

# INTRODUCTION OF THE FIRST YEAR Ph.D. STUDENT

**Michal Michalec, Ing.**

ÚSTAV KONSTRUOVÁNÍ  
Fakulta strojního inženýrství  
VUT v Brně

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# CONTENT

- About Myself
- Hobbies
- Education
- Doctoral Study
- Teaching and Learning Activities



# ABOUT MYSELF

## Trenčín

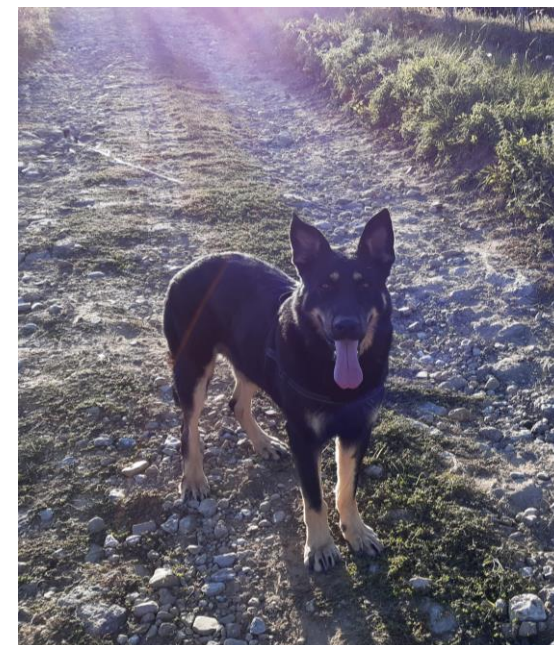
- Castle
- Brewery





# ABOUT MYSELF

- Drietoma (border crossing)
- Local nature

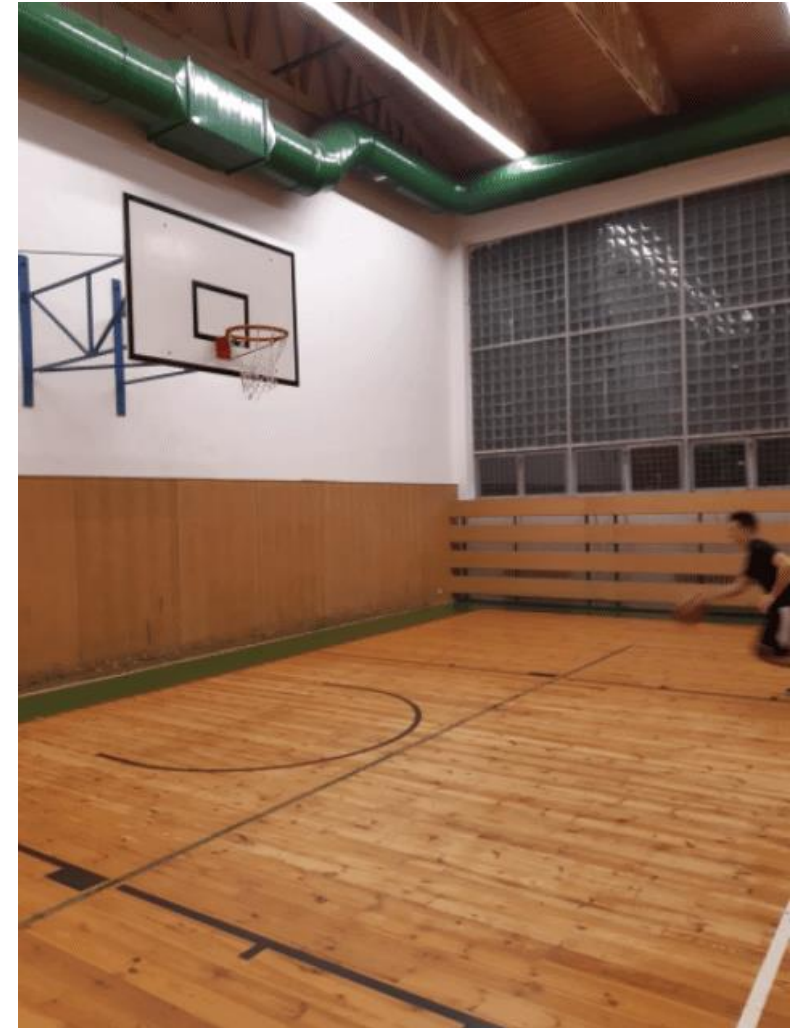




