Fabio Gosetti

Curriculum vitae

PERSONAL DATA

Born in 1978.

BIO AND EDUCATION

He graduated in Chemistry *Summa cum Laude* at the University of Piemonte Orientale (Alessandria, Italy) in 2002. In 2003, he passed the government exam and licensed as a profession chemist at University of Pavia (Pavia, Italy). In 2005, he received the Ph.D. degree in Chemical Sciences at the University of Piemonte Orientale, with a thesis entitled: ”Methods of analysis and control in food chemistry by chromatographic techniques with UV-vis and mass spectrometry detections”.
He is author of 52 manuscripts published in peer-review journals (total IF 172, average IF 3.30, citations: 1066, H-index: 19, by Scopus update 19 August 2016), 5 peer-reviewed conference proceedings and 9 book chapters (invited).
Since 2001, he has collaborated to didactics in the academic course of Analytical Chemistry for the degrees in Chemistry and Environmental Sciences. He is co-tutor of more than 25 Degree and Master Degree Thesis in Chemistry and Chemical Sciences. Since 2006 he has been invited to lecture at more than 20 seminars, workshops and schools, and in 2015, he has been a member of the organizing committee of 16th European Meeting of Environmental Chemistry. He attended about ninety schools, congresses and seminars. He presented 30 oral and 10 poster communications as author and more than 50 communications as co-author in national and international conferences.
He co-operated in national research projects CIPE, COFIN03, ATF, Ricerca Sanitaria Finalizzata, CARIPLO 2014, CARIPLO 2015.

UNIVERSITY CAREER

2006 - now	Research Technician, at University of Piemonte Orientale

SCIENTIFIC POSITIONS

2003 - now	Member of the Analytical Chemistry Division and Mass Spectrometry Division of the Italian Chemical Society (SCI)
2008 - now	Reviewer for several journals among which Mass Spectrometry Reviews, Trends in Analytical Chemistry, Analytical Chemistry, Journal of Chromatography A, Journal of Chromatography B, Analytica Chimica Acta, Talanta, Analytical and Bioanalytical Chemistry, Journal of Hazardous Materials, Food Chemistry, Journal of Agricultural and Food Chemistry, Food Analytical Methods, Food Additives and Contaminants,

	Analytical Letters, Analytical Methods, Journal of Separation Science, Rapid Communication Mass Spectrometry, etc
2010 - 2011	Reviewer of the committee for Physical Sciences of Czech Science Foundation – Grant Agency of the Czech Republic.
2012 - now	Member of the Interdivisional Group of Science Separation of the Italian Chemical Society (SCI)
2012 - now	Member of Editorial Board of Current Chromatography (Bentham Sciences Publisher)
2012 - now	Member of Editorial Board of Journal of Pharmaceutical Analysis (Elsevier)
2013 - now	Member of the Editorial Board of The Scientific World Journal: Environmental Chemistry (Hidawi)
2013 - now	Member of the Editorial Board of The Journal of Chemistry: Analytical Chemistry (Hidawi)
2013 - 2014	Member of Editorial Board of Advances in Nutrition and Food Technology (Aperito Publications)
2014 - 2015	Member of Asian Council of Science Editors

MAIN FIELDS OF INTEREST

1. Analytical Chemistry
2. Development, optimization and validation of analytical methods
3. Food and environmental safety
4. Identification and determination of unknown compounds
5. Characterization of typical food, traceability and authentication studies
6. Metabolomic, lipidomic and proteomic studies
7. Identification of biomarkers
8. Nutraceutical studies

CURRENT ISSUES OF RESEARCH

1. Development, optimization and validation of analytical methods

Development, optimization and validation of of new analytical methods (in particular HPLC-MS/MS, UHPLC-MS/MS, online SPE HPLC-MS/MS) for the identification and the determination of target and non-target species in food (dyes, biogenic amines, PAHs, aldehydes, etc), environment (chloroanilines, aromatic sulfonates, pesticides, perfluorocompounds, etc) and biological samples (drugs of abuse, benzodiazepines, neurotransmitters, etc).

