

## Curriculum Vitae (December 2022)

### 1 Personal Information

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Name: Stefan Mommer, Dr. rer. nat.  
Date/Place of Birth: 04/08/1989, Eupen (Belgium)  
Nationality: Belgian  
Languages: German (native), English, French, Dutch  
Current address: 8045, Zurich, Switzerland  
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### 2 Education

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01/03/2013-26/05/2017 **Ph. D. in Polymer Chemistry** with Prof. Dr. M. Möller (summa cum laude),  
DWI - Leibniz Institute for Interactive Materials (Aachen, Germany).  
02/05/2017 **PhD Viva**  
15/10/2010-29/01/2013 **Master of Science RWTH** (1.2, excellent),  
Rheinisch-Westfälische Technische Hochschule (Aachen, Germany).  
15/10/2007-26/07/2010 **Bachelor of Science RWTH** (2.2, good),  
Rheinisch-Westfälische Technische Hochschule (Aachen, Germany).

### 3 Employment history and current position

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01/09/2022-present **SNF Ambizione Group Leader**, Macromolecular Engineering Laboratory, ETH  
Zurich, (Zurich, Switzerland). Host: Prof. M. Tibbitt  
01/01/2021-31/06/2022 **Post-Doc Research Assistant**, Leiden Institute of Chemistry, Leiden University  
(Leiden, The Netherlands). Advisor: Assoc. Prof. S. Wezenberg  
01/01/2018-30/11/2020 **Newton International Fellow**, Melville Laboratory for Polymer Synthesis, University  
of Cambridge (Cambridge, UK). Advisor: Oren Scherman  
01/06/2017-31/10/2017 **Post-Doc Research Assistant** with Prof. Dr. M. Möller, DWI – Leibniz Institute for  
Interactive Materials (Aachen, Germany).  
01/03/2013-26/05/2017 **Ph. D. in Polymer Chemistry** with Prof. Dr. M. Möller (summa cum laude),  
DWI – Leibniz Institute for Interactive Materials (Aachen, Germany).

### 4 Institutional Responsibilities

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01/01/2018-31/10/2021 Responsible for maintenance, operation, and training of the following  
instrumentation: semi-prep/analytical HPLC, 2 size exclusion chromatography set-  
ups, IR spectrometer, Automated column chromatography system Biotage.  
01/03/2013-26/05/2017 Responsible for maintenance, operation and training of the size exclusion  
chromatography set-up, Chairman of the weekly seminar within the Institute.

### 5 Approved Research Projects

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01/01/2018-31/12/2019 “(Iminium)thiolactone-functional hyaluronic acid for hydrogel-based tissue  
engineering applications”, Role: Newton International Fellowship  
01/01/2018-31/12/2019 “(Iminium)thiolactone-Functional Hyaluronic Acid Hydrogels as Tissue Engineering  
Scaffolds“, Role: DFG Post-Doctoral Researcher

## 6 Supervision Activities

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10/2022-present	Nika Petelinsek, PhD Thesis, "Slide-Ring Networks using High-Affinity Host-Guest Inclusion Complexation", ETH Zurich (Switzerland).
03/2019-09/2019	Wiebke Schnettger, Master Thesis, "Synthesis of self-reporting hydrogels via 2:2 Cucurbit[8]uril host-guest complexation", University of Cambridge (UK).
10/2018-09/2019	Anton M. Graf, MPhil, "Development of Extended Viologens Towards Aqueous Organic Redox Flow Batteries", University of Cambridge (UK).
04/2017-08/2017	Pascal Jeschenko, Bachelor Thesis, "Synthesis of functional polyamides by using a novel cyclic thiolactone-lactone monomer", RWTH Aachen University (Germany).
04/2017-08/2017	Steven Van Terwingen, Bachelor Thesis, "Synthesis of functional polyamides by using a novel thiolacton-anhydride monomer", RWTH Aachen University (Germany).
10/2018-12/2018	Tessa Hughes, BBSRC DTP student, "Synthesis of Hyaluronic Acid-based Hydrogels for Tissue Engineering Applications", University of Cambridge (UK).
08/2018-01/2019	Benjamin Chan, 4th year PhD student, "Preparation of shape-memory materials via dynamically covalent cross-linked hydrogels", University of Cambridge (UK).
11/2018-01/2019	Wiebke Schnettger, ERASMUS, "Synthesis of styrene-based extended viologens for polymerization towards self-reporting hydrogels", University of Cambridge (UK).
04/2018-07/2018	Caroline Lienert, ERASMUS student, "Synthesis of an Iminiumthiolane derivative for efficient peptide ligations", University of Cambridge (UK).
03/2015-05/2015	Dominic Schäfer, Master's project, "Synthesis of a novel multifunctional Coupler", RWTH Aachen University (Germany).
08/2013-09/2013	Defne Sahin, IAESTE Exchange student, "Synthesis and Optimization of amino-functionalized poly(THF)", RWTH Aachen University (Germany).
07/2013-08/2013	Pavel Chapala, IAESTE Exchange student, "Synthesis of functional poly(amides)", RWTH Aachen University (Germany).

