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**Title: Palladium/Phenanthrolines Catalyzed Carbonylation of Nitroarenes;
the Key Role of the Nitrogen Ligand**

Professor Fabio Ragaini obtained his Ph.D. in chemistry at the University of Milan, where he later became Assistant, Associate and finally Full Professor in 2011. In 1993 he was also visiting scientist at The Pennsylvania State University. Since 2016, he is the Coordinator of the Interdivisional Organometallic Chemistry Group of the Italian chemical Society. Author of 115 papers on scientific journals, a monograph entitled “Catalytic Reductive Carbonylation of Organic Nitro Compounds” (Kluwer Academic Publishers, 1997), 2 book chapters, and 3 patents. He has over 2900 citations and an h-index of 33.

Scientific interests are in the field of organometallic chemistry and homogeneous catalysis. The research activity has mainly, but not only, focused on the following topics: Carbonylation reactions of nitroarenes to afford base chemicals (carbamates, ureas, isocyanates). The catalytic system described by Prof. Ragaini is the most active ever reported for this reaction; Carbonylation reactions of nitroarenes to afford fine chemicals (allylic amines, indoles, pyrroles, oxazines). A system was recently developed that allows to perform the reaction in one pot using phenylformate as a CO source, releasing the need for a high pressure CO line; Synthesis and use of nitrogen ligands (Schiff bases, phenanthrolines). The synthesis of bis-aryliminoacenaphthene (Ar-BIAN) ligands developed by Prof. Ragaini is now the most often employed one for this widely employed class of ligands; Amination and aziridination reaction of olefins or activated C-H bonds (benzylic, allylic etc.) by organic azides. Together with Prof. Cenini and Prof. Gallo, Prof. Ragaini was a pioneer of the use of arylazides as aminating agents, a field now rapidly expanding; A special attention is given to mechanistic studies in all mentioned fields, as a mean to rationally improve the catalyst performance.