MAURICIO URIONA MALDONADO

I specialize in the examination of clean technologies that propel the shift toward sustainable and low-carbon economies in Developing Countries, utilizing a socio-technical lens. Proficient in system dynamics modeling, I craft simulated scenarios to forecast the diffusion of technology and sustainable transitions. As the head of the Sustainable Energy Innovation Group (Sinergia) at UFSC, I spearhead initiatives that push the boundaries of clean energy innovation. My research findings have found a home in esteemed journals and have been shared at specialized conferences worldwide. Additionally, I have undertaken visiting roles at prominent institutions such as Universidad Autonoma de Madrid (Spain), University of Tampere (Finland), and University of Bremen (Germany). Furthermore, I have enriched my expertise through training at the Massachusetts Institute of Technology (USA).

🎓 EDUCATION

PhD. in Knowledge Management and Engineering

2012 | 2008

Federal University of Santa Catarina

📍 Florianopolis, Brazil

- PhD Dissertation: Sectoral Innovation Dynamics, Innovation Systems, System Dynamics, IT Sector
- CAPES Fellow, PEC-PG. Supervised by Prof. G. Varvakis
- Co-supervised by Prof. V. Kern (UFSC) and Prof. R. Pietrobon (Duke University)

M.Sc. in Knowledge Management and Engineering

2008 | 2006

Federal University of Santa Catarina

📍 Florianopolis, Brazil

- Thesis: Business Process Management, System Dynamics, IT Sector
- CNPq Fellow, PEC-PG. Supervised by Prof. G. Varvakis

B.S. in Industrial Engineering

2004 | 2000

Military School of Engineering (EMI)

📍 La Paz, Bolivia

- Thesis: Strategic Planning, Service Industry

👨‍🏫 ACADEMIC EXPERIENCE

Associate Professor

Current | 2013

Federal University of Santa Catarina

📍 Florianopolis, Brazil

- Department of Industrial and Systems Engineering
- Courses taught in Undergraduate Level: Decision Analysis, IT Management/Data Science, Microeconomics, Ethics in Business
- Courses taught in Graduate level: System Dynamics Simulation, Innovation and Industrial Economics, Renewable Energy Economics

Associate Professor Extraordinary

2025 | 2022

Stellenbosch University

📍 Stellenbosch, South Africa

- Department of Industrial Engineering
- Invited Position

Research Associate

2013 | 2009

Duke University

📍 Durham, NC, US

- Research on Research Group
- Under the lead of Dr. Ricardo Pietrobon
- Conducted research on system dynamics and Science and Technology Policy

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CONTACT

Born and raised in La Paz, Bolivia 🇧🇴

Lives in Florianopolis, Brazil 🇧🇷

Age: *43 years old*

✉ m.uriona@ufsc.br

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LANGUAGE SKILLS

English

Portuguese

Spanish (Native)

French

SPECIFIC SKILLS

System Dynamics

Bibliometrics

Data Visualization

Data Analysis

Machine Learning

MODELLING SKILLS

🖥 Stella

🖥 Vensim

🖥 Anylogic

® R

🐍 Python

🌐 VISITING POSITIONS

2024
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2024

Visiting Professor
Universidad Nacional del Sur

📍 Bahia Blanca, Argentina

• Visiting Professor at the Department of Economics
• AUGM Fellow

2017
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2017

Visiting Professor
University of Bremen

📍 Bremen, Germany

• Visiting Professor at the Bremen Institute for Production and Logistics
• CAPES-DFG Fellow

2017
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2017

System Dynamics Training
MIT

📍 Boston, USA

• MIT Sloan School of Management
• Advanced Course in System Dynamics

2011
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2011

Visiting Researcher
Autonomous University of Madrid

📍 Madrid, Spain

• Visiting Scholar at the Economics and Business Faculty
• EU 7th Framework Programme - Marie Curie Actions

$ FUNDING AND GRANTS

2028
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2025

Latin American research consortium on Green Hydrogen Energy Transitions (H2VLatam)
CAPES & AUGM - PI

📍 Brazil & Latin America

2027
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2024

Mapping Hydrogen Diffusion and its Interconnection with Renewable Energy Sources in Brazil.
CNPq - Co-PI

📍 Brazil

2026
|
2025

An integrated climate-economy stakeholder-based model for assessing SRM future implications in Brazil, India and South Africa
Degrees Initiative - PI

📍 UK

2026
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2024

Scenarios for green hydrogen production in Brazil
CNPq - Principal Investigator

📍 Brazil

2025
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2025

Green hydrogen production for transportation in Colombia.
CAPES - PI

📍 Brazil & Colombia

2024
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2023

Public policies and corporate responses to promote sustainable economic development at the green hydrogen HUB with an emphasis in Ceara State
CNPq - Co-Investigator

📍 Brazil

2023
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2022

Decision Support Systems for long-term hydrogen scenarios
DAAD and GIZ - PI

📍 Germany

2023
|
2021

New index for green technologies in Latin America
Universidad Militar Nueva Granada - Co-PI

📍 Colombia

📖 SELECTED PUBLICATIONS

Industry Experience

Consultant in Innovation Management (FIESC) - 2012-2013

Business Analyst (Dinamica Software) - 2005-2008

Noteworthy International Collaborations

w/ Prof. Sara Grobbelaar (Stellenbosch Univ) 🇿🇦

w/ Prof. Rhythm Singh (IIT Roorkee) 🇮🇳

w/ Prof. Rainer Walz (Fraunhofer ISI) 🇩🇪

w/ Prof. Milton Herrera (Univ Militar Nueva Granada) 🇨🇴

w/ Prof. Minelle Silva (La Rochele Business School) 🇫🇷

w/ Prof. Guillermo Davila (Univ de Lima) 🇵🇪

w/ Prof. Peter Wells (Cardiff Univ) 🇬🇧

Relevant Publications in the last five years – Citation at Scopus

Year	Title	Journal	DOI
2025	Growth of residential solar energy in Brazil: A system dynamics approach	Renewable and Sustainable Energy Reviews	10.1016/j.rser.2025.115582
2024	Exploring the influence of Brazilian project cancellation mechanisms on new wind power generation	Renewable Energy	10.1016/j.renene.2023.119755
2023	Scaling actors' perspectives about innovation system functions: Diffusion of biogas in Brazil	Technological Forecasting and Social Change	10.1016/j.techfore.2023.122359
2023	Exploring a System Dynamics Approach to Develop Shared–Mobility Services Models: A Literature Review	IFIP Advances in Information and Communication Technology	10.1007/978-3-031-25182-5_45
2023	The Sustainable Transition of the Public Bus Fleet in the City of São Paulo Until 2038	Palgrave Studies in Democracy, Innovation and Entrepreneurship for Growth	10.1007/978-3-031-34793-1_5