

CAROLINA SOTÉRIO

cs4465@tc.columbia.edu || www.linkedin.com/in/soterio || soterio.net || <https://github.com/drsoterio/>
Teachers College, Columbia University, 525 W 120th St, New York, NY 10027, United States

SUMMARY

I am a doctoral researcher in the Communication, Media, and Learning Technologies Design program at Teachers College, Columbia University. I study emancipatory science and tech learning—how learners reclaim knowledge by redesigning the tools and systems that shape it. From AI to social media and science toolkits, my work blends participatory design, critical pedagogy, and constructionist practices to make science more hands-on, open, and driven by learner agency. I'm the inventor of Lab-on-a-Book, a low-cost, paper-based chemistry kit designed to support hands-on science in under-resourced settings. I'm also part of the Paulo Freire Initiative at Columbia. Previously, I produced guidebooks, podcasts, and science kits; co-led IUPAC's Global Conversation on Sustainability; and co-founded Brazil's first ACS Student Chapter—becoming the first international student to receive the ACS Leadership Award. Interests: Science & Technology Education and Communication, Critical Pedagogy, Instructional Design, and Constructionism.

EDUCATION

Columbia University, Doctoral Student in Education Teachers College, NY, United States Advisor: Paulo Blikstein	2024 - current
Cornell/University of São Paulo, Ph.D. in Sciences (Honors) Advisors: Bruce V. Lewenstein and Éder G. T. Cavalheiro Thesis: <i>What do Students Want to Learn? Participatory Elaboration of a Guidebook on Science Communication for CHemistry Undergraduates</i> Grantee of the São Paulo Research Foundation (FAPESP)	2020 - 2024
Licentiate degree in Chemistry Teaching Franca University, UNIFRAN, Brazil	2020 - 2022
Specialist in Science Journalism State University of Campinas, UNICAMP, Brazil Thesis: Quarantine: a storytelling podcast about Covid-19	2019 - 2020
University of São Paulo, Bachelor of Chemistry (Honors) Thesis: Science Communication: Writing strategies applied to popular science texts	2015 - 2018
ETECAP, Chemistry Technician (Honors) Thesis: Application of mate residue from <i>chimarrão</i> as a catalyst in organic reactions	2012 - 2014

TEACHING

COMM2850/STS2851 - Communication, Environment, Science, and Health Extra-credits instructor, Cornell University Course offered to undergraduate students majoring in STEM or communication	Jan 2023 - May 2023
COMM5660 - Science Communication Workshop Graduate Teaching Assistant (volunteer), Cornell University Course offered to STEM graduate students on campus	Mar 2023 - Mar 2023
SQF0320 - Scientific Writing and Communication I Graduate Teaching Assistant, University of São Paulo (IQSC/USP) Course offered to undergraduate chemistry students Grantee of the Teaching Improvement Program Outstanding Teaching Assistant Awardee	Mar 2021 - Jul 2021

Podcast Scripting Workshop

Dec 2019 - Dec 2019

Instructor, University of São Paulo (IQSC/USP)

Course offered to undergraduate chemistry students

Cooperative Learning and Science Communication Workshop Series

Feb 2017 - Feb 2018

Instructor, Argumentaê Company

Course offered to STEM education undergraduate students and school teachers at the Scientific and Cultural Dissemination Center (University of São Paulo)

and at the Federal University of São Carlos (UFSCar)

Publication of teaching material on Cooperative Learning

SERVICES, ACTIVITIES & EXPERIENCES

Researcher

Sep 2024 - present

Transformative Learning Technologies Lab (TLTL)

Researcher

Sep 2024 - present

Paulo Freire Initiative at Columbia University

Public Outreach Team Member

Feb 2021 - present

International Younger Chemists Network (IYCN/IUPAC)

Science Podcaster

Apr 2020 - Dec 2020

Quarantine series, Oxi gênio Podcast (UNICAMP Web Radio)

