



## CLAUDIA PATRICIA PABÓN PEREIRA

[claudia.pabon@uc.cl](mailto:claudia.pabon@uc.cl)

### I. EDUCATION

- Diploma in Learning and Teaching for Higher Education, Universidad Adolfo Ibáñez, Santiago de Chile. 2018 - 2019
- Ph.D. in Environmental Sciences and Production Ecology and Resource Conservation, Wageningen University 2004 - 2009
- M.Sc. in Environmental Sciences, Wageningen University, The Netherlands 2004 - 2002
- Bachelor's degree in industrial engineering, Pontificia Universidad Javeriana, Bogotá, Colombia 1994 - 1999

### II. ACADEMIC POSITIONS

- Assistant Professor, School of Management, Pontificia Universidad Católica de Chile 2023 – To date
- University Lecturer in Circular Economy for the MBA at Santa Maria University, Santiago de Chile 2021 – To date
- University Lecturer in Environmental Technology for the Master in Urban Environmental Management at Wageningen University, The Netherlands. 2016 – To date
- University Lecturer in Circular Economy for the Master of Science in Development and Culture at Universidad Tecnológica de Bolívar 2018 – To date
- Assistant Professor, Universidad Adolfo Ibáñez, Environmental and Energy Engineering 2011 - 2020
- Academic Director at Eco Parque Peñalolén, UAI Universidad Adolfo Ibáñez. Facultad de Ingeniería y Ciencias 2007 - 2014

### III. AREA OF SPECIALIZATION AND MAIN COURSES

- Area: Specializes in circular economy, sustainability, environmental engineering, environmental technology, and sustainable construction.
- Main courses: Corporate sustainability



#### IV. RESEARCH

##### *Recent Publications*

- Pabón, C., Fleitas, A., & Wassenaar, T. (2023). Assessing nutrient circularity capacity in South American metropolitan areas. *Resources, Conservation and Recycling*, 197, 107085.
- Villena Chamorro, M. J., & Pabón-Pereira, C. P. (Submitted June 2022). On the macroeconomic modeling of the circular economy. Submitted to *Journal of Ecological Economics*.
- Crutchik, D., Rodríguez-Valdecantos, G., Bustos, G., Bravo, J., González, B., & Pabón-Pereira, C. P. (2020). Vermiproductivity, maturation and microbiological changes derived from the use of liquid anaerobic digestate during the vermicomposting of market waste. *Water Science and Technology*, 82(9), 1781-1794.
- Pabón-Pereira, C. P., Hamelers, H. V. M., Matilla, I., & van Lier, J. B. (2020). New insights on the estimation of the anaerobic biodegradability of plant material: Identifying valuable plants for sustainable energy production. *Processes*, 8(7), 806.
- de Kraker, J., Kujawa-Roeleveld, K., Villena, M. J., & Pabón-Pereira, C. P. (2019). Decentralized valorization of residual flows as an alternative to the traditional urban waste management system: The case of Peñalolén in Santiago de Chile. *Sustainability*, 11(22), 6206.
- Pabón-Pereira, C. P., Slingerland, M., Hogervorst, S., van Lier, J., & Rabbinge, R. (2019). A sustainability assessment of bioethanol (EtOH) production: The case of cassava in Colombia. *Sustainability*, 11(14), 3968.
- Cataldo-Born, M., Pabón-Pereira, C. P., & Araya-Letelier, G. (2016). Obstacles and motivations for earth social housing in Chile; energy, environment, economic and codes implications. *Revista de la Construcción*, 15(3), 17-26.
- Pabón-Pereira, C. P., de Vries, J., Zeeman, G., & van Lier, J. B. (2014). Impact of crop-manure ratios and digestion time on the fertilizing characteristics of liquid and solid digestate during codigestion. *Journal of Environmental Technology*, 35(19), 2427-2434.
- Pabón-Pereira, C. P., Castanares, G., & van Lier, J. B. (2012). An Oxitop(R) protocol for screening plant material for its biochemical methane potential (BMP). *Water Science and Technology*, 66(7), 1416-1423.
- Pabón-Pereira, C. P., Slingerland, M., van Lier, J., & Rabbinge, R. (2012). Anaerobic digestion as a key technology for biomass valorization: Roles and contribution to the energy balance of biofuel chains. In Wellinger, A., Murphy, J., & Baxter, D. (Eds.), *The Biogas Handbook* (pp. 166-188).
- Pabón-Pereira, C. P., Zeeman, G., Zhao, J., Ekmekci, B., & van Lier, J. B. (2009). Implications of reactor type and conditions on first-order hydrolysis rate assessment of maize silage. *Water Science and Technology*, 60(7), 1829-1836.
- Pabón-Pereira, C. P., Kujawa-Roeleveld, K., Mol, A. P., & Zeeman, G. (2005). Characterization and optimization of small scale farming systems for material recovery



and sustainable management: The case of Sunchochumo Community in Peruvian Andes. *Water Environment Management Series, 10*, 90-103.

