

Personal details:

Name: Petr Šácha

Affiliations: Faculty of Mathematics and Physics, Charles University, Prague.

Institute for Meteorology and Climatology, BOKU Wien.

Contact: ✉ petr.sacha@mff.cuni.cz | ☎ +420-770139692

Homepage: <https://boku.ac.at/personen/person/64376010FCC33B0B>

ORCID: <https://orcid.org/0000-0001-9707-1750>

Full list of publications: <https://www.researchgate.net/profile/Petr-Sacha>

Education:

- | | |
|-----------------|--|
| 10/2012-01/2017 | PhD in Meteorology and Climatology, Faculty of Mathematics and Physics, Charles University (MFF UK), Czech Republic |
| 10/2010-09/2012 | MSc in Meteorology and Climatology, MFF UK, Czech Republic |
| 10/2007-09/2010 | BSc in General Physics, MFF UK, Czech Republic |

Position(s):

- | | |
|-----------------|--|
| since 01/2019 | Visiting Researcher , Institute of Meteorology and Climatology, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria |
| since 05/2017 | Academic Researcher , Faculty of Mathematics and Physics, Department of Atmospheric Physics, Charles University, Czech Republic |
| 02/2017-12/2018 | Postdoctoral Researcher , Environmental Physics Laboratory, University of Vigo, Spain |
| 02/2015-04/2017 | Research Associate , Faculty of Mathematics and Physics, Department of Atmospheric Physics, Charles University, Czech Republic |

Net research experience: 4 years of doctoral studies, 5 years after the PhD title.

Significant international activities:

- | | |
|----------------|--|
| 2020 – present | Postdoctoral fellowship in the frame of International mobility of researchers at Charles University MSCA-IF III (CZ.02.2.69/0.0/0.0/19 074/0016231), host institution: Institute of Meteorology and Climatology, University of Natural Resources and Life Sciences (BOKU-MET), Vienna, Austria. |
| 2021 – present | Member of the Wave and Dynamics working group and of the Cold-Air-Pools task team of the TEAMx programme. |
| 2019 – 2020 | Postdoctoral fellowship of the Xunta de Galicia (Regional government of Galicia) for a research stay abroad, host institution: BOKU-MET, Austria. |

- 2018 – 2021 **Member of the of the international team** on New Quantitative Constraints on Orographic Gravity Wave Stress by the International Space Science Institute, Bern (ISSI) led by Dr. J. Alexander.
- 2014 – 2015 **DAAD PhD scholarship** for a research stay (3-months), University Leipzig, Germany
- 2013 – 2014 **OEAD PhD scholarship (AKTION)** for a PhD research stay (4-months), University of Graz, Austria

Scientific performance and 3 selected publications since 2019:

Author and co-author of **18** (12 since 2019) **peer-reviewed publications** in impacted international journals. **H-index:** 7 (WoS, 2021), 6 (Scopus, 2021), 8 (Google Scholar, 2022; i10-index: 7)

Number of citations: 108 (WoS, 2021), 110 (Scopus, 2021), 154 (Google Scholar, 2022).

Šácha, P., Kuchar, A., Eichinger, R., Pisoft, P., Jacobi, C., and Rieder, H. E. (2021). Diverse dynamical response to orographic gravity wave drag hotspots—a zonal mean perspective. *Geophysical Research Letters*, 48, e2021GL093305. <https://doi.org/10.1029/2021GL093305>

Kruse, C. G., Alexander, M. J., Hoffmann, L., van Niekerk, A., Polichtchouk, I., Bacmeister, J. T., Holt, L., Plougonven, R., **Šácha, P.**, Wright, C., Sato, K., Shibuya, R., Gisinger, S., Ern, M., Meyer, C. I., & Stein, O. (2022). Observed and Modeled Mountain Waves from the Surface to the Mesosphere near the Drake Passage, *Journal of the Atmospheric Sciences*, 79(4), 909-932.

Eichinger, R and **Šácha, P.** (2020). Overestimated acceleration of the advective Brewer–Dobson circulation due to stratospheric cooling. *QJR Meteorol. Soc.*, 146, 3850–3864, <https://doi.org/10.1002/qj.3876>.

Invited presentations since 2019:

SPARC Gravity wave Symposium, Frankfurt, 28.03.-01.04.2022. Title: Interaction between parameterized orographic gravity wave drag and resolved dynamics in chemistry-climate models.

Colloquium of the Leibniz Institute of Atmospheric Physics, Kühlungsborn, 28.01.2021. Title of the talk: On the complex interaction between parameterized orographic gravity wave drag and resolved dynamics in chemistry-climate models.

Special seminar of the Center for Earth System Research and Sustainability, University of Hamburg, 28.5. 2019. Title of the talk: How do gravity wave parameterizations influence atmospheric transport in current generation global climate models?

Supervision of students and teaching since 2019:

Currently **supervising** 1 doctoral, 1 graduate and 1 undergraduate student at MFF UK and former supervisor to 2 successfully **defended theses** (batchelor and diploma) at MFF UK. **Guarantor** and lecturer of 2 courses for BSc students and MSc students at MFF UK. **Lecturer** and collaborator of 3 MSc and PhD courses at the Department of Atmospheric Physics at MFF UK.