



**Prof. Annemie Bogaerts**  
University of Antwerp, Belgium

**Annemie Bogaerts** (49 years old) obtained her M.Sc. and Ph.D. in Chemistry in 1993 and 1996, respectively, at the University of Antwerp. After some postdoc years, she became professor in physical chemistry in 2003, at the University of Antwerp, where she is full professor since 2012. She is head of the Research group PLASMANT, which she founded from scratch, and which counts about 40 members.

Her research focuses on plasma chemistry, plasma sources/reactors and plasma-surface interactions (including liquid surfaces and biomolecules), both by modeling and experiments, with special focus on plasma-based gas conversion and plasma medicine (cancer treatment). In the field of plasma medicine, she closely collaborates with the Center for Oncological Research at the University of Antwerp, for in vitro (2D and 3D cell cultures), in ovo and in vivo cancer treatment studies, also in combination with immunotherapy. In addition, her group performs computer modeling, including both molecular dynamics simulations for molecular-level interactions of plasma species with biomolecules, fluid dynamics and chemical kinetics modeling for plasma jets interacting with liquids.

She has written ca. 500 peer-reviewed publications since 1995, as well as ca. 20 invited book chapters. She was editor of the journal "Spectrochimica Acta: Part B", from 2002 till 2018, where she was responsible for the review papers. She is currently topics editor of J. Phys. D: Applied Physics, for the 3-years programme "Advances in Plasmas for a Sustainable Future". She is also member of the Editorial Board of 12 journals, including Plasma Sources Sci. Techno., Plasma Proc. Polym., Plasma Chem. Plasma Process., Cancers, J. Phys. Chem. A/B/C, J. Appl. Phys, J. CO<sub>2</sub> Utiliz., and Chem. Eng. J. In addition, she was 17 times guest editor of a special issue related to plasma research.

Overall, her work is very highly cited, with above 17,000 citations since 1997 (source: Web of Science), resulting in a h-index of 65 (Google Scholar: above 25,000 citations and h-index of 77).

She has presented above 160 invited talks at international conferences (since 1998) and ca. 70 invited seminar talks (since 1995). She is in the international scientific committee of several plasma conferences, member of the Board of Directors of the International Plasma Chemistry Society, and Vice-President from 2020. She was also the chair of the International Symposium on Plasma Chemistry in July 2015 in Antwerp, with almost 600 attendants.

Finally, she has an ERC Synergy Grant (2019-2025), on plasma-catalytic conversion of small molecules, which is the highest recognition in European research.