Reporter for ComCiência Magazine

Nov 2019 - present

Affiliated to the Brazilian Society for the Progress of Science (ISSN 1519-7654)

Student Representative

Sep 2019 - Sep 2021

Center for Science Culture and Outreach, University of São Paulo (CDCC/USP)

Opportunity Prospector

Sep 2019 - Aug 2020

Young Researchers at the Brazilian Chemical Society (JP-SBQ)

Science Podcaster

Aug 2019 - Jul 2020

Minuto da Química (UFSCar Radio)

Research Internship in Science Outreach

Feb 2017 - Feb 2018

Teacher's training, Argumentaê Company

Research Internship in Bioanalytics

Sep 2016 - Aug 2017

BioMicS Group, University of São Paulo, Grantee of the University of São Paulo

Founder and President

Oct 2015 - Jul 2020

American Chemical Society Student Chapter, University of São Paulo

LANGUAGES

Portuguese (Native), English (Fluent), and Spanish (Fluent)

RESEARCH PUBLICATIONS

In Press

Sotério, C., & Lewenstein, B. V. (in press). *What do they want to learn? Student-centered insights on science communication training. International Journal of Science Education Part B: Communication and Public Engagement.*

Sotério, C., & Lewenstein, B. V. (in progress). *How can we communicate science? Chemistry students guide.*

2025

Sotério, C., & Blikstein, P. (2025). Lab-on-a-Book: A paper-based chemistry kit for hands-on science learning in under-resourced schools. In *Proceedings of Constructionism 2025*.

Sotério, C., Russo, R., & Blikstein, P. (2025). Co-constructing (twisted) knowledge: Argumentation in far-right YouTube comments on Brazil's war with X's Elon Musk. In *Proceedings of the International Society of the Learning Sciences (ISLS)*.

2024

Sotério, C. (2024). *What do students want to learn? Participatory elaboration of a guidebook on science communication for chemistry undergraduates* (Doctoral dissertation). Universidade de São Paulo.

2023

Sotério, C., & Queiroz, S. L. (2023). Chemistry students as science journalists: Creating a virtual magazine on COVID-19. *Journal of Chemical Education*, 100(1). <https://doi.org/10.1021/acs.jchemed.2c00277>

Sotério, C., Lamim, A. R. S., & Queiroz, S. L. (2023). Teaching controversial socio-scientific issues in online exhibits of science museums: COVID-19 on the scene. *Disciplinary and Interdisciplinary Science Education Research*, 5(1). <https://doi.org/10.1186/s43031-022-00069-8>

Sotério, C., & Queiroz, S. L. (2023). Improving writing skills through scripting a science podcast for non-expert audiences. *Journal of College Science Teaching*, 52(6).

Silva, N. S. M., Sotério, C., Canduri, F., & Queiroz, S. L. (2023). The biochemistry behind COVID-19: Webquest development and application for emergency remote teaching. *Química Nova*, 46(8). <http://dx.doi.org/10.21577/0100-4042.20230044>

Queiroz, S. L., & Sotério, C. (2023). *Case studies: Approach to teaching chemistry*. São Carlos: Diagrama Editorial. Sotério, C., & Queiroz, S. L. (Eds.). (2023). *Case studies: Approaches to chemistry teaching*. ISBN: 978-65-86512-39-7.

Faiad, C. R., Ayres-Pereira, T. I., & Sotério, C. (2023). Case study: Living and learning about natural hairs. In C. Sotério & S. L. Queiroz (Eds.), *Case studies: Approaches to chemistry teaching*.

Queiroz, S. L., & Sotério, C. (2023). Introduction. In C. Sotério & S. L. Queiroz (Eds.), *Case studies: Approaches to chemistry teaching*.

Sotério, C., & Deflon, R. J. (2023). Case study: El caso de papel. In C. Sotério & S. L. Queiroz (Eds.), *Case studies: Approaches to chemistry teaching*.

