

# Pavel Michal

\* 10/01/1991 | OLOMOUC, CZECH REPUBLIC

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## Education

### Department of Optics, Palacký University Olomouc

Olomouc, Czech Republic

DOCTOR'S DEGREE IN OPTICS AND OPTOELECTRONICS

01/09/2017 - PRESENT

- Doctoral thesis: Optimization of Raman optical activity spectrometer to measure peptides and proteins

MASTER'S DEGREE IN OPTICS AND OPTOELECTRONICS

07/09/2015 - 29/05/2017

- Diploma thesis: Utilization of Raman optical activity for investigation of solvent-solute interaction

BACHELOR'S DEGREE IN OPTICS AND OPTOELECTRONICS

04/09/2012 - 15/06/2015

- Bachelor thesis: Mueller matrix polarimetry of interface of two isotropic materials

## Work Experience

### Faculty of Science, Palacký University Olomouc

Olomouc, Czech Republic

JUNIOR RESEARCHER (DEPARTMENT OF OPTICS)

1/9/2017 - PRESENT

## Personal Skills

**Native Language** Czech

**Other Languages** English (B2), Russian (A2)

**Computer Skills** Matlab, Gaussian, Bash (Unix shell), Zemax, TracePro, LaTeX, SolidWorks, Linux

**Other Skills** Digital Image Processing, Polarimetry, Optics, Optoelectronics, Spectroscopy, Vibrational optical activity, Big data processing

## Honors & Awards

11/2017 **2nd Place**, The Young Authors' Best Diploma Thesis in Spectroscopy Competition

Brno,  
Czech Republic

## Courses

**Zemax - Private OpticStudio Course at Meopta - optika, s.r.o.**

Přerov, Czech Republic

30/08/2016 - 01/09/2016

## Publications

### Vibrational Optical Activity of Intermolecular, Overtone, and Combination Bands: 2-Chloropropionitrile and $\alpha$ -Pinene

MICHAL P., ČELECHOVSKÝ R., DUDKA M., KAPITÁN J., VŮJTEK M., BEREŠOVÁ M., ŠEBESTÍK J., THANGAVEL K. AND BOUŘ P.  
*J. Phys. Chem. B* **2019**, 123 (9), 2147-2156, DOI: 10.1021/acs.jpcc.9b00403.

## **Presentations**

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### **31th International Symposium on Chirality (CHIRALITY 2019)**

*Bordeaux, France*

POSTER PRESENTATION

*Jul. 2019*

- Topic: „Raman Optical Activity of Intermolecular, Overtone and Combination Bands, and Absolute Spectral Intensities“

### **6th International Conference on Vibrational Optical Activity (VOA-6)**

*Brescia, Italy*

ORAL PRESENTATION

*Sep. 2018*

- Topic: „Exploring the combination and overtone vibrations by Raman optical activity“

### **European Conference on the Spectroscopy of Biological Molecules (ECSBM)**

*Amsterdam, Netherlands*

POSTER PRESENTATION

*Sep. 2017*

- Topic: „Raman optical activity as a Tool for Investigation of Solvent-Solute Interaction“

### **5th International Conference on Vibrational Optical Activity (VOA-5)**

*Antwerp, Belgium*

POSTER PRESENTATION

*Sep. 2016*

- Topic: „Exploration of the Solvent Dependence of Raman optical activity“