

DR. EZEQUIEL VIDAL

Exchange Researcher
Department of Chemistry, Clemson University

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Educational Background

- **Postdoctoral Fellow**, National University of La Pampa, Argentina. (04/21 – 04/24)
- **PhD in Chemistry**, National University of the South, Argentina. (09/17 – 12/20)
- **BS in Biochemistry**, National University of the South, Argentina. (03/95 – 05/01)

Professional Employment History

- **Department of Chemistry, Clemson University**, Research Visitor (11/2021 – date)
- **Department of Chemistry, University of the South**, Teaching Assistant “A” (09/2021 – 09/2021).
- **Department of Chemistry, University of the South**, Teaching Assistant “A” (04/2021 – 09/2021).
- **Bromatology City Laboratory, Bahia Blanca, Argentina**. Biochemist, Analytical Chemist (2015 – 2021).
- **Department of Chemistry, University of the South, Argentina**. Teaching Assistant “A” (01/01 – 12/01).

Doctoral Thesis

Application of new analytical methodologies to determinative and screening systems for the study of environmental and food samples. Development and validation of devices based on image detection.

Oral thesis defense: 12/11/2020. Qualification: 10 (Outstanding).

Awards and Honors

"Aaron and Fanny Fideleff de Nijamkin" award granted by the National University of the South to the best GPA of the PhD Program in Chemistry, 2020.

Teaching Experience

- **Department of Chemistry, University of the South**. “Analytical Chemistry, laboratory” Teaching Assistant “A”. 1 Semester (08/2021 – date).
- **Department of Chemistry, University of the South**. “Analytical chemistry, laboratory” Teaching Assistant “A”. 2 Semesters (03/2021 – 10/2021).
- **Bromatology Central Laboratory, Bahia Blanca, Argentina**. “Food handling for processors”. 10 Semesters (non-academic course). (2015 – 2021).
- **Department of Chemistry, University of the South**. “Instrumental analysis, laboratory” Teaching Assistant “A”. 2 Semesters. (01/01 – 12/01)

Publications (10)

- **Flow injection analysis: Rayleigh light scattering technique for total protein determination.** Ezequiel Vidal, Miriam E. Palomeque, Adriana G. Lista, Beatriz S. Fernández Band. Analytical and Bioanalytical Chemistry 376 (2003) 38-41
- **Micropaper-based analytical device (μ PAD) for the simultaneous determination of nitrite and fluoride using a Smartphone.** Ezequiel Vidal, Anabela S.Lorenzetti, Adriana G.Lista, Claudia E.Domini. Microchemical Journal 147 (2018) 467-473
- **New, inexpensive, and simple 3D printable device for nephelometric and fluorimetric determination based on smartphone sensing.** Ezequiel Vidal *, Anabela Lorenzetti, Miguel Angel Aguirre, Antonio Canals, Claudia Domini. RSC Advances 10 (2020) 19713-19719
- **Use of universal 3D-Printed smartphone spectrophotometer to develop a time-based analysis for hypochlorite.** Ezequiel Vidal, Anabela Lorenzetti, Carlos D. García, Claudia Domini. Analytica Chimica Acta 1151 (2021) 338249
- **Simple-to-use and portable device for free chlorine determination based on microwave-assisted synthesized carbon dots and smartphone images.** Damian Uriarte, Ezequiel Vidal, Antonio Canals, Claudia Domini, Mariano Garrido. Talanta, 229 (2021) 122298

- **Native Fluorescent Natural Deep Eutectic Solvents for Green Sensing Applications: Curcuminoids in Curcuma longa Powder**
 Anabela Lorenzetti, Ezequiel Vidal, Maria Fernanda Silva, Claudia Domini, Federico Gomez.
 ACS Sustainable Chem. Eng. 2021, 9, 5405–5411
- **Brand New Dual Absorption and Emission Smartphone-Based Spectrophotometer (DAESS) for the Study of the Role of Water in the Preparation of Natural Deep Eutectic Solvents.**
 Ezequiel Vidal, Lorenzetti, A. S., Gomez, F., Silva, M. F., & Domini, C. E. (2021).
 Analytica Chimica Acta 1179 (2021) 338831
- **Reversed-phase dispersive liquid-liquid microextraction for elemental analysis in gasoline by inductively coupled plasma optical emission spectrometry**
 Ezequiel Vidal, Lorenzetti, A. S., Alvarez, M., Domini, C., Aguirre Pastor M.A., Vidal, L., Canals, A.
 Journal of Analytical Atomic Spectrometry (2021) 36, 2338
- **Study of phase-pure TiO₂ for the removal of fluorides in water.**
 Meier L.A., Schvval A.B., Ulaccoc S.B., Lorenzetti A.S., Vidal E, Domini C., Morgade C.I.N. (2022).
 Materials Today Communications. Volume 31, June 2022, 103389.
- **From Glow-Sticks to Sensors: Single-Electrode Electrochemical Detection for Paper-Based Devices.**
 Vidal E., Domini C., Whitehead D., Garcia C.D. (2022)
 Sensors and Diagnostics. RSC. <https://doi.org/10.1039/D2SD00041E>
- **On-Site Preparation of Natural Deep Eutectic Solvents Using Solar Energy.**
 Ricardo Elia Dazat, Ezequiel Vidal, Anabela S. Lorenzetti, Carlos D. García, Claudia Domini, María F. Silva, Federico J. V. Gomez. (2022)
 ChemistrySelect, 2022, 7, e202104362.

Research Presentations

I have presented 15 posters/oral in different scientific events. The most remarkable of them are:

Oral presentation. Development of a paper-based microanalytical device (μ PAD) for the simultaneous determination of fluorides and nitrite in water using a smartphone. 9th Argentinian Congress of Analytical Chemistry, Rio Cuarto, Córdoba; 07 - 10 November 2017

Oral presentation. Development of a simple, inexpensive and 3D printable device for turbidimetric and fluorometric determinations based on smart cell phones: Determination of sulfates and quinine. 10th Argentine Congress of Analytical Chemistry, Santa Rosa, La Pampa; September 17 - 20, 2019.

Exhibition of work in poster. Native Fluorescent Natural Deep Eutectic Solvents for Green Sensing. 1st European Sample Preparation e-Conference, March 2021.

Exhibition of work in poster. Curcuminoids in Curcuma longa Powder. EuChemS-DAC Sample Preparation Study Group and Network. March 2021.