

Gabriel Negrão Meloni

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EDUCATION

PhD in Chemistry, University of São Paulo (2017). BSc in Chemistry, University of São Paulo (2012)

APPOINTMENTS

Aug. 2023– Assistant Professor, Department of Chemistry, University of São Paulo
2022–2023 Research Fellow, Department of Chemistry, University of São Paulo, under a FAPESP fellowship
2021–2025 Honorary Research Fellow, Warwick Electrochemistry and Interfaces Group, University of Warwick
2020–2021 Research Fellow, Warwick Electrochemistry and Interfaces Group (Department of Chemistry) and Soyer Research Group (School of Life Sciences), University of Warwick
2018–2021 Member of the Bio Electrical Engineering Innovation Hub (BeeHub), University of Warwick
2018–2020 Marie Skłodowska-Curie Research Fellow, Warwick Electrochemistry and Interfaces Group, University of Warwick
2015–2016 Visiting PhD student, University of Warwick, under a Science without Borders fellowship

SERVICE

2025–present Vice-Chair, ISE Division 1
2025 Lifetime Member, Society for Electroanalytical Chemistry (SEAC)

RESEARCH

Nanoscale electrochemical techniques and electrodes for studying interfaces and living systems, and low-cost, 3D-printed electrochemical instrumentation for research, teaching and the democratization of science. 46 publications, 2,100+ citations, h-index 25.

SELECTED PUBLICATIONS

Theory in practice: testing the limits of the Randles–Ševčík equation (*ACS Electrochem.*, 2026) • Simple fabrication method of needle-type carbon-disk microelectrodes using conductive thermoplastics (*ChemElectroChem*, 2026) • Transient single cell hypoxia induced by localized galvanostatic oxygen challenge (*ACS Meas. Sci. Au*, 2025) • Operando electrochemical and optical characterization of the meniscus of scanning electrochemical cell microscopy (SECCM) probes (*ACS Electrochem.*, 2025) • Single-cell analysis with spatiotemporal control of local pH (*ACS Meas. Sci. Au*, 2025) • The current shortcomings and future possibilities of 3D printed electrodes (*Anal. Chem.*, 2024) • Adiabatic versus non-adiabatic electron transfer at 2D electrode materials (*Nat. Commun.*, 2021) • Building a microcontroller based potentiostat: an inexpensive and versatile platform for teaching electrochemistry and instrumentation (*J. Chem. Educ.*, 2016)