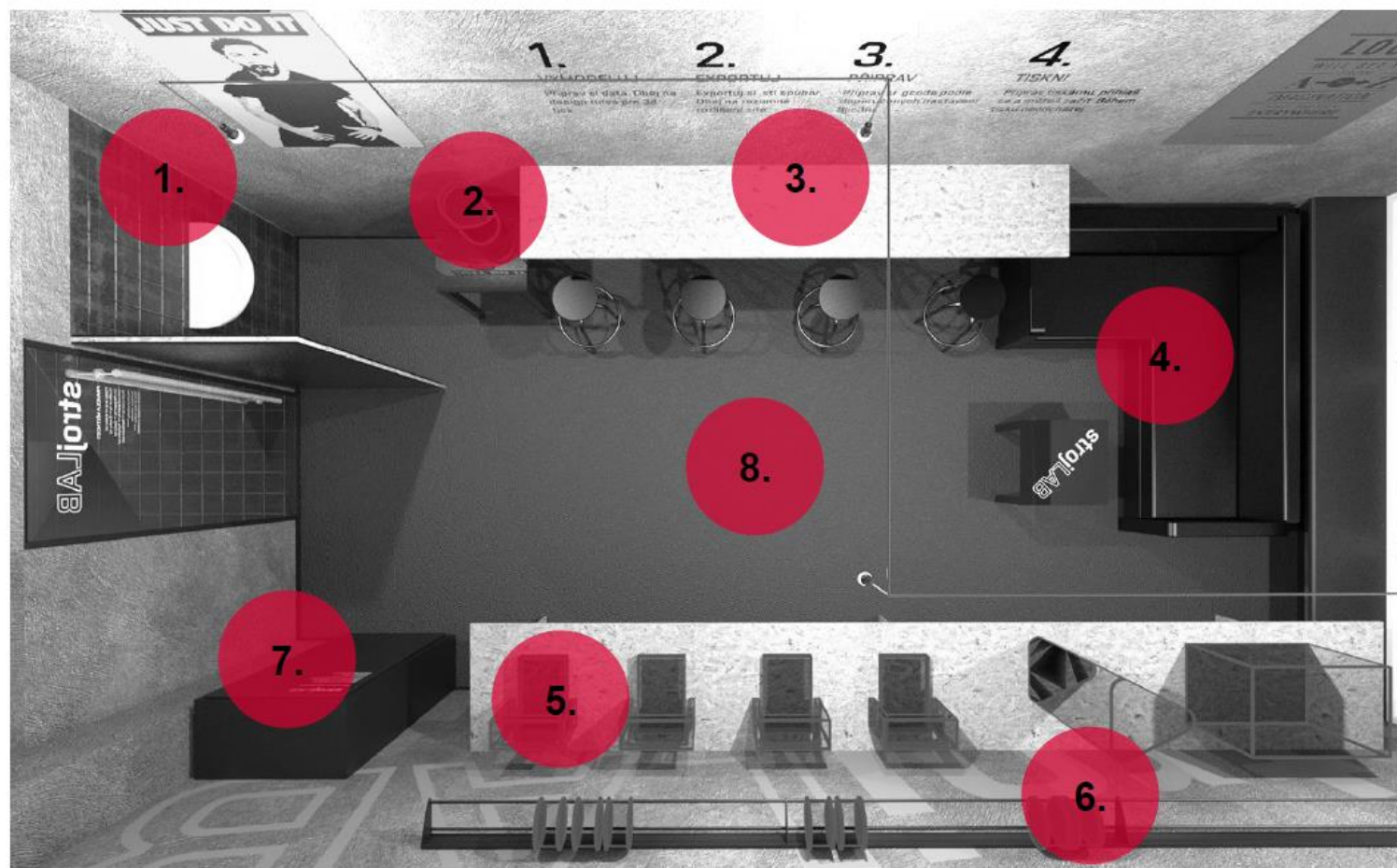
PR AND PROMOTION

Lítáme v 3D tisku?



DISPOSITION/ SPACE LAYOUT

1. Washing corner
2. Coffe corner
3. Workspace for 4 students
4. A relaxing corner
5. 3D printer Machinery
6. Fillament storage
7. Lockable cabinet /Safe
8. Free zone



Thanks for your attention

YODA QUOTE

**“Fear is the path to the dark side...fear leads to anger...
anger leads to hate...hate leads to suffering.”**

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