

Editorial Board Focus: Professor Pol Besenius (Johannes Gutenberg University Mainz, Germany)

Background and Purpose. From time to time, SYNFORM portraits Thieme Chemistry Editorial Board or Editorial Advisory Board members who answer several questions regarding their research interests and revealing their impressions and views on the developments in organic chemistry as a general research field. This Editorial Board Focus presents Professor Pol Besenius (Johannes Gutenberg University Mainz, Germany) who joined the Editorial Board of ORGANIC MATERIALS with effect of June 2018.

Biographical Sketch



Prof. P. Besenius

Pol Besenius is Professor for Macromolecular Chemistry in the Department of Chemistry at the Johannes Gutenberg University in Mainz (Germany). Pol was born in Wiltz (Luxembourg) in 1981, where he grew up and completed secondary school education. From 2000 to 2004 Pol studied chemistry at the Vienna University of Technology (Austria) and University of Strathclyde in Glasgow, Scotland (UK). He completed his PhD studies at the University of Strathclyde and WestCHEM Research School in Glasgow, under the supervision of Prof. Peter Cormack and Prof. David C. Sherrington FRS, in collaboration with Prof. Sijbren Otto and Prof. Jeremy K. M. Sanders FRS at the University of Cambridge (UK). In 2008 Pol moved to the Eindhoven University of Technology (the Netherlands) to work with Prof. Anja Palmans and Prof. E. W. “Bert” Meijer as a Marie-Curie Fellow. In 2011 Pol started his independent research as group leader (Habilitation), in the Organic Chemistry Institute at the Westfälische Wilhelms-Universität Münster (Germany), under the mentorship of Prof. Bart Jan Ravoo, and received the *venia legendi* in Organic Chemistry. In January 2015 Pol was appointed as Professor (W2) for Macromolecular Chemistry at JGU Mainz. Pol has received numerous awards and fellowships, and is the recipient of an ERC Consolidator Grant (2019), Liebig-Fellowship of the Fonds der Chemischen Industrie (2011), was member of the ‘Junges Kolleg der Nordrhein-Westfälischen Akademie der Wissenschaften und der Künste’ (2013–2014) and recently began to act as vice spokesperson of the DFG Research Training Group (RTG 2516) ‘Structure Formation of Soft Matter at Interfaces’ (since 2020).

INTERVIEW

SYNFORM Please comment on your role as a member of the Editorial Board of Organic Materials?

Prof. P. Besenius As editor of the recently launched journal ORGANIC MATERIALS, I am responsible for the peer review process and associated editorial decisions, along with the two other editors Prof. Michael Mastalerz (Ruprecht-Karls-Universität Heidelberg) and Prof. Xiaozhang Zhu (Institute of Chemistry at Chinese Academy of Sciences, Beijing).

SYNFORM How do you describe the value of a product such as Organic Materials to the chemistry community?

Prof. P. Besenius ORGANIC MATERIALS is an open access journal and aims to broaden the knowledge in the interdisciplinary fields of chemistry and materials. The scope is broad and covers the synthesis and characterisation of molecular and polymeric functional materials. We welcome exciting contributions and the latest discoveries of the growing community engaged in organic materials, on topics ranging from porous materials, supramolecular chemistry, organic electronics, molecular machines, sensors, functional polymers or polycyclic aromatics. ORGANIC MATERIALS offers the opportunity to publish both experimental and theoretical studies as well as to publish scientific primary data.

SYNFORM What is the focus of your current research activities?

Prof. P. Besenius The research in my lab focuses on the synthesis of organic and supramolecular functional systems. We design molecular and macromolecular building blocks that self-assemble into programmable polymers, adaptive materials in aqueous media and in the bulk. Utilising natural

and non-natural supramolecular interactions we investigate multifunctional systems for applications as temperature-, pH-, oxidative-stress- and mechano-responsive hydrogels and biomaterials. We are also very excited to translate the design of our biomedical carriers into the development of synthetic vaccines for applications in immunotherapy.

SYNFORM *You are a leading researcher with regard to organic materials chemistry. Could you tell us more about how important you perceive this particular topic to be?*

Prof. P. Besenius The capacity to design and synthesise molecules and macromolecules, further guided by computational methods, puts us chemists into a very privileged and central position to interact with many adjacent research fields. Curiosity-driven developments of synthetic methodology, coupled with creativity, allows us to prepare (macro)molecules with exquisite control over functionality, size and shape. These are key in the discovery of fundamental new properties, and in mechanistic understanding and can be exploited for unique electronic, mechanical or biological function. I am excited to be part of this vibrant research field and look forward to many spectacular achievements at the frontiers of chemistry and materials science.

SYNFORM *What is your most important scientific achievement to date and why?*

Prof. P. Besenius Since 2011 I have had the privilege to work with a group of very talented chemists. Eight students have successfully defended their PhD since, and secured positions in industry or started their own independent research group. They have all massively contributed to the success of our group and brought in a good mix of creative molecular designs, ambitious synthetic routes and exciting biomedical applications. There is not one achievement I would like to single out here.

