
EDUCATION	Student Researcher, Massachusetts Institute of Technology Cambridge, MA, USA <i>Master Thesis: Machine Learning for Antibiotics Discovery</i> 2024 - 2025 (expected) <ul style="list-style-type: none">• Advisor: Prof. Jim J. Collins• Worked on model architecture as well as high-throughput screenings to discover novel antibiotics
	Master of Science, Interdisciplinary Sciences, ETH Zurich Zurich Switzerland <i>Major in Chemistry and Computer Science</i> 2023 - 2025 (expected) <ul style="list-style-type: none">• Courses in computer science, computational biology and chemistry.
	Bachelor of Science, Interdisciplinary Sciences, ETH Zurich Zurich Switzerland <i>Major in Chemistry and Biology</i> 2020 - 2023 <ul style="list-style-type: none">• All courses of the chemistry and biology curriculum. Extended with some courses from the computer science department.• All laboratory practicals of the chemistry curriculum.
PUBLICATIONS	1. <u>Leif Sieben</u> , Ioannis Gr. Pagonakis, Jérémy Genoud, Jean-Philippe Hogge, Alexander B. Barnes. <i>A model of electron beam neutralization for gyrotron simulations</i> . Physics of Plasmas , 2024.
	2. Lionel Wettstein, Julia Specht, Vera Kesselring, <u>Leif Sieben</u> , Yanlin Pan, Daniel Käch, Dominika Baster, Frank Krumeich, Mario El Kazzi, Máté J. Bezdek. <i>A Dye-Sensitized Sensor for Oxygen Detection under Visible Light</i> . Advanced Science , 2024.
	3. Lea Marti, Ioannis Gr. Pagonakis, <u>Leif Sieben</u> , Marthe Millen, Jérémy Genoud, Jean-Philippe Hogge, Alexander B. Barnes. <i>Electron Optics Simulation in the Overall Gyrotron Geometry</i> . Physics of Plasmas , 2024, accepted.
	4. Fan Li, <u>Leif Sieben</u> , Johannes Büchler, Pascal Poc, Matej Vizovišek, Michael G. Christiansen, Simone Schuerle. <i>A fluidic device for continuous on-line inductive sensing of proteolytic cleavages</i> . Lab on a Chip , 2024, submitted.
RESEARCH PROJECTS	Master thesis: Machine learning for antibiotics discovery <i>Broad institute, MIT.</i> 2024-2025
	A microfluidic, inductive assay of protease activity <i>Laboratory of Medical Microsystems, ETH Zurich.</i> 2024
	Bachelor thesis: Dye-sensitized chemoresistive greenhouse gas sensor. <i>Laboratory of Inorganic Chemistry, ETH Zurich.</i> 2023
	Nuclear Magnetic Resonance for in-cell protein structure elucidation. <i>Laboratory of Physical Chemistry, ETH Zurich.</i> 2022-2023
WORK EXPERIENCE	Teaching Assistant Department of Chemistry, ETH Zurich 2022–2024 <ul style="list-style-type: none">• Teaching Assistant giving a weekly exercise class for 20 to 40 students. I was involved in writing the script for Inorganic Chemistry I from scratch.• Courses: Thermodynamics (2 semesters), Organic Chemistry, Inorganic Chemistry, Quantum Mechanics.
	Student Internship Roche, Penzberg, Germany 2018 <ul style="list-style-type: none">• Internship with multiple teams in the Research and Development Department.• Insight into large-scale industrial production of pharmaceutical agents.

AWARDS AND HONORS	• Fellowship , 2023 and 2024 Werner Siemens Excellence Fellowship	2023–2025
	• Mobility Grant , ETH internal grant for studies abroad	2024
	• Fellow of the Swiss Study Foundation	2020 (ongoing)
	• Invited speaker , TEDx Youth Basel	2022
	• Participant , International Swiss Talent Forum,	2022
	• First Place , National Swiss Science Competition	2021

SKILLS

Languages: German (native), English (C2), French (C1).

Programming: Python, Unix, SQL, Jsq, C++, MATLAB, \LaTeX , R.