2022

Sotério, C., Teodoro, D. L., & Queiroz, S. L. (2022). Cooperative and collaborative learning to teach chemical equilibrium to freshman students. *Química Nova*, 45(1). <http://dx.doi.org/10.21577/0100-4042.20170809>

Sotério, C., & Queiroz, S. L. (2022). Creating blogs about chemistry and COVID-19. In *Hands-on Science* (pp. 147–151). Braga: Copissaurio Repro.

Sotério, C., & Queiroz, S. L. (2022). Elaboration of popular science texts on COVID-19 in higher education chemistry: Content analysis in focus. In P. A. de Castro, S. Sá, J. L. Carvalho, & M. G. Sanmamed (Eds.), *New Trends in Qualitative Research* (Vol. 12, pp. 596–606). <https://doi.org/10.36367/ntqr.12.2022.e596>

2021

Sotério, C. (2021). The provisional nature of science evidenced in times of pandemic. *Alternautas*, 8(1). <https://doi.org/10.31273/alternautas.v8i1.1121>

Silva, G. B., Sotério, C., & Queiroz, S. L. (2021). The application of a comic strip, *Trinity*, in chemistry education. *Química Nova*. <http://dx.doi.org/10.21577/0100-4042.20170734>

Peron, K. A., Sotério, C., & Queiroz, S. L. (2021). Combining primary chemistry literature and peer-review into a science communication course. *Educación Química*, 32(1). <http://dx.doi.org/10.22201/fq.18708404e.2021.1.76119>

2020

Sotério, C., & Queiroz, S. L. (2020). Writing strategies for incorporating public communication of science into chemistry education. *Química Nova*, 43(8). <http://dx.doi.org/10.21577/0100-4042.20170580>

Sotério, C., & Populim, M. S. (2020). Shortening distances in science communication: From the Republic of Letters to *The Martian*. *Khronos*, (9). <https://doi.org/10.11606/khronos.v0i9.171799>

Sotério, C., & Queiroz, S. L. (2020). Estratégias de escrita: Utilização de textos de divulgação científica no ensino superior de química. *Revista do EDICC*, 6.

Sotério, C. (2020). *Quarantine: A storytelling podcast on COVID-19* (Specialist thesis). Universidade Estadual

de Campinas (UNICAMP).

2019

Sotério, C., Silva, G. B., & Queiroz, S. L. (2019). Science communication in higher education: Strategies in natural sciences. In *XVII EVEQ - Encontro de Educação em Química* (Vol. 9, pp. 179–188). São Paulo State University Júlio de Mesquita Filho.

2017

Veras, L., & Sotério, C. (2017). *Cooperative learning: A workshop guide*. São Carlos: CDCC Printing.

2014

Sotério, C., Rosada, L. F., & Maria, W. U. (2014). Application of *chimarrão* yerba mate residue as a catalyst in organic reactions. In *IV Mostra de Trabalhos Técnicos* (Vol. 4, pp. 1252–1255). Technical High School of Campinas (Cotuca), State University of Campinas.

MEDIA PUBLICATIONS

Sotério, C. Bruce Lewenstein: Recognizing the importance of public discussion for the progress of science. ComCiência, 2023.

Sotério, C.; Dobbelaar, E.; Lama, S. M. G. Becoming a Scientist Means Empowering Oneself to Improve Life. ChemViews, 2022.

Sotério, C.; Borges, J.F.; Martínez-García, J. IUPAC and IYCN: Working Together for a Globally Sustainable Future. Chemistry International, 2022.

Sotério, C.; Hafiz, M. Anxiety rates are higher in graduate students. ComCiência, 2020.

Sotério, C. How the scientific method applies to research on the new coronavirus. ComCiência, 2020.

Sotério, C.; Canto, K. Covid-19: What we know so far about potential treatments. ComCiência, 2020.

Sotério, C. Oxigênio podcast releases series about science, society, and pandemic. ComCiência, 2020.

Sotério, C. The elderly deserve attentive care. Correio Popular de Campinas, 2020.

