



Marta Senofonte

Home : Italy

Nationality: Italian

WORK EXPERIENCE

[01/10/2019 – 30/09/2020]

Internship

Italian National Institute of Health

City: Rome | **Country:** Italy

Research fellow at the Italian National Institute of Health (ISS), EUCA Unit, DAMSA Department, working on the project titled 'Determination and Evaluation of Exposure Biomarkers in Populations Residing Near Known Contamination Sources (Irno Valley and Solofra-Montoro Plain)

Assessment of Cr(VI) exposure in areas with different environmental impacts and development of a method for Cr(VI) determination in erythrocyte pellets using ICP-MS

[01/10/2020 – 30/09/2021]

Internship

Italian National Institute of Health

City: Rome | **Country:** Italy

Research fellow at the Italian National Institute of Health (ISS), EUCA Unit, DAMSA Department, working on the project titled 'Health Surveillance and Monitoring Plan for the Assessment of Health Status Variations in the Population Residing Near the Waste-to-Energy Plant in Turin (SPoTT Program).'

-Assessment of exposure biomarkers (EBs) to metals in the population residing near the waste-to-energy plant in Turin and in plant workers, and evaluation of the relationship between EB concentrations and risk factors.

-Analysis conducted using high-resolution inorganic mass spectrometry (HR-ICP-MS) and statistical processing of data through univariate and multivariate analysis.

EDUCATION AND TRAINING

[01/01/2022 – Current]

PhD in Chemical Processes for Industry and the Environment

"La Sapienza" University

City: Rome | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Chemistry* • *Environmental sciences* | **Level in EQF:** EQF level 8

PhD candidate at the University of 'La Sapienza' of Rome, Chemical Processes for Industry and the Environment, working on the project titled 'Development of In-Situ Treatment Processes for the Sustainable Remediation of Groundwater Contaminated by PFAS.'

Application of adsorption technology for the removal of per- and polyfluoroalkyl substances (PFAS) from water, through the use of innovative adsorbent materials derived from plant-based waste. Development and optimization of an analytical method for the determination of PFAS substances in aqueous matrices using liquid chromatography coupled with mass spectrometry (HPLC-MS/MS).

[01/10/2016 – 14/12/2018]

Master's degree in Analytical Chemistry

"La Sapienza" University

Field(s) of study: Natural sciences, mathematics and statistics: • *Chemistry* | **Final grade:** 110/110 cum laude | **Level in EQF:** EQF level 7 | **Thesis:** Insulin Doping: Comparative Evaluation of Alternative Pre-treatment Techniques for the Detection of Recombinant Insulin in Urine

Development and validation of an analytical method based on liquid chromatography coupled with organic mass spectrometry (HPLC-MS/MS) for the determination of doping insulin and sample pretreatment and extraction using immunoaffinity techniques (immunopurification microcolumns).

Bachelor's Degree in Chemistry

"La Sapienza" University

City: Rome | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Chemistry* | **Level in EQF:** EQF level 6 | **Thesis:** Analytical Determination of Food Preservatives – Development and Comparison of Methods

Comparison and Validation Between the Current Method According to EU Regulations (Optimized Monier-Williams Method) and the Method Using Ion Exchange Chromatography (HPLC) for the Detection of Sulfur Dioxide in Various Food Matrices. Both Techniques Show Compliance with the Requirements of Official Controls in Feed and Food (EU Regulation), Although the Chromatographic Method Shows Better Performance Than the Volumetric Method.

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Word | Microsoft Powerpoint | Microsoft Office

CONFERENCES AND SEMINARS

[18/09/2024 – 20/09/2024]

Remtech Europe 2024 Ferrara, Italy

Senofonte M., G. Simonetti, C. Riccardi, M. Petrangeli Papini. Application of biosorption technology for PFAS removal in water.

[24/06/2024 – 28/06/2024]

Second Symposium for Young Chemists: Innovation and Sustainability (SYNC) 2024
Rome, Italy

Senofonte M., Simonetti G., Parisi S., Riccardi C., Petrangeli Papini M. Biosorption enhancement by the use of surfactants for PFAS removal from waters. Second Symposium for Young Chemists: Innovation and Sustainability (SYNC) 2024

[08/02/2024 – 10/02/2024]

Workshop SiCon 2024

Senofonte M., Simonetti G., Riccardi C., Petrangeli Papini M. Uso di surfattanti nella funzionalizzazione di un biochar di origine vegetale per la rimozione di PFAS dalle acque.

[08/05/2023 – 11/05/2023]

Bioremediation Symposium Austin, Texas

Senofonte M., Cuzzola R., Remmani R., Riccardi C., Simonetti G., Petrangeli Papini M. Biosorption Technology: PFAS Removal in Water by the Use of Novel Carbonaceous Materials.

