

## Personal Data

### Date of Birth

born as Sokolowski  
9.12.1987  
In Berlin

### Citizenship

German

### Languages

German (native)  
English (professional)  
Polish (fluent)



# Curriculum Vitae

Dr. Marek Bekir

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## Affiliation

University of Potsdam  
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## Professional Experience

- 04/2022– Research group leader (Habilitation candidate) at the University of Potsdam, Mentor Prof. Dr. Svetlana Santer
- 10/2018–03/2022 Postdoctoral fellow at University of Potsdam at the group of Prof. Dr. Svetlana Santer
- 10/2016–05/2017 Ph.D. student at Duke University at group of Prof. Dr. Stefan Zauscher (international partnership through IRTG 1524)

## Education

- 12/2018 Dissertation: "[The Interaction of Soft Silica Nanoparticles with Phospholipid Membranes](#)"
- 08/2014–09/2018 Ph.D. student at the Technische Universität Berlin at the group of Prof. Dr. Michael Gradzielski
- 01/2014–07/2014 Master thesis at the Technische Universität Berlin in the group of Prof. Dr. Gradzielski, "Synthesis of Quantum Dot Labeled Silica Particles"
- 08/2012–07/2014 Student assistant at the Technische Universität Berlin in the group of Prof. Dr. Gradzielski – Topic: Dynamic Emulsion Exchange
- 10/2008–06/2014 Master of Science – Chemistry – Technische Universität Berlin
- 05/2010–05/2012 Student assistant at Deutscher Bundestag, Berlin, Information Service

## Awards

- 08/2021–03/2022 Stipend for the project, Thermal Diffusio Osmosis of Charged Microgels, GRISC, DAAD, Germany
- 06/2020–06/2021 Stipend for the project, Size Response Delay of Microgel due to Photo-Induced Concentration Change, GRISC, DAAD, Germany
- 08/2014–09/2018 DFG-International Graduate Research Training Group 1524 (IRTG 1524), Self-Assembled Soft Matter Nanostructures at Interfaces, stipend

## H-Index

Publications: 23  
Citations: 234  
H-index: 8  
i10-index: 6

## Grants

- 03/2022–03/2023 Potsdam Transfer, Topic: “Polymer and Microplastic Separation from Material Properties”, 10.000 €, granted 2022
- 06/2022–06/2025 [DFG-Research-Postdoctoral Fellowship \(Eigene Stelle\)](#), Topic: “Light Induced Particle Separation”, 340.000 €, granted 2021, project number 469240574, Principal Investigator
- 01/2022–01/2025 DFG-Open Topic (Sachmittelbeihilfe), Topic: “Light-Driven Manipulation and Ordering of Spherical Polymer Brushes at Solid Liquid Interfaces.”, 250.000 €, granted 2021, project number 460124920, Co-Investigator

## Teaching

- Since 2022: Lecture: Polymer science (1SWS, Master class)  
Exercise and lecture: Experimental physics for chemistry students I (2SWS, Bachelor class)
- Since 2019: Exercise: Soft matter (2SWS, (Master class)
- Since 2018: Exercise: Experimental physics for chemistry students I and II (2SWS, Bachelor class)  
Exercise: Experimental physics for earth science students I and II (2SWS, Bachelor class)  
  
Supervision of practical courses (lab groups and individual students) for students of physics in the field of soft matter and surface science
- Since 2014: Supervision of practical courses (lab groups and individual students) for students of colloid, macromolecular and surface chemistry

## Supervision

### Post-Doc Students:

01/2022– Dr. Daniela Vasquez Munóz

### Ph.D. Students:

10/2019– Anjali Sharma\*

03/2020– Maren Umlandt\*

03/2018–12/2020 Dr. Pooja Arya\*

Since 2014 Supervision of: 3 Master students, 1 Bachelor student, 5 Student assistant

\*co-supervision with Prof. Dr. Svetlana Santer

## Oral Presentations

ECIS 2023, Naples, Italy, Topic: Light induced elevation of microparticles from planar bottom interfaces, 07/2023

51st Conference of the German Colloid Society 2022, Berlin, Germany, Topic: Surface Sensitive Microparticle and Microplastic Separation, 10/2022

ECIS 2022, Chania, Greece, Topic: Potential Filtration Technique for Microparticles of Equal Size but Different Surface Modifications, 09/2022

Chemiedozentagung, Saarbrücken, Germany, Topic: Light Driven Motion Acceleration, 03/2022

TAU-Potsdam-Meeting, Tel Aviv, Israel, Topic: Application of *l*-LDDO – Separation of Particles with Equal Size but Different Surface Modification, 11/2020

Engineering of Chemical Complexity, 10<sup>th</sup> International Conference, Potsdam, Germany, Topic: Light Driven Self-Sustained Motion of Spherical Polymer Brushes, 06/2019

Annual Meeting IRTG 1524, Raleigh, USA, Topic: Soft Nanoparticle Interaction with Supported Lipid Membranes, 10/2017

## Review Assignments

ACS Applied Materials, ACS Macro Letters, Advanced Functional Materials, Physical Chemistry Chemical Physics, MDPI Applied Science, MDPI Colloids and Interfaces, MDPI Molecules, MDPI Symmetry, MDPI Science

## Research Interests

- Separation of Micro-Sized Object and Microplastics of Equal Size but Different Surface Modification and Material (Effect Investigation, Filter Device Development, Commercialization)
- Development of Functional Materials and Substrates (Polymers, Colloidal Systems, Coatings)
- Supramolecular Interaction of Colloids and Polymers with Surfactants
- Dynamics of Interaction Between Interfaces and Bulk Solutions
- Photochemistry and Dynamic Responses to Light Stimuli



**Dr. Marek Bekir**

## References

### Prof. Dr. Svetlana Santer

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### Prof. Dr. Michael Gradzielski

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10623 Berlin, Germany  
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### Prof. Dr. Stefan Zauscher

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