Sotério, C.; Maia, C. M. Oxigênio launches two new shows. Laboratory of Journalism (LabJor) Webpage, 2020.

Sotério, C.; Ramos, C.; Torres, R. Climate activism: a possibility for the future in the midst of chaos. ComCiência, 2019.

Sotério, C.; Torres, R. Publishing market in Brazil: crisis numbers and perspectives. ComCiência, 2019.

Sotério, C.; Giachini, A. Science in the Streets: a project funded by the Serrapilheira Institute promotes science among young people. FAPESP na Mídia, 2019.

Sotério, C.; Ybarra, T. P. ; Granato, J. E. ACS USP Student Chapter offers the “Chemistry in Action” workshop at the CDCC. The University of São Paulo News Webpage, 2018.

Sotério, C.; Zambon, S. Student Chapter, composed of students and faculty from IQSC, is featured in an international magazine. São Carlos Institute of Chemistry Webpage, 2017.

PODCASTS

[Podcast Episode] Sotério, C. Episode 01: Remote World. Oxigênio Podcast. Unicamp Web Radio. 2020.

[Podcast Episode] Sotério, C. Episode 02: Ok, Computer. Oxigênio Podcast. Unicamp Web Radio. 2020.

[Podcast Episode] Sotério, C. Episode 03: Aging. Oxigênio Podcast. Unicamp Web Radio. 2020.

[Podcast Episode] Sotério, C. Episode 04: The science backstage. Oxigênio Podcast. Unicamp Web Radio. 2020.

[Podcast Episode] Sotério, C. Episode 05: Farewells. Oxigênio Podcast. Unicamp Web Radio. 2020.

[Podcast Episode] Sotério, C.; ACS USP. Episode 01: Beer. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 02: Plastics. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 03: Glasses. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 04: Chocolate. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 05: Silk and Nylon. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 06: PET Bacteria. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 07: Molecules of Witchcraft. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 08: Bees. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 09: Coffee. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 10: Milk. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 11: Dyes. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 12: Pepper. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 13: Aspirin. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 14: Sugar. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 15: Nuclear Bomb. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 16: Hormones. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 17: Marie Curie. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 18: Periodic Table. UFSCar Radio, 95.3 FM. 2019.

[Podcast Episode] Sotério, C.; ACS USP. Episode 19: Deodorants part I. UFSCar Radio, 95.3 FM. 2020.

[Podcast Episode] Sotério, C.; ACS USP. Episode 20: Deodorants part II. UFSCar Radio, 95.3 FM. 2020.

[Podcast Episode] Sotério, C.; ACS USP. Episode 21: Polyacrylamide. UFSCar Radio, 95.3 FM. 2020.

[Podcast Episode] Sotério, C.; ACS USP. Episode 22: Hand Sanitizer. UFSCar Radio, 95.3 FM. 2020.

[Podcast Episode] Sotério, C.; ACS USP. Episode 23: Hand Sanitizer vs Vinegar. UFSCar Radio, 95.3 FM. 2020.

HONORS AND AWARDS

- Outstanding Teaching Assistant, University of São Paulo, 2021.
- Ranked 5th place in the GRE general score for the doctoral degree, University of São Paulo, 2020.
- Culture and Extension (Science Outreach) Award, University of São Paulo, 2019.
- Commendable Award, American Chemical Society, 2019.
- Science Communication Hackathon, winner, University of São Paulo, 2019.
- Innovative project, Chapter Awards, ACS USP Student Chapter, 2019.
- Leadership, Chapter Awards, ACS USP Student Chapter, 2019.
- Graduate Video Prize (3 minutes thesis), University of São Paulo and TV Cultura, 2019.
- Look and Learn Video Challenge, 2nd Place, American Chemical Society, 2018.
- Younger Chemists Committee Leadership Award, American Chemical Society, 2017.
- Ranked in the top 0.5% in Portuguese composition, Brazilian high-school national exam (ENEM), 2014.
- Outstanding Technical Thesis, 1st place, Conselheiro Antônio Prado Technical State School, 2014.