# HOBBIES

## Sports

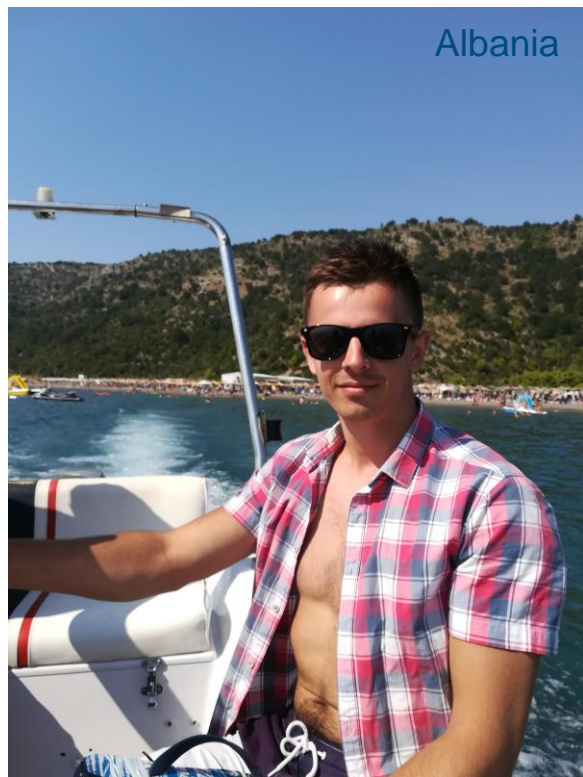
- Skiing, Basketball, any challenge (Strojařské schody)





# HOBBIES

- Travelling, summer festivals
- Toastmasters International



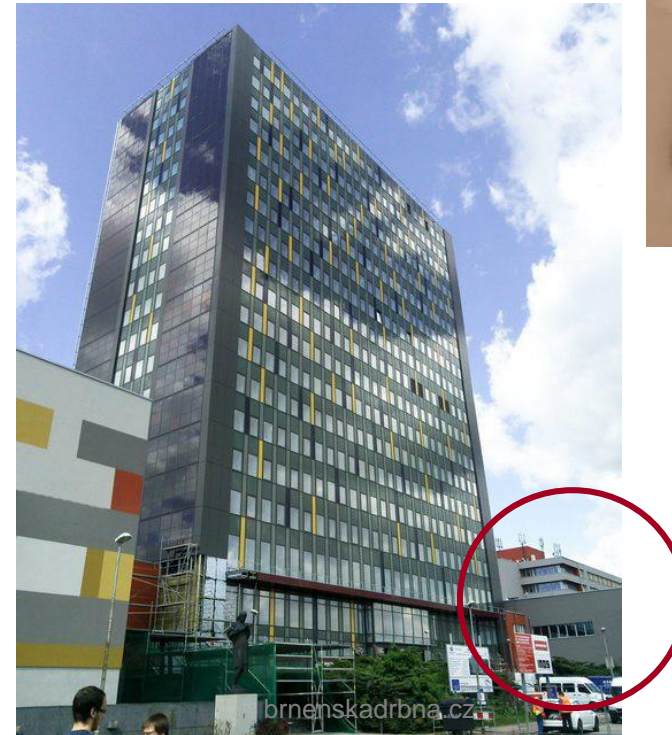
# EDUCATION

## High school

- Grammar school - Gymnázium Ľudovíta Štúra Trenčín (2010-2014)

## University

- Bachelor degree – Fundamentals of Mechanical Engineering at BUT FME (2014-2017)
- Masters degree – Mechanical Engineering Design at BUT FME (2017-2019)



