

Curriculum Vitae

Tobias Komsthöft

Born: 03.08.1992
Place of birth: Cologne

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EDUCATION

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|-------------------|--|
| 04/2021 - present | ETH, Zurich
Chemistry, Ph.D. student |
| 09/2018 – 12/2018 | Thompson Rivers University, Kamloops, Canada
Semester abroad |
| 10/2016 – 08/2020 | RWTH, Aachen
Chemistry, Master of Science – 1.7
Master thesis: Quantitative investigation of the tetrahydrofuran emission of polybutylene terephthalate with headspace gas chromatography/mass spectrometry
Specialisation: <ul style="list-style-type: none">• MES: Materials and mesoscopic systems: solid state, polymers and nanostructures• CAT: Catalysis |
| 10/2012 - 09/2016 | RWTH, Aachen
Chemistry, Bachelor of Science – 2.7
Bachelor thesis: Aluminium oxide ceramic fiber fabrication by sol-gel synthesis based on aluminium chloride |
| 09/2003 - 06/2012 | Hoelderlin Gymnasium, Cologne
Abitur – 1,8 |
| 08/1999 - 08/2003 | Katholische Grundschule Diependahlstr., Cologne |

WORK EXPERIENCE

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| 09/2019 – 08/2020 | Lanxess AG
Master thesis <ul style="list-style-type: none">• Investigating influences on the tetrahydrofuran emission of polybutylene terephthalate• Method development headspace gas chromatography/mass spectrometry• Analysing Vehicle Interior Air Quality (VIAQ)• Method validation headspace gas chromatography/mass spectrometry• Coordination/appointment of external measurements |
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04/2019 – 08/2019

Institute of Inorganic Chemistry – RWTH, Aachen

Research internship

- Synthesis and characterisation of molecular barium hydroxide and precursor complexes
- Stabilising the complexes with different ligands
- Investigating, optimising and comparing different synthesis routes
- Working in a glovebox with inert gas

04/2018 - 11/2018

DWI – Leibniz Institute for Interactive Materials, Aachen

Student assistant

- Synthesis of PNIPAm microgel networks for biotechnological applications
- Precipitation polymerisation
- Analysis and modification of size and zeta potential of the synthesised microgels
- Cross-linking reactions
- Fluorescence assays

11/2017 - 02/2018

DWI – Leibniz Institute for Interactive Materials, Aachen

Research internship

- Synthesis and characterisation of defined PNIPAm star polymers for biotechnological applications
- RAFT (Reversible Addition-Fragmentation Chain Transfer) polymerisation
- End-group modification
- Cross-linking of the star polymers

04/2017 - 10/2017

Lanxess AG, Leverkusen

Research internship

- Development and execution of a new synthesis route for the fabrication of monodisperse ion exchanger without use of animal origin chemicals
- Downsizing of an operational process to a laboratorial scale with emphasis on the microfluidic
- Dispersion polymerisation

03/2015 - 06/2015

Institute for Inorganic Chemistry – RWTH, Aachen

Student assistant

- Supervising a second semester practical course

08/2010 - 09/2010

Lanxess AG, Leverkusen

Internship

- Analysis of laboratory samples

05/2009

SBK Soziale-Betriebe-Köln non-profit GmbH

Social internship

- Looking after disabled persons
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EXTRAMURAL COMMITMENT

2014 - 2015	Tutor for first semester students <ul style="list-style-type: none">• Conception, planning and execution of events• Daily supporting and consulting in the introductory week• Contact person for questions regarding university and the city Aachen
2009 - 2012	Member of a school sports aid program <ul style="list-style-type: none">• Conception and execution of a physical education class for lower grade students
2009 - 2012	Member of the student council

MISCELLANEOUS

09/2018	Member of Mensa International (Mensa in Deutschland e.V.) <ul style="list-style-type: none">• High IQ society
10/2017	Member of the Lanxess intern talent program „eXclusive“ <ul style="list-style-type: none">• Promotion program for interns of Lanxess• For students, who were able to convince with their special commitment and above average performance during an internship

KNOWLEDGE & ABILITIES

Languages	German: first language English: fluent Latin: proficiency certificate Spanish: beginner
Computer skills	MS-Office Chemdraw MestreNova Origin

HOBBIES

Calisthenics	<ul style="list-style-type: none">• Training with your own bodyweight
Swimming	<ul style="list-style-type: none">• Endurance training
Skiing	
Baking	

Zurich, 12th October 2021

T. Koushlioff