## 7 Teaching Activities

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01/2020-03/2020	Part II Chemistry Undergraduate Teaching Course "Polymers: synthesis, characterization and application", University of Cambridge (UK).
10/2019-11/2019	Part III Chemistry Undergraduate Teaching Course "Introduction to Polymers", University of Cambridge (UK).
01/2019-03/2019	Part II Chemistry Undergraduate Teaching Course "Polymers: synthesis, characterization and application", University of Cambridge (UK).
10/2018-11/2018	Part III Chemistry Undergraduate Teaching Course "Introduction to Polymers", University of Cambridge (UK).
2014-2016	Annual supervision and teaching of the practical course, "Engineering and Macromolecular Chemistry for Teachers", RWTH Aachen University (Germany).
02/2013	Undergraduate Biomedical Engineering Sciences practical course, "Basics of Chemistry – practical course", RWTH Aachen University (Germany).

## 8 Membership in Panels, Boards / Scientific Reviewing Activities

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Activities Grants/Others	Czech Science Foundation, Israel Science Foundation, Swiss Science Foundation, Reviewing a Royal Society of Chemistry Book Proposal
Activities Journals	Chem, ACS Sustainable Chemistry & Engineering, ACS Applied Materials & Interfaces, JACS, Angewandte Chemie, Advanced Materials, Advanced Healthcare Materials, Science Advances.

## 9 Active Memberships in Scientific Societies, Fellowships in Renowned Academies

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01/01/2018-present	Member of the Royal Society of Chemistry (London, United Kingdom).
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- 01/12/2019-present Member of the Materials Research Society (Warrendale, PA, USA).  
01/01/2020-31/12/2020 Member of the Trinity College Cambridge

## 10 Prizes, Awards, Fellowships

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- 09/2021 **SNF Ambizione Grant**, 4-year research fellowship to conduct, manage and lead an independent project at a Swiss higher education institution (825,000 CHF).
- 10/2018 **Borchers Medal**, Awarded to excellent doctoral candidates in recognition of their outstanding achievements (Aachen, Germany).
- 09/2017 **Newton International Fellowship**, 2-year postdoctoral research fellowship, Selects the very best early stage post-doctoral researchers from all over the world, and offers support for two years at a UK research institution (funding volume: £99,000.00).
- 09/2017 **DFG 2-year Postdoctoral Research Fellowship**, enables early-stage researchers to carry out a clearly defined research project at a place of choice abroad. (75,000€)
- 07/2017 **LANXESS Talent Award** (Second rank), July 2017, DWI - Leibniz Institute for Interactive Materials, Aachen (Germany).
- 08/2016 **GARG Fellowship**, to conduct a research internship at Osaka University (Japan), (3000€).
- 08/2016 **DAAD Conference Grant**, to participate in an international conference (2000€).
- 08/2011 **ERASMUS Scholarship**, Scholarship for graduates to conduct research abroad (2000€).

## 11 Publication record

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### Publications in progress

16. S. Mommer, R. Sala, Z. Huang, B. Longbottom and Oren A. Scherman, Dynamic Supramolecular Hydrogels Via 2:2 Cucurbit[8]uril Host-Guest Complexation, **2022**, *manuscript in preparation*.
15. S. Mommer, C. Lienert, O. A. Scherman, Functional Iminiumthiolactones Allow Lysine-Specific Single or Double Modification of Proteins, **2022**, *manuscript in preparation*.