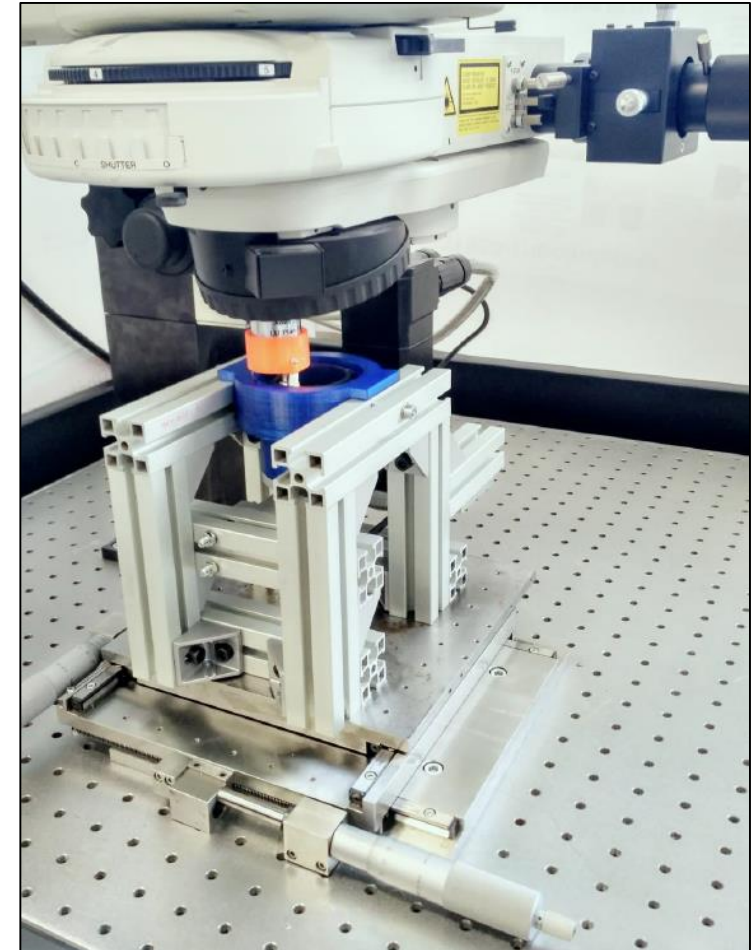
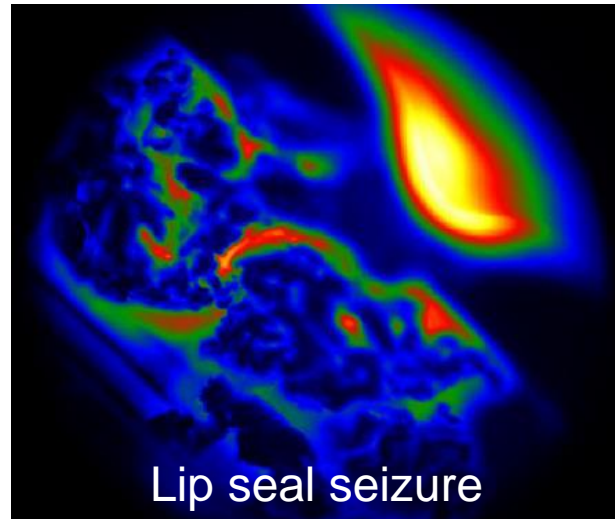
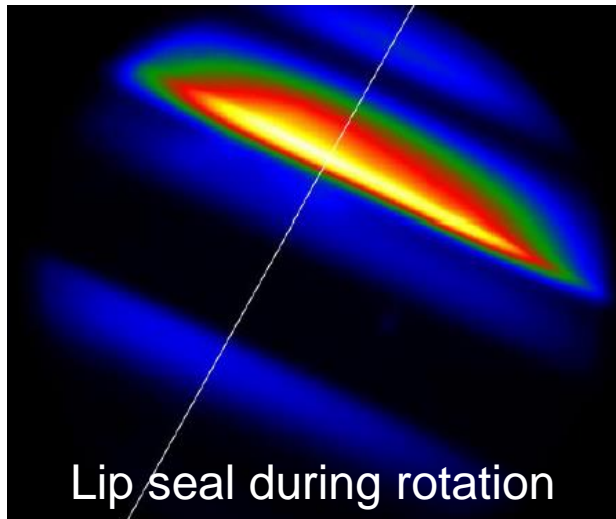


# BACHELOR'S THESIS

**Experimental rig for study of lubricant film in compliant contact of oil seal using fluorescence technique**

Supervisor: Ing. Kryštof Dočkal

- Design and realization
- Experimental verification





# MASTER'S THESIS

## Tribological characteristics of smart fluids

Supervisor: doc. Ing. Petr Svoboda, Ph.D.

- Lubricating film, friction and wear
- Review article (*Tribology in Industry*)
- Results article (*Friction – accepted manuscript*)

