Claudia Dragonetti obtained her “diploma di maturità scientifica” at Liceo Scientifico “Donatelli” of Milan with 60/60, then she attended the Master of Science in Industrial Chemistry at the University of Milan and on 13 July 2000 she graduated in in Industrial Chemistry (110/110), with a thesis on organometallic complexes of iridium (I) as potential materials with anisotropic electrical properties.

In the period 2000-2003 she worked as a PhD student in Industrial Chemistry (XVI cycle); In October 2003 she was awarded of the title of PhD in Industrial Chemistry with a thesis on Organometallic Compounds: new synthetic methodologies, anisotropic, electrical, and nonlinear optical properties.

In the period November 2003 - December 2004 she was “assegnista di ricerca” with a project concerning electrical properties, optical and magnetic properties of coordination compounds.

On November 2005 she become a researcher in CHIM/03 (General and Inorganic Chemistry) at the Faculty of Mathematical, Physical and Natural Sciences, and took service at the Department of Inorganic, Organometallic and Analytical Chemistry of University of Milan on January 2005.

She is currently (from 1 April 2016) a CHIM/ 03 associate professor of the Department of Chemistry.

August 2018: Abilitazione Scientifica Nazionale for full professor (03/B1, art. 8 comma 9 DPR 95/2016).

Claudia Dragonetti is the author of 100 publications in international and highly qualified journals, of 3 patents (two national and one European) and about 90 communications at national and international conferences.

Claudia Dragonetti carried out her research in the following areas: 1) Synthesis mediated by the silica surface and in solution of neutral and anionic clusters; synthesis and reactivity of organometallic compounds as models of organometallic species present on the silica surface. C. Dragonetti has studied the surface of silica as a means of new and unusual reaction for the preparation of metal carbonyl compounds, making a significant contribution to the important field of synthesis mediated by organometallic oxide surfaces. She is oriented toward the use of silica as a reaction medium for the development of new and convenient synthetic methodology of carbonyl clusters of rhodium, iridium and platinum. 2) Synthesis and characterization of organometallic and coordination compounds with second order nonlinear optical properties (NLO) and their nano-organization. The study of coordination compounds as new materials with high second order nonlinear optical response is currently of high interest, thanks to their use for optical communication and for the storage and processing of data. In this context, C.Dragonetti has dealt mainly with the synthesis, characterization and study of nonlinear optical properties of the second order in solution (measured using EFISH-Electric Field Induced Second Harmonic Generation technique) of organometallic and coordination push-pull complexes of Ru, Ir, Pt and Zn. A new area of interest for C. Dragonetti is the nano-organization starting from molecular compounds with the most significantant NLO properties, to give new nanostructured materials stable over time and with improved properties with respect to the molecular ones. 3) Synthesis and characterization of organometallic compounds and coordination with luminescent properties. C. Dragonetti dedicated her time to the synthesis and characterization of new terdentate Pt(II) complexes useful for the preparation of Organic Light-Emitting Diodes (OLEDs). Her studies have shown that the emission color can be modulated by choosing adequately the nature of substituents and how Pt-Pt interactions is a new convenient way to obtain materials with a significant emission in the Near Infrared (NIR). She has also successfully used a platinum complex for the realization of a WOLED; this device has the ambitious aim to bring lighting to low energy for a sustainable future. 4) Synthesis and characterization of organometallic compounds and coordination with application in

the field of solar cells. C. Dragonetti recently has worked on the design, synthesis and study of new coordination compounds for application in solar cells both Bulk-Heterojunction and Dye Sensitized Solar Cells (DSSCs); in particular she studied the use of Ru-acetylides for the design of donor materials to combine with electron-attractor fullerene derivatives in BHJ solar cells. C. Dragonetti studied some innovative sensitizers for DSSCs based on cyclometallated thiocyanate-freef Ru(II) complexes; such compounds are an emerging class of photosensitizers really efficient and very stable without limitations due to the presence of the thiocyanate ligand. C. Dragonetti, also studied copper(I) and copper(II) complexes as efficient electrolytic couples.

Five recent publications:

1) Second-order NLO switches from molecules to polymer films based on photochromic cyclometalated platinum(II) complexes. J. Boixel, V. Guerchais, H. Le Bozec, D. Jacquemin, A. Amar, A. Boucekkine, A. Colombo, C. Dragonetti, D. Marinotto, D. Roberto, S. Righetto, R. De Angelis, J. Am. Chem. Soc. 2014, 136, 5367.

2) Multifunctional Luminescent Down-Shifting Fluoropolymer Coatings: A Straightforward Strategy to Improve the UV-Light Harvesting Ability and Long-Term Outdoor Stability of Organic Dye-Sensitized Solar Cells. G. Griffini, F. Bella, F. Nisic, C. Dragonetti, D. Roberto, M. Levi, R. Bongiovanni, S. Turri, Adv. Energ. Mat., 2015, 5, 1401312.

3) Versatile copper complexes as a convenient springboard for both dyes and redox mediators in dye sensitized solar cells. M. Magnia, P. Biagini, A. Colombo, C. Dragonetti, D. Roberto, A. Valore, Coordination Chemistry Reviews 2016, 322, 69.

4) UV-curable fluoropolymers crosslinked with functional fluorescent dyes: the way to multifunctional thin-film luminescent solar concentrators, D. Pintossi, A. Colombo, M. Levi, C. Dragonetti, S. Turri, G. Griffini, J. Mater. Chem. A, 2017, 5, 9067.

5) Coupling of a Copper Dye with a Copper Electrolyte: A Fascinating Springboard for Sustainable Dye-Sensitized Solar Cells, C. Dragonetti, M. Magni, A. Colombo, F. Melchiorre, P. Biagini, D. Roberto, ACS Appl. Energy Mater. 2018, 1, 751.