

Leonardo Soto, MSc.

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1 Education

MSc in Chemistry, Uppsala University, Uppsala, Sweden 2023
MSc in Analytical Chemistry, University of Tartu, Tartu, Estonia 2023
BEng in Chemical Engineering, National Polytechnic School (NPS), Quito, Ecuador 2017

2 Professional Experience

Collaborator at the Environmental Engineering Teaching Laboratory 2020-2021
Civil and Environmental Engineering, NPS, Quito, Ecuador
supervision and advising of undergraduate students
managed equipment, reagents, purchases, maintenance, and information systems

Laboratory Technician 2017-2021
Center for Environmental Research and Control, NPS, Quito, Ecuador
managed and applied physicochemical methods according to ISO 17025
wrote SOPs, guides, technical and management procedures
developed and deployed a web app prototype for lab information management
organized the production of microbiology laboratory video tutorials

3 Research Experience

Graduate Student, lab Dr. Anneli Kruve 2023
Materials and Environmental Chemistry, Stockholm University, Stockholm, Sweden
predicting bioactivity of detected chemicals with machine learning
building molecular networks for non-targeted LC-ESI-HRMS

Graduate Student with Dr. Magnus Palmblad 2023
Center for Proteomics and Metabolomics, Leiden University, Leiden, Netherlands
building semantic graphs from LC-MS experimental methodologies

Lab Technician, at NPS 2019
Center for Environmental Research and Control, NPS, Quito, Ecuador
managed the TOC method with an accredited research scope under ISO 17025
statistical testing for flexible scopes

Undergraduate Student with Dr. Florinella Muñoz 2015
Nuclear Sciences, National Polytechnic School, Quito, Ecuador
advanced oxidation processes with ozone, activated carbon and hydrogen peroxide

4 Publications

- M. Palmblad, E. Asein, N. Bergman, A. Ivanova, L. Ramasauskas, H. Reyes, S. Ruchti, **L. Soto**, and J. Bergquist, "Semantic Annotation of Experimental Methods in Analytical Chemistry", DOI: [10.1021/acs.analchem.2c03565](https://doi.org/10.1021/acs.analchem.2c03565), Analytical Chemistry, 2022
- F. Muñoz, V. Maldonado, M. Barba, **L. Soto**, and O. Balladares, "Study of the combination of ozone with hydrogen peroxide and activated carbon in the treatment of BRL blue dye and a textile effluent", VII EPOA II CIPOA Conference, 2015

5 Academic Service

Teacher

Feb 2019 – Jun 2019

Polytechnic Training Center CCP, Quito, Ecuador

presented courses for the National Exam for Admission to University

Math Teacher

Dec 2017 – May 2018

Department of Basic Education, NPS, Quito, Ecuador

prepared and presented a leveling course for high school students within a social project

Presenter

Jun – Aug 2017

The Science Tunnel, Sociedad Max Planck

science communication to non-expert audiences at the Ecuadorian National House of Culture

Chemistry Teacher

Aug 2015, Aug 2016

Federation of Students of the National Polytechnic School, Quito, Ecuador

prepared and presented 2 courses in undergraduate level on Chemistry, wrote and graded exams

6 Skills

Laboratory: HPLC-ESI-MS, IC, TOC, ASV, FTIR, electrochemistry, sample preparation**Technical:** Method validation, Uncertainty estimation, Metrology, ISO 17025**Languages:** Spanish - *native*. English - *advanced*. French - *basic***Software:** Cytoscape - *intermediate*. Xcalibur, MZMine - *basic***Programming:** Python, R, bash, \LaTeX - *intermediate*. SQL, PHP, HTML5 - *basic*

7 Continuing Education

Bioinformatics: Introduction and Methods 2024

Toxicology 21: Scientific Applications 2023

Applied Machine Learning in Python 2022

LC-MS Method Validation 2021

Measurement Uncertainty in Chemical Analysis 2021

ISO/IEC 17025 Laboratory Management Implementation 2019

Metrologist Training Program 2019

Project Management PMBOK® Guide 2019

See more on leosotoj.com/#continuing-education