Jena School for Microbial Communication
Graduate School of Excellence

Moemi Kawashima

Molecular and Applied Microbiology
Leibniz Institute for Natural Product Research and Infection Biology–
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Title PhD Project:
Molecular communication involving membranes and lipid rafts

Main Research Interests

- Importance of membrane fluidity and lipid rafts for signal perception
- Analysis of the change of membrane fluidity and lipid raft composition by observation technology

Methodological Experiences

- Cell culture
- Super-resolution microscopy
- Spectral imaging

Education & Research

2022/06 – Present **PhD student** *Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute*

2018/10 - 2021/03 **Master of Science (Medical Photonics)** *Friedrich-Schiller University Jena, Germany*
-GPA 1.4 (highest achievable 1.0)
-Master's thesis: "Optical spectroscopic characterisation of phage-bacteria interaction using *Bacillus* strains", supervised by Prof. Ute Neugebauer (Graded 1.0)

2017/10 - 2018/03 **Research internship** *Friedrich-Schiller University Jena, Germany*
Investigation on electronic properties of a two-dimensional semiconductor using density functional theory under the supervision of Prof. Silvana Botti

2014/04 - 2018/03 **Bachelor of Engineering** *University of Electro-Communications, Japan*
-GPA 2.67 (highest achievable 4.0)
-Participated in the Global Leadership Training Programme
-Given the *Megurokai Award* for writing the best bachelor thesis of the year
-Bachelor's thesis: "Intra- and Inter-layer Magnetic Interactions in a van der Waals Crystal", supervised by Prof. Jun Nakamura

Work experience

2021/04 – 2022/02 **Clinical Research Associate** *CMIC Co., Ltd., Japan*
Knowledge gained on Good Clinical Practice and the fundamentals of clinical trial procedures

Scholarships

2019/10 - 2021/02 Study Scholarships for Graduates of All Disciplines
German Academic Exchange Service

2017/10 - 2018/03 TOBITATE! Young Ambassador Program
Japan Student Services Organization

2017/10 - 2018/03 Saitama Window to the World Scholarship Program
Saitama International Association

2014/04 - 2018/03 UEC WOMAN Scholarship
University of Electro-communications

Skills

Software: MATLAB (good knowledge), LaTeX (good knowledge), bash (basic knowledge)

Languages: Japanese/English bilingual, German (intermediate, CEFR level B2)

Publications

Peer-reviewed original papers

Michael Seifert, Moemi Kawashima, Claudia Rödl, Silvana Botti (2021) *Layered CuI: a path to 2D p-type transparent conducting materials*, Journal of Material Chemistry C 9, 11284-11291