- [08/02/2023 – 10/02/2023] **Workshop SiCon 2023** Rome, Italy
- Senofonte M.**, Cuzzola R., Remmani R, Riccardi C, Simonetti G, Petrangeli Papini M.
Application of the biosorption technology for the removal of PFAS in water
- [20/06/2022 – 24/06/2022] **First Symposium for Young Chemists (SYNC) 2022** Rome, Italy
- Senofonte M.**, Acquaviva L., Barbatì B., Pomata D., Simonetti G. Preliminary adsorption test for the removal of PFAS in water by biochar and graphene
- [21/09/2021 – 24/09/2021] **NanoInnovation 2021 Conference** held virtually
- Senofonte M.**, Bocca B., Caimi S., Battistini B., Cavallo D.M., Cattaneo A., Lovreglio P., Leso V., Iavicoli I. Metal oxide nanoparticles in stainless-steel welders: a pilot human biomonitoring study.
- [23/08/2021 – 26/08/2021] **33rd Annual Conference of the International Society for Environmental Epidemiology**
held virtually
- Ruggieri F., Abate V., Bena A., Bocca B. De Filippis S.P., Dellatte E., De Luca S., Farina E., Gandini M. Iacovella N., Iamiceli A. L., Ingelido A. M., Ivaldi C., Oreggia M., Pino A., **Senofonte M.**, De Felip E. Human Biomonitoring of metals and OH-PAHs nearby the Waste- to- Energy plant in Italy: a tool to assist evidence-based public health promotion.
- [01/12/2020 – 02/12/2020] **10th International Conference on Children's Health and Environment** held virtually
- Senofonte M.**, Ruggieri F., Pino A., Rovira J., Calamandrei G., Mirabella F., Martínez M. A., Domingo J.L., Schuhmacher M. and Bocca B. Maternal blood levels of trace elements, passage in cord blood and predictors of exposure associated.
- [02/06/2019 – 06/06/2019] **ASMS Conference on Mass Spectrometry and Allied Topics** Atlanta, Georgia
- Mazzarino M., Martinelli F., **Senofonte M.**, de la Torre X., Botrè F. Automated immunoaffinity purification of large peptides followed by LC-MS(/MS) analysis ASMS Conference on Mass Spectrometry and Allied Topics
- [17/02/2019 – 22/02/2019] **XXXVII Manfred Donike workshop on Dope Analysis** Cologne, Germany
- Mazzarino M., **Senofonte M.**, de la Torre X., Botrè F. Immunopurification of proteins by monolithic microcolumns. The case of insulins analogues.

DRIVING LICENCE

Cars: B

PUBLICATIONS

- [2025] [**From food-to-human microplastics and nanoplastics exposure and health effects: A review on food, animal and human monitoring data**](#)

Ruggieri F., Battistini B., Sorbo A., Senofonte M., Leso V., Iavicoli I., Bocca B., 2025. From food-to-human microplastics and nanoplastics exposure and health effects: A review on food, animal and human monitoring data. Food and Chemical Toxicology 196, 115209

- [2024] [**Adsorption Technology For PFAS Removal In Water: Comparison Between Novel Carbonaceous Materials**](#)

Reference: Petrangeli Papini, M., Senofonte, M., Cuzzola, R., Remmani, R., Pettiti, I., Riccardi, C., Simonetti, G. Materials 17, 4169

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- [2024] [Studies of Potential Migration of Hazardous Chemicals from Sustainable Food Contact Materials](#)
- Reference:** Simonetti G., Riccardi C., Pomata D., Acquaviva L., Fricano A., Buiarelli F., Senofonte M, Di Filippo P., 2024. Studies of Potential Migration of Hazardous Chemicals from Sustainable Food Contact Materials. Foods 13(5), 645.
- Write here the description...
- [2023] [Human biomonitoring and personal air monitoring. An integrated approach to assess exposure of stainless-steel welders to metal-oxide](#)
- Bocca B., Leso V., Battistini B., Caimi S., **Senofonte M**, Fedele M, Cavallo DM, Cattaneo A, Lovreglio P, Iavicoli I., 2023. Human biomonitoring and personal air monitoring. An integrated approach to assess exposure of stainless-steel welders to metal-oxide nanoparticles. Environmental Research 216(Pt 3), 114736.
- [2022] [Mechanistic considerations and biomarkers level in nickel-induced neurodegenerative diseases: An updated systematic review.](#)
- Anyachor C.P., Dooka D.B., Orish C.N., Amadi C.N., Bocca B., Ruggieri F., **Senofonte M.**, Frazzoli C., Orisakwe O.E., 2022. Mechanistic considerations and biomarkers level in nickel-induced neurodegenerative diseases: An updated systematic review. IBRO Neuroscience Reports. 13:136-146.
- [2022] [HBM4EU Chromates Study: Determinants of Exposure toHexavalent Chromium in Plating, Welding and Other Occupational Settings.](#)
- Viegas S., MartinsC., Bocca B., Bousoumah R., Duca R.C., Galea K.S., Godderis L., Iavicoli I., Janasik B., Jones K., et al., 2022. HBM4EU Chromates Study: Determinants of Exposure toHexavalent Chromium in Plating, Welding and Other Occupational Settings. International Journal of Environmental Researchand Public Health 19(6):3683.
- [2021] [The levels of trace elements in sputum as biomarkers for idiopathic pulmonary fibrosis](#)
- Giovanni F., Bocca B., Pisano A., Collu C., Farace C., Sabalic A., **Senofonte M.**, Fois A.G, Mazzaello V.L., Pirina P., Madeddu R. The levels of trace elements in sputum as biomarkers for idiopathic pulmonary fibrosis. Chemosphere 271, 129514.
- [2019] [Detection of recombinant insulins in human urine by liquid chromatography-electro-spray tandem mass spectrometry after immunoaffinity purification based on monolithic microcolumns](#)
- Mazzarino M., **Senofonte M.**, Martinelli F., de la Torre X., Botrè F. Detection of recombinant insulins in human urine by liquid chromatography-electro-spray tandem mass spectrometry after immunoaffinity purification based on monolithic microcolumns. Analytical and Bioanalytical Chemistry, 411(30), 8153-8162.