- Science and Technology (Green Chemistry Project), 2nd place, 3M, 2014.
- Outstanding Oral Presentation, Honorable Mention, State University of Campinas, 2014.
- Young Engineer Challenge, 5th place, State University of Campinas, 2013.

GRANTS AND FELLOWSHIPS

CMLTD Conference Travel Grant [US\$ 1,000]. International Society of the Learning Sciences, Helsinki, Finland (Teachers College, Columbia University).

Lemann Center Conference Travel Grant [US\$ 1,000]. Constructionism, Zurich, Switzerland (Teachers College, Columbia University).

São Paulo Research Foundation [US\$ 24,000]. Elaboration and validation of didactic material on public communication of science for undergraduate Chemistry students from participant research. Honors Doctorate Scholarship (University of São Paulo). Grant number 2020/03233-0.

São Paulo Research Foundation [US\$ 34,250]. Preparing and validating a textbook on public communication of science and technology for undergraduate chemistry students based on participatory research. Doctorate Scholarship Abroad (Cornell University). Grant number 2021/14496-4.

The Brazilian National Council for Scientific and Technological Development [US\$ 9,000]. Elaboration and validation of didactic material on public communication of science for undergraduate Chemistry students from participant research. Master's degree Scholarship. Grant number 130647/2019-5.

American Chemical Society [US\$ 2,500]. International Student Chapters. Travel Award to the ACS 255th National Meeting in New Orleans, LA, USA.

Unified Program of Scholarships at the University of São Paulo [US\$ 1,480]. Dynamic coating on polyester-toner microchips for biomolecule analysis using C4D detectors. Research Grant.

Teaching Improvement Program [US\$ 1,000]. Analysis and writing of popular science texts about coronavirus in higher education in chemistry. Grant for Outstanding Teaching Assistants (University of São Paulo).

International Union of Pure and Applied Chemistry (IUPAC) [US\$ 1,000]. Global Conversations on Sustainability. Grant number: 2021-034-2-041

American Chemical Society. Young Chemists Committee. Travel Award to the ACS Leadership Institute in Dallas, TX, USA.

American Chemical Society. International Student Chapters. Travel Award to the Atlantic Basin Conference on Chemistry (ABCCChem) in Cancun, Mexico.

REVIEWER AND/OR MEMBER OF EDITORIAL BOARD

New Media & Society ISSN 1461-4448	2025 - present
International Society of the Learning Sciences (ISLS) Conference Proceedings	2025 - present
Química Nova ISSN 1678-7064	2024 - present
International Communication Association (ICA) Conference Proceedings	2023 - 2023
Disciplinary and Interdisciplinary Science Education Research (Springer Open) ISSN 2662-2300	2022 - present
Revista do EDICC ISSN 2317-3815	2021 - 2022

MEMBER OF JUDGING COMMITTEE

- Franco, D. F.; Sotério, C.; Davolos, M. R. Participation in Cicero Luiz Melhiado De Moraes's academic committee. *Atividades Educativas Museais Como Ferramentas De Divulgação Científica No Ensino De Química: Uma Experiência De Fotônica No Centro De Ciências De Araraquara*. 2024. Undergraduate Thesis (Bachelor's Degree in Chemistry) - São Paulo State University Júlio de Mesquita Filho.
- Bego, A. M.; Sotério, C.; Khan, S. Participation in Isabela Fernandes Ierick's academic committee. The development of a popular science text on the use of selective polymers in chromatography for pesticide identification. 2022. Undergraduate Thesis (Bachelor's Degree in Chemistry) - São Paulo State University Júlio de Mesquita Filho.
- Bego, A. M.; Frem, R. C. G.; Sotério, C. Participation in Leonardo Lima e Silva's academic committee. Development of a popular science text on Metal Organic Frameworks for teaching chemistry. 2022. Undergraduate Thesis (Bachelor's Degree in Chemistry) - São Paulo State University Júlio de Mesquita Filho.
- Sotério, C.; Castelfranchi, Y.; Correa, A. D. DivulgAÇÃO - Science Communication Hackathon. 2021. Federal University of Minas Gerais.
- Sotério, C.; Favacho, D. G. A.; Sacchi, F. G. XVII Regional Chemistry Olympiad. 2019. University of São Paulo.

