

Curriculum of Alessandra Gentili

Department of Chemistry
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TRAINING, TEACHING and UNIVERSITY

Alessandra Gentili is an Associate professor of Analytical Chemistry at the University of Rome La Sapienza, where she is also Director of HYDRO-ECO, a Research Centre which involves four departments from the Faculties of Science and Engineering and whose mission is to develop scientific and technological activities, focused on the study of materials from renewable sources and processes for energy storage, conversion and utilization.

At Sapienza University, after her Master's degree, Magna cum Laude, in Industrial Chemistry and her PhD degree in Chemical Sciences, she was researcher from 1999 to 2004 and has been Associate Professor since 2005. In December 2013, she received the national qualification as Full Professor (CHIM 01).

She has undertaken her teaching duties for the classes of Analytical Chemistry since 2001 (courses for the Bachelor of Science, Master of Science, second level Master of Industrial Chemistry and Chemistry). She was member of the Doctorate Committees of the PhD Programs in: "Pathology of the neck organs" (2003-2004); "Environmental and Industrial Hygiene" (2006-2009); "Infectious Diseases, Microbiology and Public Health Sciences" (2013-2015); "Chemical Engineering" (2016-).

SCIENTIFIC ACTIVITY

- General overview -

Her scientific activity essentially concerns the development of novel analytical methodologies for solving problems in different areas of Chemistry, namely Clinical, Food and Environmental Chemistry. The themes of her research include the development of original extraction methodologies and the use multihyphenated analytical techniques ((nano) liquid chromatography/diode array detection/mass spectrometry). Recently, special interest has been focused on the preparation and characterization of deep eutectic solvents and low transition temperature mixtures to develop liquid phase microextraction procedures as well as on the research and experimentation of novel sorbent nanomaterials (buckypaper). To this end, she often collaborates with Italian and European colleagues of other areas of Chemistry, namely Physical Chemistry, Material Science and Organic Chemistry.

- Scientific production, Editorial Boards and Conferences -

The results of her research have been published over 93 publications, including 87 papers on international journals and 10 chapters/monographs on international books (Elsevier Inc., Wiley-VCH VerlagGmbH & Co. KGaA', Royal Society of Chemistry publishing). Her publications have been cited over 2700 times; h-index 26. She is a member of the Editorial Boards of the Journal of Chromatography A (Elsevier), Molecules (MDPI; section of analytical chemistry) and Current Analytical Chemistry (BenthamScience). She is Guest Editor of a special issue "Advances in Food Analysis" published in Molecules and has been selected (Editor's choice) to participate to a special issue on Journal of Chromatography A.

Besides national conferences, she was invited for plenary lectures at ISOPS 2018, International Symposium on Pharmaceutical Science, Ankara, Turchia and at ASPAC 2019, Annual Symposium on Physical and Analytical Chemistry, Tbilisi, Georgia. She was also chairwoman and member of the scientific committee for the same scientific events.

- Evaluator of research projects/ activities/scientific journals and international member of doctorate committee -

- She was selected as an evaluator of the research activity of the Institutes of the Czech Academy of Sciences (2010-2014). She was also selected by ANVUR (National Agency for the Evaluation of the University and Research System) as an auditor for the Evaluation of Italian Research Quality (2004-2010; 2011-2014).

- She was consulted as an international referee for the evaluation of research projects by the Kuwait Foundation for the Advancement of Sciences (KFAS), Safat, State of Kuwait (2014 and 2016).

- She was consulted as an external reviewer (2017) and invited as a committee member (2019) for PhD Theses with international mention of a PhD student from Universidad de La Laguna, Santa Cruz de Tenerife, España (2017). She was an external member of the committee
- She is currently referee for several ISI journals belonging to top-decile and top-quartile in her research area (AIS; SJR).

RESEARCH PROJECTS AND COLLABORATIONS

She has participated in national and international projects (PRIN, MIUR, MIPAF, Ateneo, European Research Projects), both as a responsible (local projects) and as a component. Since 2005, she has been coordinator of collaboration activities with national and international companies such as ABBOTT Srl, Abbvie Srl, Avio Spa, IBN Srl and CD Investment Srl. Her LC-MS laboratory has obtained the quality certification according to the standards of ISO 9001:2000 since 2005.

INTERNATIONAL AND NATIONAL SCIENTIFIC COOPERATIONS

She has collaborated with national and international Universities and Research Centres.

- Her research group participated in the vitamin K External Quality Assurance Scheme (KEQAS), an international scheme that monitors and reports on the accuracy of the vitamin K analysis. KEQAS is administered by the Nutristasis Unit, hosted by Guy's and St. Thomas' Hospital, London, UK (2013-2015).
- She collaborated (2012-2014) with the Department of Analytical Chemistry, Physical Chemistry and Chemical Engineering, University of Alcalá, Madrid, Spain, for the development of novel methods for the determination of emerging contaminants in environmental waters.
- In 2006, she was contacted by the Consejo Superior de Investigaciones Científica IIQAB-CSIC (Proff. Damia Barcelo and Mira Petrovic) in order to join NORMAN network. NORMAN is an European network of reference laboratories (GC-MS and LC-MS) aimed at monitoring emerging contaminants in European environmental waters.
- From 2001 to 2007, she was a member of the Environmental Chemistry group within the Project of Cooperation among the Italian Government, the Ecuadorian Government and the United Nations Program for Development, aimed at promoting the "sustainable development" of the Galapagos Islands. Currently, she is collaborating with Prof. Salvatore Fanali (Institute of Chemical Methodologies, Italian National Research Council (C.N.R.), Monterotondo (Rome), Italy) and with the UNICATT Cord Blood Bank and Neonatology Unit, Policlinico Gemelli, Università Cattolica del Sacro Cuore, Rome, Italy.