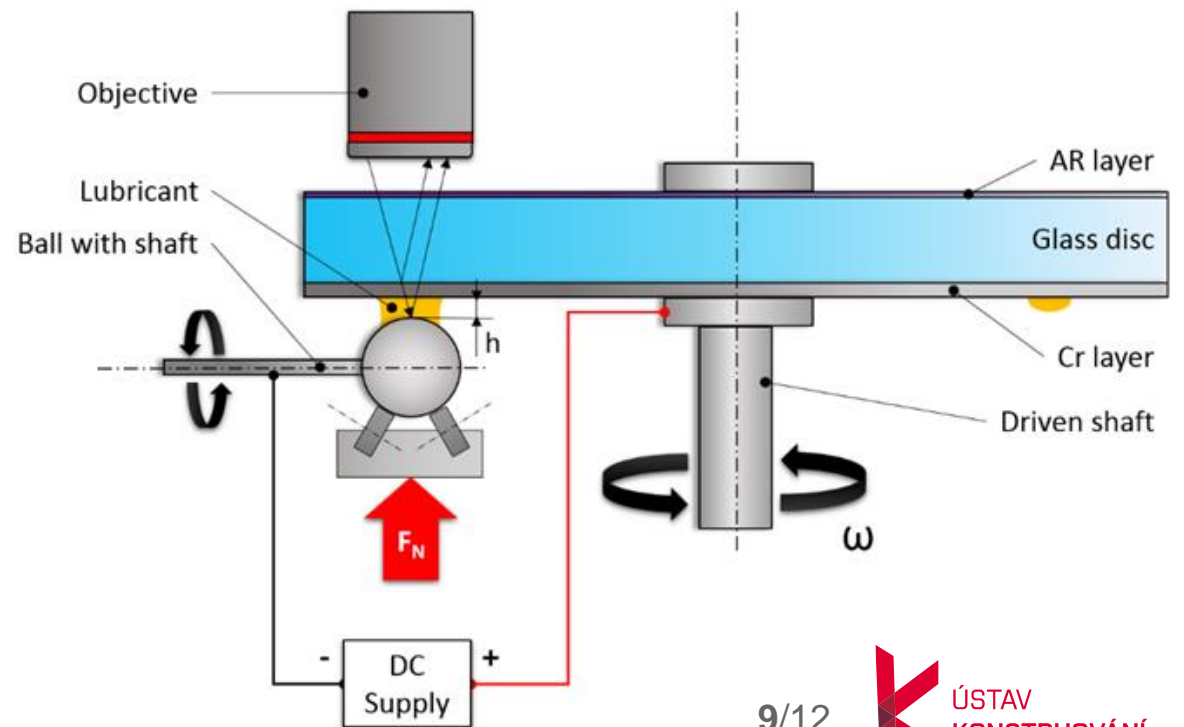


webdocs.cs.ualberta.ca

INTRODUCTION OF THE FIRST YEAR PHD STUDENT

MICHALEC, M., P. SVOBODA, I. KRUPKA and M. HARTL. Tribological Behaviour of Smart Fluids Influenced by Magnetic and Electric Field – A Review. *Tribology in Industry*. 2018, **40**(4), 515-528. DOI: 10.24874/ti.2018.40.04.01.

MICHALEC, M., P. SVOBODA, I. KRUPKA, M. HARTL and A. VENCL. Investigation of Ionic Liquid Tribological Performance in Non-Conformal EHL Contacts Under Electric Field Activation. *Friction* (Accepted Manuscript).

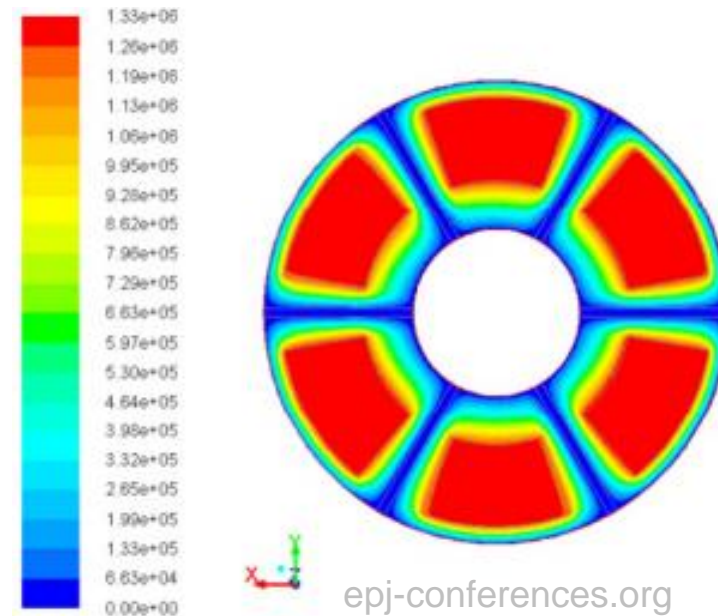
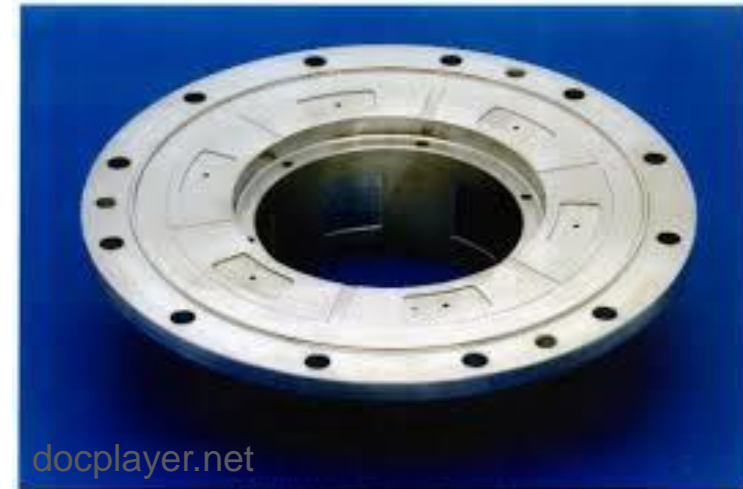