GUEST SPEAKER

[Oral Presentation] Sotério, C. Paulo Freire: Pedagogy of the Oppressed. Teachers College, Columbia University, New York, United States, 2025.

[Oral Presentation] Sotério, C. & Guimarães, S. Research & Innovation, Keynote. Brasa Summit Americas. Columbia University, New York, United States, 2024.

[Oral Presentation] Sotério, C. What do students want to learn? A comparative study on science communication training. The International Symposium on Public Communication of Science and Technology 2024 and IX National Colloquium on Science Recreation, Zacatecas, Mexico, 2024.

[Oral Presentation] Sotério, C. How to script a science podcast? Cornell University, Ithaca, United States, 2023.

[Panel Discussion] Sotério, C. The provisional nature of science evidenced in times of pandemic. "El futuro de los bienes comunes en América Latina" Conference, Critical Perspectives on Covid-19 in Latin America, Mexico City, 2021.

[Oral Presentation] Sotério, C.; Populim, M. S. ; Gonçalves, G. F. B. What now, Wally, where is the scientist? Pint of Science, São Carlos, Brazil, 2020.

[Oral Presentation] Sotério, C. Five steps to start a podcast. DivulgAÇÃO, Federal University of Minas Gerais, Virtual, 2020.

[Oral Presentation] Sotério, C. ACS Student Chapters. American Chemical Society on Campus, University of São Paulo, São Paulo, Brazil, 2019.

[Panel Discussion] Sotério, C.; Miller, R.; Ramirez, J.; Offiong, N.; Sheikh, S.; Castro-Acuña, C. ; Lui, N. Around the world in ACS International Student Chapters: A Chapter event planning exchange. American Chemical Society 255th National Meeting & Expo, New Orleans, United States, 2018.

CONFERENCE PRESENTATIONS

[Oral Presentation] Sotério, C.; Russo, R.; Blikstein, P. Co-constructing (Twisted) Knowledge: Argumentation in Far-Right YouTube Comments on Brazil's War with X's Elon Musk. International Society of the Learning Sciences (ISLS) Annual Meeting, Helsinki, Finland, 2025.

[Oral Presentation] Sotério, C.; Blikstein, P. Lab-on-a-Book: A Paper-Based Chemistry Kit for Hands-on Science Learning in Under-Resourced Schools. Constructionism Conference, Zurich, Switzerland, 2025.

[Oral Presentation] Sotério, C.; Lewenstein, B. V. What do students want to learn? A comparative study on science communication training. PCST symposium, Zacatecas, Mexico, 2024.

[Oral Presentation] Sotério, C.; Queiroz, S. L. Science journalism in the classroom: Developing communication skills for chemistry students during the COVID-19 pandemic. American Chemical Society Northeast Regional Meeting, Northeastern University, Boston, US, 2023.

[Poster Presentation] Sotério, C.; Queiroz, S. L. Chemistry students' scientific arguments to fight Covid-19 misinformation. American Chemical Society Northeast Regional Meeting, Northeastern University, Boston, US, 2023.

[Oral Presentation] Sotério, C.; Lamim, A. R. S.; Queiroz, S. L. What can we learn from socio-scientific controversies? Exploring Covid-19 in virtual museums. ICA Media Sociology Postconference, Toronto Metropolitan University, Toronto, Canada, 2023.

[Oral Presentation] Sotério, C.; Queiroz, S. L. Elaboration of Popular Science Texts on COVID-19 in Higher Education Chemistry: Content Analysis in Focus. Q11th Ibero-American Congress on Qualitative Research, University of A Coruña, La Coruña, Spain, 2022.