### ***Academic Research***

- Circular metabolism in South American cities. Université de Montpellier. PhD co-supervisor of student Alma Fleitas in collaboration with Prof. Tom Wassenaar at CIRAD (France)
- Remind Project. Renewable Energies for Water treatment and Reuse in Mining Industries. EU Cordis Project. Horizon 2020. Università della Calabria. Researcher in the field of circular strategies for water management in the mining industries.
- Circular Urban Metabolism at EcoParque Peñalolen UAI Universidad Adolfo Ibàñez. Engineering Faculty. Santiago de Chile <http://ingenieria.uai.cl/ecoparque>
- Applied research in Life Cycle Assessment of Solar Technologies for AtaMoS-TeC Project (Atacama Module and System Technology Center). Researcher part of WP 8, focusing on the Life Cycle Assessment of different solar panel configurations for the North of Chile within the Atacama Desert. Santiago de Chile, Chile
- Academic research in Anaerobic Digestion in Sustainable Bioenergy Chains Wageningen University, Sub-department of Environmental Technology and the Sustainable Development and Food Security Group. Wageningen, The Netherlands. PhD Thesis.
- Scientific Researcher for EU Project Cropgen Wageningen University, EU Project CROPGEN. [www.cropgen.soton.ac.uk](http://www.cropgen.soton.ac.uk). Responsible for research deliverables of two work packages within the EU Project CROPGEN –Renewable Energy from Crops and Agroresidues.

### ***Patents***

- 03. 2020. Compact biodigestion system for the treatment of domestic organic residues. sistema biodigestor para tratamiento de desechos orgánicos domiciliarios, metodo. Check in: <https://ion.inapi.cl/Patente/ConsultaAvanzadaPatentes.aspx> with Patent number 201702617.

## **V. SELECTED SCIENTIFIC PRESENTATIONS**

- Chile-Germany Forum, Chile, 2023.  
Discussion of Research Agenda in Circular Economy.
- International Seminar, Crecimiento, Desarrollo Sostenible: perspectivas en Iberoamérica. Cartagena, Colombia, 2022.  
Presented Paper: Circular Economy: An Imperative Transition
- XXXIII Annual Conference of the Chilean Cellular Biology Society. Puerto Varas, Chile, 2019.  
Presented Paper: Urban Circular Metabolism: Cities as living organisms.
- Circular Economy Seminar. Università della Calabria. Faculty of Economics. 2019.  
Presented Paper: The macroeconomics of the circular economy.



- 9th Latin-American Workshop and Symposium in anaerobic digestion. Eastern Island, Chile. October 19-23, 2008.  
Presented Paper: Impact of crop-manure ratios and digestion time on the fertilizing characteristics of liquid and solid digestate during codigestion.
- 5th International Symposium on Anaerobic Digestion of Solid Waste and Energy Crops. Hammamet (Tunisia). May 25-28, 2008.  
Presented Paper: Implications of reactor type and conditions on first-order hydrolysis rate assessment of maize silage.
- 4th International Symposium on Anaerobic Digestion of Solid Waste - ADSW. Copenhagen (Denmark), Aug 31th – Sept 2th 2005.  
Presented Paper: The role of anaerobic digestion in biomass energy chains.
- VIII Latin American Workshop and Symposium on Anaerobic Digestion. Punta del Este (Uruguay), October 2-5 2005.  
Presented Paper: The Role of Anaerobic Digestion in Sugarcane Chains in Colombia.

