

Prof. Andrea Biffis

Short CV

Andrea Biffis graduated in Chemistry (cum laude) at the University of Padua in 1993, in the group of Prof. B. Corain. After a post-graduate semester as a visiting researcher at the Technical University of Bratislava, Slovakia, funded by the “Ing. Aldo Gini” foundation, he joined the group of Prof. G. Wulff at the University of Düsseldorf, Germany, where he obtained the PhD degree (magna cum laude) in 1998. In 1995 he was also a visiting researcher at the University of Strathclyde in Glasgow, Scotland, in the group of Prof. N. B. Graham. In 1998 he moved to the University of Essen, Germany, accepting a postdoc position (Marie Curie fellowship) in the group of Prof. G. Schmid. He then returned to Padua, where he was successively a scholarship holder, a research fellow, a university researcher (since 2001), an associate professor (since 2010) and a full professor (since 2022).

Prof. Biffis has so far co-authored about 130 international refereed publications and 7 chapters in monographs, with an h-index of 36 (source: Scopus). He has presented his results at numerous national and international conferences, and has been invited to give lectures at Italian and foreign universities, national schools and chemical firms. Prof. Biffis has also been working for years as a referee for the main chemical journals and for national and foreign research agencies. Since 2020, Prof. Biffis has been a member of the Editorial Board of the journal “Catalysts”.

Prof. Biffis has won the Enichem study award (1990, 1991, 1992), the Enichem thesis award (1993), the thesis award of the consortium “Padova Ricerche” (1994), the study award “Dott. Comm. Alceste Mion” (2008) and the “Frontiers in Catalysis” award (2021). He has received scholarships from the “Ing. Aldo Gini” foundation (1994) and from the University of Padua (1998).

Prof. Biffis has been the scientific referent of numerous research projects funded by the University of Padua and by the CNR. He was the local coordinator of the European Marie Curie RTN network “NASCENT” (Nanomaterials for Applications in Sensors, Catalysis and Emerging Technologies, 2006-2010). He has been scientific coordinator of collaborative projects with Zhermack SpA, Italy (2005-2006, 2019-2021), with Henkel KGaA, Germany (2006-2007) and with Zetagi Srl, Italy (2021, 2023-25).

Prof. Biffis is a member of the Italian Chemical Society and representative of the University of Padua in the Assembly of the Interuniversity Consortium for Chemical Reactivities and Catalysis (CIRCC). He was also coordinator of the Interdivisional Group of Organometallic Chemistry of the Italian Chemical Society in the three-year period 2022-2024.

The research interests of Prof. Biffis cover various aspects of organometallic chemistry, catalysis and polymer chemistry. They are currently focused on the development of transition metal catalysts (metal nanoparticles, metal complexes) for fine chemistry, on the study of organometallic complexes and clusters with N-heterocyclic carbene ligands, on the development of innovative strategies for the recovery and recycling of homogeneous catalysts and on the preparation, characterization and application of inorganic nanoparticles in soluble cross-linked polymers (microgels).

Recent publications:

1. F. Ravera, M.S. Martinsen Holmsen, P. Sgarbossa, D. Bourissou, A. Biffis, Gold(III) Catalysis in Ionic Liquids: The Case Study of Coumarin Synthesis, *Adv Synth Catal* 367 (2025) e202400706.
<https://doi.org/10.1002/adsc.202400706>.
2. M. Bevilacqua, M. Roverso, S. Bogialli, C. Graiff, A. Biffis, First Evidence of Au-CH₃ Bonding in Superatomic Au₁₃ Clusters, *Eur J Inorg Chem* 27 (2024) e202400351.
<https://doi.org/10.1002/ejic.202400351>.
3. M. Bevilacqua, M. Roverso, S. Bogialli, C. Graiff, A. Biffis, From Au₁₁ to Au₁₃ : Tailored Synthesis of Superatomic Di-NHC/PPh₃ -Stabilized Molecular Gold Nanoclusters, *Inorg. Chem.* 62 (2023) 1383–1393.
<https://doi.org/10.1021/acs.inorgchem.2c03331>.