[Oral Presentation] Sotério, C.; Queiroz, S. L. Creating Blogs about Chemistry and Covid-19. Hands-on science, University of Burgos, Burgos, Spain, 2022.

[Oral Presentation] Sotério, C.; Queiroz, S. L. Writing Popular Science Texts on Treatments to fight Covid-19. Hands-on science, University of Burgos, Burgos, Spain, 2022.

[Oral Presentation] Lima, M. S. ; Sotério, C.; Larine, H. M. ; Queiroz, S. L. Analyzing visual representation in Brazilian Chemistry Textbooks. Hands-on science, University of Burgos, Burgos, Spain, 2022.

[Oral Presentation] Sotério, C.; Silva, G. B.; Queiroz, S. L. . Science communication in higher education: strategies in natural sciences. XVII EVEQ - Encontro de Educação em Química, São Paulo State University Júlio de Mesquita Filho, Araraquara, Brazil, 2019.

[Oral Presentation] Sotério, C.; Silva, V. M. P.; Queiroz, S. L. Hands-on an everyday chemistry podcast: the case of Minuto da Química. Hands-on science, Virtual, 2021.

[Poster Presentation] Sotério, C.; Queiroz, S. L. Perceptions of Undergraduate Chemistry Students about a Public Communication of Science and Technology Course. The 48th World Chemistry Congress, the 51st IUPAC General Assembly, and the 104th Canadian Chemistry Conference and Exhibition(CCCE), Virtual, 2021.

[Oral Presentation] Sotério, C.; Borges, J. F.; Dobbelaar, E.; Fung, F. M.; Ngai, C.; Lee, H. L.; Ismail, H.; Valli, M. The International Younger Chemists Network (IYCN): The Role of Outreach Activities in Engaging the Next-Generation of Chemists Worldwide. The 48th World Chemistry Congress, the 51st IUPAC General Assembly, and the 104th Canadian Chemistry Conference and Exhibition(CCCE), Virtual, 2021.

[Poster Presentation] Sotério, C.; Queiroz, S. L. Preparation and validation of didactic material on science outreach for undergraduate chemistry students from participatory research. American Chemical Society National Meeting & Expo, Virtual, 2020.

[Oral Presentation] Sotério, C.; Queiroz, S. L. Writing strategies: use of popular science texts in chemistry higher education. 6th Meeting of Science and Culture Dissemination (EDICC), State University of Campinas, Brazil, 2019.

[Poster Presentation] Sotério, C.; Queiroz, S. L. Science communication in higher education curricula: what do the publications of the Journal of College Science Teaching tell us? III Meeting of Science Educators, Center for Culture and Scientific Dissemination, University of São Paulo, São Carlos, Brazil, 2019.

[Oral Presentation] Sotério, C. Popular Science Texts: Writing Strategies. São Carlos Institute of Chemistry, University of São Paulo, Brazil, 2019.

[Poster Presentation] Silva, G. B.; Sotério, C.; Queiroz, S. L. Reading the graphic novel "Trinity" by chemistry undergraduates. XVII EVEQ - Encontro de Educação em Química, São Paulo State University Júlio de Mesquita Filho, Araraquara, Brazil, 2019.

[Oral Presentation] Sotério, C. Elaboration and validation of didactic material on public communication of science and technology for undergraduate chemistry students based on participatory research. First Oral Presentation Meeting of Postgraduate Programs, University of São Paulo, São Carlos, Brazil, 2019.

[Poster Presentation] Sotério, C.; Catai, J. R.; Souza, F. Z. R.; Carrilho, E. Polyester-toner microchips for biomolecule analysis. Atlantic Basin Conference on Chemistry (ABCCChem), Cancún, Mexico, 2018.

[Poster Presentation] Sotério, C.; Catai, J. R.; Souza, F. Z. R.; Carrilho, E. Techniques for manufacturing polyester-toner microchips. Symposium of Scientific and Technological Initiation of the University of São Paulo, São Carlos, Brazil, 2018.