# DISSERTATION TOPIC

## Development of large-scale hydrostatic bearing with intelligent systems

Supervisor: doc. Ing. Petr Svoboda, Ph.D.

- Diameter up to 20 m
- Implementation of modern technologies





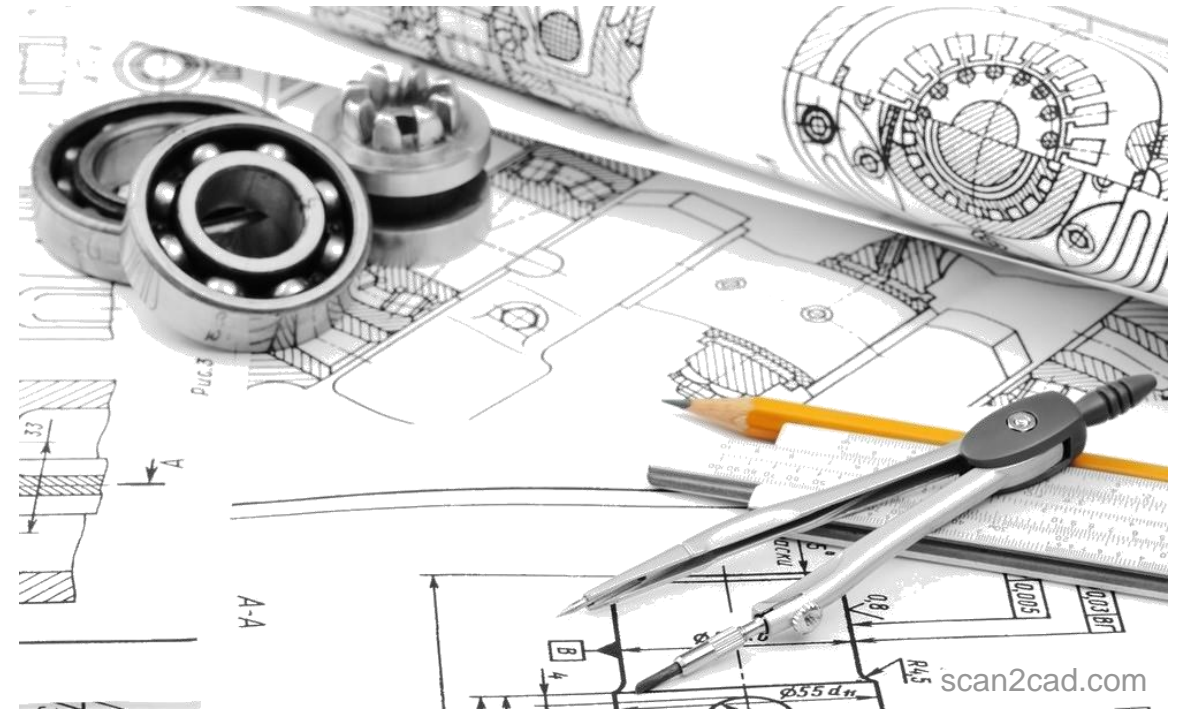
# EDUCATION ACTIVITIES

## Teaching:

- 1K – Fundamentals of Mechanical Design
- 3CD – AutoCAD and Inventor

## Learning:

- 9MOP – Methodologies of Scientific Work
- 9EXT – Experimental Methods in Tribology
- 9EHD – Elastohydrodynamics
- 9VPR – Research project and Its Management
- 9AJ – English for Doctoral Degree Study



# THANK YOU FOR YOUR ATTENTION

**Michal Michalec, Ing.**

[Michal.Michalec@vut.cz](mailto:Michal.Michalec@vut.cz)



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