Coordination Chemistry Reviews 441 (2021) 213990

Contents lists available at ScienceDirect

Coordination Chemistry Reviews

journal homepage: www.elsevier.com/locate/ccr

Preface

Phosphorus Coordination Chemistry: A Special Issue in Honor of Maurizio Peruzzini

The present Article Collection celebrates the outstanding scientific career of Maurizio Peruzzini and his interest in Phosphorus Chemistry. Maurizio was formed as a young chemist at the University of Florence (Italy) under the supervision of Piero Stoppioni and Claudio Bianchini, thus belonging to the numerous heirs of the prestigious chemistry school of Luigi Sacconi. After a period as research assistant at the same University, in 1986 he won a place as researcher at CNR-ISSECC, now CNR-ICCOM, where Maurizio spent most of his further activity as scientist. Since the beginning, he got fascinated by the beauty and complexity of main group and transition metal coordination chemistry, in particular phosphorus in all its allotropic forms. This interest accompanied him throughout his scientific career, that saw promotions first to Senior Researcher (1996–2001) and then to Research Director (2001–2020). In 2013 he became Director of CNR-ICCOM, after two years as Deputy Director, and in 2017 he took the position of Director of the CNR Department of Chemical Sciences and Materials Technology in Rome, until retirement in 2020. Since then, Maurizio has taken the role of Senior Associate at CNR-ICCOM, and still actively collaborates with his coworkers in various fields of research. His commitment to the development of chemistry in Italy brought him to become President of the Inorganic Chemistry Division of the Italian Chemical Society (2009–2011). He was the mentor of many undergraduate, postgraduate students and postdoctoral fellows coming from all over the world to join his research group in Florence. Maurizio's bibliometric data are truly outstanding, with more than 400 co-authored peer-reviewed papers, more than 13,000 citations and an *h*-index of 57 (WoS data, 14th April 2021).

Maurizio's scientific interests cover many areas of research, achieving over the years excellent results in fields such as transition metal-promoted activation of hydrogen and small organic and inorganic molecules, C–H bond activation in organic substrates, hydrogen transfer reactions and hydrogen production, homogeneous catalytic isomerization, hydrogenation and hydroformylation of alkenes and oligomerization and functionalization of alkynes, synthesis of water-soluble phosphorus-based ligands, mechanistic studies of catalytic and stoichiometric reactions by means of high pressure NMR spectroscopy (HPNMR), hydrodesulfurization of fossil fuels (HDS), CO_2 capture, storage and utilization, and of course phosphorus activation.

He has been very active at national and international level, securing fundings on a competitive basis as Project Coordinator, for example for the FP6 Marie Curie Research Training Network AQUACHEM (2003–2008), collecting expertise of some of the most renown European research groups working on aqueous phase organometallic chemistry and catalysis, and for the prestigious ERC Advanced Grant Project PHOSFUN (2015–2019), focused on the study of the properties and reactivity of a new 2D phosphorus-based material named phosphorene. His open and friendly attitude, together with his high competence in chemistry, both as scientist and manager, made it easy for him to build a wide network of collaborations in Italy and worldwide. Some of these contacts resulted in collaborative projects in the field of phosphorus chemistry, including for example the FP7 Marie Curie Research Training Network SUSPHOS (2013–2017), a European Training Network for Sustainable Phosphorus Chemistry, and the COST Action PHOSCINET, the European Phosphorus Sciences Network (2008–2012). Indeed, some of Maurizio's friends and colleagues in these projects graciously accepted our invitation to celebrate him with the excellent reviews belonging to this Virtual Special Issue.

Maurizio is also very well known as organizer of national and international conferences, starting from serving as Scientific Secretary of the International Conference on Coordination Chemistry (ICCC-XXXIII, Florence 1998) and ranging to the role of Chairman of the 28th International Conference on Organometallic Chemistry (ICOMC-28, Florence 2018), and of the forthcoming 44th International Conference on Coordination Chemistry (ICCC-44, Rimini 2022).

In conclusion, we are grateful for having shared with Maurizio many working and social occasions for many years, and we are glad to see that so many esteemed colleagues and friends have taken this opportunity to celebrate him for his outstanding research achievements with this (very) Special Issue of Coordination Chemistry Reviews.

https://doi.org/10.1016/j.ccr.2021.213990

Antonio Romerosa graduated in Chemistry in 1987 (Granada University) and doctorated in January 1992 (U. Autonoma de Barcelona). The same year he enjoied a postdoctoral research position at the CNR-ISSECC (Florence, Italy), now CNR-ICCOM, before becoming Lecture Professor (1997) and finally Full Professor (2009) at the University of Almeria (Spain). His research interests range over homogeneous catalysis and organometallic chemistry in water, phosphorus chemistry, photoinorganic-chemistry, bioinorganic chemistry mainly related to antiproliferative active metal complexes, and neutron scattering to determine how water molecules interact with metal complexes and drive catalytic processes. He has co-authored more than 150 papers and 220 conference communications as well as being promotor of 20 Ph.D. thesis, which cover his many interests in inorganic chemistry.

Luca Gonsalvi is Research Director at the Institute of Chemistry of Organometallic Compounds (ICCOM) of the Italian National Research Council (CNR) since January 2021. He got his Degree in Chemistry in 1994 from the University of Parma (Italy) and his Ph.D. in Organometallic Chemistry and Catalysis from the University of Sheffield (U.K.) in 1999. After a Postdoctoral Fellowship at Delft University of Technology (NL) in 2000–2001, he joined CNR-ICCOM as Researcher, then Senior Researcher (2010–2020). His main interests are in the fields of organometallic chemistry of precious and base transition metals, aqueous phase homogeneous catalysis, hydrogen storage and production from small organic molecules, CO_2 hydrogenation, mechanistic studies by NMR and HPNMR techniques. He has co-authored more than 100 peer-reviewed articles and contributed to more than 140 conferences. He has been Scientific Secretary of EWPC-6 (Florence, 2009) and ICOMC-28 (Florence, 2018) and Session Chairman at various international conferences, including the forthcoming ICCC-44 (Rimini, 2022).

Antonio Romerosa *
Área de Química Inorgánica-CIESOL,
Facultad de Ciencias Experimentales,
Universidad de Almería, 04071 Almería, Spain
E-mail address: romerosa@ual.es

Luca Gonsalvi *
Consiglio Nazionale delle Ricerche, Istituto di Chimica dei Composti Organometallici (CNR-ICCOM), Via Madonna del Piano 10, 50019 Sesto Fiorentino, Firenze, Italy
E-mail address: l.gonsalvi@iccom.cnr.it
* Corresponding authors.