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## Personal Data

Name Adrian Hoeske  
Date of Birth May 16, 1993  
Place of Birth Braunschweig, Germany

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## Education

2012 University entrance diploma (Abitur) at Lessinggymnasium in Braunschweig  
2012–2018 Undergraduate studies in Chemistry at TU Braunschweig (B. Sc. degree)  
Thesis in theoretical chemistry, supervised by Prof. Christoph Jacob  
Title: Overtones and Combination Bands in Theoretical Vibrational Spectroscopy  
2018–2020 Graduate studies (specialized in biophysical chemistry) at TU Braunschweig (M. Sc. degree)  
Thesis in theoretical chemistry, supervised by Prof. Christoph Jacob  
Title: Assignment of Vibrational States in Vibrational Configuration Interaction Calculations based on Localized Modes  
Since 2020 Ph.D. studies in the group of Prof. Christoph Jacob  
Research topic: Computation of Resonant Inelastic X-ray Scattering in the Condensed Phase across the whole Periodic Table

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## Pre-Ph.D. Academic Experience

2016–2020 Research assistant in the theoretical chemistry group of Prof. Christoph Jacob, involving the calculation of infrared spectra with the local modes approach in Vibrational SCF/Vibrational CI calculations  
2018 and 2019 Tutor in the advanced physical chemistry (quantum mechanics) bachelor course  
2019 Tutor in the computational chemistry bachelor course  
2020 Tutor in the mathematics bachelor course for pharmacists

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## Conferences and Summer Schools

03/2019 WAMCC – Workshop on Advanced Methods in Computational Chemistry  
Workshop for one week in Tönning, Germany  
Talk: Vibrational spectroscopy  
07/2019 TASQ – Torun Astrophysics, Spectroscopy and Quantum Chemistry School  
Summer school for two weeks in Torun, Poland  
Poster: Efficient Calculation of Overtones and Combination Bands with Localized Modes

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## Publications

2019 "On the choice of coordinates in anharmonic theoretical vibrational spectroscopy: Harmonic vs. anharmonic coupling in vibrational configuration interaction"; P. T. Panek, A. A. Hoeske, C. R. Jacob; J. Chem. Phys., 150(5), 054107

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## Miscellaneous

Languages German – Native speaker  
English – Highly proficient (CEFR: C2)  
Spanish – Very good working knowledge (CEFR: B2)  
Portuguese – Good working knowledge (CEFR: B1)  
Japanese – Basic communication skills (CEFR: A1)  
Chinese – Basic communication skills (CEFR: A1)