## VI. GRANTS AND AWARDS

- 12.2016 National Prize on Environment. Category Sustainable Culture. Awarded to EcoParque Peñalolen UAI. Otorgado por El Mercurio, la Fundación Recyclápolis y la Univ Católica reconociendo a empresas e instituciones comprometidas con el medio ambiente y el desarrollo sustentable.
- 12.2014 Best Faculty Project 2014. Universidad Adolfo Ibáñez . Faculty of Engineering and Sciences. For the creation of EcoParque Peñalolen UAI. A project aimed at education, research and community engagement around circular urban metabolism.
- 11.2008 Storm van- der Chijs Stipend. Finalist. Recognition given once a year to outstanding women Ph.D. researchers at Wageningen University.
- 02.2004 Cum Laude Diploma Master in Environmental Sciences. Wageningen University The Netherlands
- 07.2002 MSc Scholarship BID Beneficiary of the Fellowship Program Japan-IADB from the Interamerican Development Bank to follow Master studies.
- 07.2002 Selected as Scholar of COLFUTURO to study a master's degree at Wageningen University.
- 08-1999 Representing Javeriana University in the "First Colloquium of Cultural Exchange" Dissertation on: Latin-American women: Poverty and Violence. Montreal, Canada.



- 11.1993 Academic Recognition Luis Carlos Galán Best academic performance during secondary school for the graduated students in 1993. La Quinta del Puente School. Bucaramanga, Colombia
- 11.1993 Andrés Bello Award 3th place at the National Level in the Colombian National Academic Tests 1993. 395 points over 400. Colombia

## VII. CONSULTING AND TRAINING PROJECTS

- Circular Economy Training Program for Compañía Minera Doña Inés de Collahuasi, 2021.
- Urban Agriculture for Lo Barnechea Municipality through Participatory Cartography, 2020.
- Domestic anaerobic digestion of organic residues in Municipalidad de Independencia, 2019.
- Circular Economy Training for the Chilean Economic Development Agency-CORFO, 2019.
- Design and execution of pilot anaerobic digester for Municipalidad de Independencia, 2019.
- Design and execution of an Advanced Training of Trainers course for the Biogas Sector in Chile, 2019.
- Urban Circular Metabolism Agenda for the city of Bucaramanga, Colombia, 2018.
- Design and execution of Intensive Training of Trainers in Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste for Colombian academics, 2017.
- Product development and patenting of a compact domestic digester for urban applications: Compact2. 2017.
- Circular Metabolism Strategies for Chile, 2015.
- Anaerobic digestion of market residues in Santiago de Chile, 2015.
- Anaerobic digestion of domestic residues in Bolivar department in Colombia, 2015.
- State of the art in composting technology in Chile, 2014.
- Design and sustainability assessment of Likandes park, 2014.
- Process evaluation and improvement of the anaerobic digestion of sewage sludge after thermal pretreatment in Mapocho -Trebil Wastewater treatment Plant in Santiago de Chile, 2014.
- Sustainable water reuse in the city of the future, lead by ICLEI ([www.iclei.org](http://www.iclei.org)) for the SWITCH Project. Task performed for Lettinga Associates Foundation, Wageningen, The Netherlands 2010.
- Expert in factory engineering for the European project entitled « Feasibility study to define the program for “Support to research in the ACP Sugar Cane Sector”, 2007.

## VIII. OTHER RELEVANT POSITIONS AND ACTIVITIES

- Senior Researcher in Circularity Metrics,  
Circle Economy The Netherlands 2022 – To date
- University Lecturer in Circular Economy for the MBA  
Master in Business Administration (CL) Santa María University 2021 – To date
- Peer Reviewer of Master courses in Environmental Sciences.  
Wageningen University, Sub-department of Environmental  
Technology. Wageningen, The Netherlands 2019 – To date



- University Lecturer in Environmental Technology for the Master in Urban Environmental Management (NL), Wageningen University, The Netherlands 2016 – To date
- University lecturer in Circular Economy for the Master of Science in Development and Culture (CO) Universidad Tecnológica de Bolívar. 2018 – To date
- CEO, Founder and Senior Consultant, Traesure. Santiago de Chile 2013 – To date
- Project Coordinator, HeadCET Project, European Union Project 2023
- Organizer, Seminar-Workshop on Circular Regions: Strategies for Nutrient Cycle Closure, FACEA 2023
- Curricular coordinator for the Urban Environmental Management Master Program Wageningen University, Sub-department of Environmental Technology. Wageningen, The Netherlands 2009 - 2010
- Director of Energy and Environmental Engineering Program, Universidad Adolfo Ibáñez. Facultad de Ingeniería y Ciencias 2014 - 2011
- Coordinator of Urban Strategic Plan CORPLAN, Metropolitan Corporation for the Planning and Development of the City of Bucaramanga. 2000 - 2002