Sara Acevedo

PhD student

👤 About me

○ I am currently finishing my PhD in Engineering Science.
○ My research is gathering data from soil science and environmental studies, to derive statistical analysis and predictive models.
○ I teach introductory data science classes using R.

🏛 Education

2016-2022   **PhD (c) Engineering Sciences**, *Pontificia Universidad Católica de Chile*, Santiago, Chile.

2012-2014   **Master of Science, Soil and Biogeochemistry**, *University of California-Davis*, Davis, USA.

2003-2009   **Chemist, Environmental and Analytics specialization**, *Pontificia Universidad Católica de Chile*, Santiago, Chile.

💼 Work

2022   **Education**, *Course Facilitator: Introduction to Tidyverse for Data Science at Estacion Lastarria.*

2020 - 2021   **Education**, *Course maintainer MOOCs Coursera UC: Intro to programming (Python) and University training and learning.*

2018 - 2020   **Education**, *TA Environmental Biophysics at Pontificia Universidad Católica de Chile.*

2018 - 2019   **Research**, *Project evaluation focused on soil physical properties and environmental baselines for water treatment facilities at Desalsolar.*

🔨 Tools

- 🖥 Programming:
  - R – Python (basic)
- 🖥 Software:
  - Rstudio – ArcGis (basic) – Zotero – Hydrus 1-D
- 🔢 Statistics
  - Modelation (linear models and machine-learning)
- 🌡 Environmental analysis
  - Analysis and interpretation of water and soil quality data.
  - Soil physics (infiltration, water balance and laboratory techniques)
- ⚙ Others:
  - Advanced English – Git/Github (basic) – Markdown (RMarkdown y Github-flavored)

📄 Selected publications

For the complete list, see my profile at ORCID 🖱 or Google Scholar 🖱

2022 **A comparative study of soil metal concentrations in Chilean urban parks using four pollution indexes**, *Applied Geochemistry*, Alejandra S.Vega, Guillermo Arce, Javier I.Rivera, Sara E.Acevedo, SoniaReyes-Paecke, Carlos A. Bonilla, Pablo Pastén.

2022 **Unveiling soil temperature reached during a wildfire event using ex-post chemical and hydraulic soil analysis**, *Science of The Total Environment*, Sofía I.Martínez, Cristina P.Contreras, Sara E.Acevedo, Carlos A.Bonilla.

2021 **Testing the integral suspension pressure method for soil particle size analysis across a range of soil organic matter contents**, *International Agrophysics*, Sara E. Acevedo, Cristina P. Contreras, Carlos J. Ávila 1, Carlos A. Bonilla.

🏅 Distinctions

- Scholarship ANID Doctorado Nacional 2016 (PhD)
- Scholarship ANID / Becas Chile 2012 (Master)

💙 Volunteering

- Proud to be a part of R-Ladies Chile since 2018 🖱
- Colaborating with Soil Biophysics Lab UC 🖱

💬 References

- Dr. Manuel Bugueño: CEO Desalsolar SPA 📧 buguenomanuel at gmail.com
- Dra. Alejandra Vega: Postdoc CEDEUS 📧 asvega at uc.cl
- Dr. Carlos Bonilla: Thesis Supervisor 📧 cbonilla at ing.puc.cl