2. Chemical characterization of food

Full fingerprint of food (cheese, wine, salami, tomato sauce, olive oil, etc) by HPLC-DAD, HPLC-MS/MS, UHPLC-MS/MS, IC, GC-MS, ICP OES, and ICP OES, in order to perform traceability and authentication studies.

3. Identification and determination of unknown compounds in food

Identification and determination of unknown species formed in food and beverages for effect of sunlight or for unexpected interactions with other ingredients. These interactions are often unpredictable, but they can give rise to different kinds of contaminations with the formation of new species potentially harmful to the consumer health. For this purpose, HPLC and UHPLC couple with low- and high-resolution tandem mass spectrometry are developed and validated.

4. Degradation studies and identification of new emerging pollutants in environment

Advanced oxidation processes are generally employed for the destruction of persistent pollutants in the environment. Nevertheless, these kind of processes do not always lead to a complete mineralization of the pollutant, but to a formation of new products of comparable toxicity.
The studies deal with also the natural solar photodegradation of the pollutant in water, the evaluation of the kinetics, and the identification of the new species formed by HPLC-MS/MS or UHPLC-MS/MS using target and non-target approach.

5. Metabolomic, lipidomic and proteomic studies for the identification of biomarkers

Metabolomic, lipidomic and proteomic studies for the identification of biomarkers of pathologies or for the understanding of the mechanisms of the action of different pathologies (cancer, diabetes) and environmental effects (plants)

6. Nutraceutical studies

Nutraceutical studies are devoted to understand the mechanism of natural extract from plant against cancer cell line proliferation.

TOP FIVE PAPERS

1. F. Gosetti, B. Bolfi, E. Marengo, “Identification of sulforhodamine B photodegradation products present in non-permanent tattoos by micro liquid chromatography coupled to tandem high-resolution mass spectrometry”, Anal. Bioanal. Chem., 407 (2015) 4649-4659. DOI: 10.1007/s00216-015-8667-5
2. F. Gosetti, U. Chiuminatto, E. Mazzucco, R. Mastroianni, E. Marengo, “Ultra high performance liquid chromatography tandem high resolution mass spectrometry analysis of sixteen red beverages containing carminic acid: identification of degradation products by

using principal component analysis - discriminant analysis", Food Chem. 167 (2015) 454-462. DOI: 10.1016/j.foodchem.2014.07.026

3. F. Gosetti, U. Chiuminatto, E. Mazzucco, G. Calabrese, M.C. Gennaro, E. Marengo, "Identification of photodegradation products of Allura Red AC – E129 in a beverage by ultra high performance liquid chromatography-quadrupole-time-of-flight mass spectrometry", Anal. Chim. Acta, 746 (2012) 84-89. DOI: 10.1016/j.aca.2012.08.020
4. F. Gosetti, U. Chiuminatto, D. Zampieri, E. Mazzucco, E. Robotti, G. Calabrese, M.C. Gennaro, E. Marengo, "Determination of perfluorochemicals in biological, environmental and food samples by an automated on-line solid phase extraction ultra high performance liquid chromatography tandem mass spectrometry method method", J. Chromatogr. A, 1217 (2010) 7864-7872. DOI: 10.1016/j.chroma.2010.10.049
5. U. Chiuminatto, F. Gosetti, P. Dossetto, E. Mazzucco, D. Zampieri, E. Robotti, M.C. Gennaro, E. Marengo, "An automated on-line solid phase extraction ultra high performance liquid chromatography method coupled with tandem mass spectrometry for determination of forty-two therapeutic drugs and drugs of abuse in human urine", Anal. Chem., 82 (2010) 5636-5645. DOI: 10.1021/ac100607v

AWARDS

2003	award of the Analytical Chemistry Division of Italian Chemical Society for the best national degree thesis (academic year 2001/2002)
2003	Award for the best graduate of the Faculty of Mathematical Physical and Natural Sciences of the University of Piemonte Orientale (academic year 2001/2002).
2004	Award for the best curriculum studiorum taking part in the 8th School of Mass Spectrometry for graduate students organized by the Mass Spectrometry Division of the Italian Chemical Society
2006	Winner of the award "Young Researcher" of the Analytical Chemistry Division of the Italian Chemical Society
2016	Winner of the best poster presentation at IMaSS Got Talent