

Rupert Johann Kargl obtained his master of natural sciences - chemistry from the Institute of Chemistry at the Karl Franzens University Graz, Austria in 2006. His Master's thesis in organic chemistry was on the synthesis of biofuels using super-critical solvents as reaction media. He further obtained a PhD in physical chemistry on the surface interaction, modification and characterization of polysaccharide based materials from the same university in 2011. He received a Marie-Curie Intra-European-Fellowship (IEF) and worked as a post-doctoral researcher from 2013-2015 at the Laboratory for Characterization and Processing of Polymers (LCPP) at the University of Maribor, Slovenia. In 2016 he obtained his habilitation as an assistant professor at the same university and is currently involved in large international and national research projects. He is active as a Junior Member in the European Polysaccharide Network of Excellence (EPNOE) and the development of bilateral R&D and educational relations in the Austrian - Slovenian European Region of Graz (AT) and Maribor (SLO). His COBISS bibliography contains 231 entries including 51 peer reviewed articles in high impact factor journals in chemistry and material science.

EDUCATION:

- June 2015 – October 2016: **Post-Doctoral researcher**, Faculty of Mechanical Engineering, University of Maribor, Slovenia.
- June 2013 – Mai 2015: **Marie-Curie Intra-European-Fellowship (IEF)**, Project title: Micro- and Nanostructured Polysaccharide Interfaces. Laboratory for Characterization and Processing of Polymers, Faculty of Mechanical Engineering, University of Maribor, Slovenia.
- December 2011 – April 2013: **Post-Doctoral researcher**, project management, Institute of Chemistry, University of Graz, Austria.
- March 2007 – November 2011: **Doctor of Natural Sciences** – Chemistry, University of Graz, Austria. Thesis title: Characterization and modification of cellulose surfaces: new routes towards the applicability of cellulose.
- September 1999 – November 2006: **Master of Natural Sciences** – Chemistry, University of Graz, Austria. Thesis title: Alternative esterification of free fatty acids, a contribution to the synthesis of biofuels.
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FACULTY RANK:

- November 2016 – present: **Assistant Professor**, Faculty of Mechanical Engineering, University of Maribor, Slovenia.

BIBLIOGRAPHY:

- His COBISS bibliography consists of 231 entries
- Number of peer-reviewed articles 51
- Number of pure citations (Scopus database): 676, h-index: 17
- 1 EU patent

MEMBERSHIP IN SCIENTIFIC ORGANISATIONS AND BOARDS:

- 2015-present: **Member of EPNOE** (European Polysaccharide Network of Excellence),
- Jan. 2015: **Member of the organization board** of the 1st International EPNOE Junior Scientists Meeting Future Perspectives in Polysaccharide Research, Wageningen, The Netherlands.

PAST AND CURRENT RESEARCH PROJECTS:

HORIZON2020

- 1.4.2017 - 31.3.2022: Scientifically involved “Renewable materials and healthy environments research and innovation centre of excellence” (InnoRenew CoE) - Ga.N. 739574.
- 1.9.2015 - 31.8.2018: Scientifically involved, Work Package Leader “Contrast by Nuclear Quadropole Enhanced Relaxation” (CONQUER) - Ga.N. 665172.

FP 7 EU Programme

- 2013-2015: Leader of the FP7 project Marie-Skłodowska-Curie Intra European Fellowship (FP7-PEOPLE-2012-IEF) “Micro- and Nanostructured Polysaccharide Interfaces” (POLY-INTER-FACES).

COST Action

- 15.11.2013 - 14.11.2017: Slovene substitute: European Network on Smart Inorganic Polymers (SIPs) - COST Action CM1302.

M-era.Net

- 1.6.2017 - 31.5.2020: Researcher in a project: Designing new renewable nano-structured electrode and membrane materials for direct alkaline ethanol fuel cell (NanoEIMem).

Cohesion found

- National Research and development programmes (TRL 3-6); Scientifically involved at Faculty of Mechanical Engineering “Potential of biomass for development of advanced materials and bio-based products (CEL.CYCLE)” (Slovenia’s Smart Specialisation Strategy) - Contract C3330-16-529004.

Bilateral project

- 1.1.2018 - 31.12.2019: Leader of bilateral project with US: Characterization and transformation of Nanocellulosic Materials Applicable in Regenerative Medicine - BI-US/18-19-004.

National ARRS projects

- 1.3.2016 - 28.2.2019: Scientifically involved: Electrostatic immobilization of bacteria and influence on their physiology (J4—7640).
- 1.3.2016 - 28.2.2019: Collaboration in an applied research project: Advanced hemocompatible surfaces of vascular stents (L7-7566).
- 1.1.2016 - 31.12.2018: Collaboration in a research project: Multifunctional electrospun nanofibers development and dynamic interaction studies with pathogen bacteria (J2-7413).

Research program

- 1.1.2015 - 31.12.2020: Researcher in a programme group “Textile Chemistry” (P2-0118). The research work of this group is focused toward the investigation of surfaces of textile materials, their finishing and modification as well as toward the development of innovative technological processes.

International business collaboration with Austria

- 2014-2017: Collaboration in an Austrian national FFG project: 3D Tissue: Bioreactor with integrated sensors and tailored matrix for tissue engineering.
- 2014-2017: Collaboration in an Austrian national FFG Project: Pt-free catalyst systems and ethanol resistant polysaccharide membranes for the alkaline direct ethanol fuel cell.