[Oral Presentation] Sotério, C. Science Communication: writing strategies applied to popular science texts. Education Week, Federal University of São Carlos, 2018.

[Oral Presentation] Sotério, C.; Rosada, L. F.; Maria, W. U. Application of Chimarrão Yerba Mate Residue as a Catalyst in Organic Reactions. IV Mostra de Trabalhos Técnicos, Technical High-School of Campinas (Cotuca), State University of Campinas, Campinas, 2014.

AFFILIATIONS

International Society of the Learning Sciences	2025 - present
International Younger Chemists Network	2021 - 2024
American Chemical Society	2015 - 2024
Brazilian Chemical Society	2017 - 2018

ORGANIZED EVENTS

Chromatic Commons: A Photo Exhibit. MediaFest. Teachers College, Columbia University, 2025. (Festival).
Swiss Teachers Visit: A Constructionist Exchange. Teachers College, Columbia University, 2025. (Conference).
Global Conversations on Sustainability. IUPAC and IYCN 2021. (Online Event).
Chemistry Show: vacations. The Scientific and Cultural Dissemination Center. 2018, 2019. (Exhibition).
Script writing for podcasts. University of São Paulo. 2019. (Workshop).
Marie Curie and the 150 years of the Periodic Table. The Scientific and Cultural Dissemination Center. 2019. (Exhibition).
II Meeting of Science Educators. The Scientific and Cultural Dissemination Center. 2019. (Conference).
Chemistry Show: Career Fair. University of São Paulo. 2017.(Exhibition).
Cooperative Learning. The Scientific and Cultural Dissemination Center. 2017. (Workshop).
Academic Meeting. 2016, 2017. (Panel Discussion).
Cooperative Learning. Federal University of São Carlos. 2017. (Workshop).
Chemistry Show: welcoming new students. University of São Paulo. 2016, 2017. (Exhibition).
XVI Science Olympics. The Scientific and Cultural Dissemination Center. 2016. (Competition)
XIX Chemistry Week. University of São Paulo. 2016. (Conference).

SKILLS AND METHODS

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- **Design & Multimedia:** Adobe Creative Suite, Audacity, Figma, UX/UI design, prototyping, wireframing.
 - **Research Methods:** Participatory-Action Research, Constructionist Design, Probability/Statistical Inference, Sentiment Analysis, Content Analysis, Surveys, Web Scraping.
 - **Programming & Data:** GitHub, HTML, JavaScript, LaTeX, Logo, Python, R, Scratch, SQL, SPSS, Textblob, NVivo, Qualtrics, Teachable Machine.
 - **Maker/Fabrication:** 3D printing, handcrafting, laser cutting, CNC, soft circuits, arduino, GoGoBoard.
 - **Writing & Communication:** Journalism content production, Microsoft Office Suite, technical writing.
 - **Management & Education Platforms:** Canvas, Google Classroom, Google Workspace, Moodle, Slack.

SELECTED MEDIA MENTIONS

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- TC News. Unlocking Creative Scholarship with Mediafest 2025. <https://www.tc.columbia.edu/articles/2025/may/unlocking-creative-scholarship-with-mediafest-2025/>
 - Science Vlogs Brazil. The Distilling Experience. <https://www.blogs.unicamp.br/raiox/>

- American Chemical Society Axial. ACS Heads to Brazil for IUPAC 2017. <https://axial.acs.org/cross-disciplinary-concepts/acs-heads-brazil-iupac-2017>
- American Chemical Society InChemistry. Spotlight: University of São Paulo International Student Chapter. <https://inchemistry.acs.org/student-chapters/sao-paulo.html>
- Graduate Video Prize (3 minutes thesis), University of São Paulo and TV Cultura, 2019.
- Chemistry International. The Global Conversation on Sustainability: An IYCN/IUPAC Joint Effort to Creating a Sustainable Future Worldwide. <https://doi.org/10.1515/ci-2023-0204>