### Full list of publications

14. S. Mommer, S. J. Wezenberg, *ACS Applied Materials & Interfaces*, **2022**, 14 (38), 43711-43718.
13. S. Mommer, K. Sokolowski, Z. Huang and Oren A. Scherman, *Chemical Science*, **2022**, 13 (30), 8791-8796.
12. S. Mommer, D. Gehlen, T. Akagi, M. Akashi, H. Keul, M. Möller, *Biomacromolecules*, **2021**, 22 (10), 4262-4273.
11. J. McCune, S. Mommer, C. Parkins, O. A. Scherman, *Adv. Mater.* **2020**, 32, 1906890.
10. S. Mommer, J. Kurniadi, H. Keul, M. Möller, *J. Appl. Polym. Sci.* **2019**, 137, 48371.
9. A. Tabet, S. Mommer, J. Vigil, C. Hallou, H. Bulstrode, O. A. Scherman, *Adv. Healthcare Mater.* **2019**, 1900068.
8. M. Marquardt, S. Mommer, J. Lange, P. M. Jeschenko, H. Keul, M. Möller, *Polymers*. **2017**, 9, 130.
7. S. Mommer, H. Keul, M. Möller, *Biomacromolecules*, **2017**, 18, 159-168.
6. S. Mommer, K.-N. Truong, H. Keul, M. Möller, *Polym. Chem.* **2016**, 7, 2291-2298.
5. S. Mommer, J. Köhler, H. Keul, M. Möller, *Macromol. Chem. Phys.* **2015**, 217(1), 2-23.
4. S. Mommer, H. Keul, M. Möller, *Macromol. Rapid Commun.* **2014**, 35, 1986-1993.  
Including front cover design

3. S. Mommer, K. Lamberts, H. Keul, M. Möller, *Chem. Commun.* **2013**, 49(32), 3288-3290. Including front cover design
2. H. Keul, S. Mommer, M. Möller, *Eur. Polym. J.* **2013**, 49, 853-864.
1. D. J. Burns, S. Mommer, P. O'Brien, R. J. K. Taylor, A. C. Whitwood, S. Hachisu, *C. Org. Let.* **2013**, 15(2), 394-397.

## 12 Oral contributions to conferences (talk or poster)

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| 2019 | <b>MRS Fall Meeting &amp; Exhibit</b> , Boston, Massachusetts (United States). Poster  |
| 2019 | <b>Joint Melville Symposium</b> , Melville Laboratory for Polymer Science, Department of Chemistry, University of Cambridge, Cambridge (United Kingdom). Talk    |
| 2018 | <b>2nd Theodore von Kármán – Discussion Conference</b> on Materials for Life Bioinspired and Biomimetic Hydrogels, Apr 2018, Bergisch Gladbach (Germany). Poster |
| 2017 | <b>Brightlands Rolduc Polymer Conference</b> , Sep 2017, Rolduc Abbey, Kerkrade (The Netherlands). Poster  |
| 2017 | <b>LANXESS Talent Award</b> , July 2017, DWI - Leibniz Institute for Interactive Materials, Aachen (Germany). Talk   |
| 2016 | <b>252nd ACS National Meeting &amp; Exposition</b> , Aug 2016, Philadelphia, Pennsylvania (USA). Talk  |
| 2015 | <b>Scientific Advisory Board Meeting</b> of the DWI - Leibniz Institute for Interactive Materials, Oct 2015, Aachen (Germany). Talk                              |
| 2015 | <b>Frontiers of Polymer Science</b> , May 2015, Riva del Garda (Italy).  |

## 13 Outreach Activities

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| 2018-2020 | <b>Cambridge Science Festival, Department of Chemistry Open Day</b> , University of Cambridge, Cambridge, UK. Annual festival and departmental Open Days in Cambridge, where scientific concepts around hydrogel materials are showcased through entertaining hands-on experiments and exhibitions with children, young people and families. |
| 08/2019   | Organizing <b>summer project for high-school student</b> , supervision of the high-school student and teaching of concepts around polymers and hydrogel materials including providing hands-on lab experience and characterization using oscillatory rheology and UV/Vis spectroscopy.   |