

Edgar Rodríguez Huerta

Curriculum Vitae, August 2020 | Interactive resume:



SUMMLab
Universitat Politècnica de Catalunya
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EDUCATION

- March 2020 **Universitat Politècnica de Catalunya (UPC) | Institute of Sustainability and Laboratory of Measurement and Modeling of Sustainability (SUMMLAB) (Barcelona, Spain)**
Ph.D. in Sustainability.
Dissertation: Water societal metabolism in Yucatan Peninsula, Mexico (YP). Application of Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM).
- 2019 Doctoral stay: Instituto Tecnológico de Mérida, Yucatán México (January -19 to April-19)
- 2013-15 **Universitat Politècnica de Catalunya | Institute of Sustainability (Barcelona, Spain)**
Master's degree in Sustainability Science and Technology (120 ECTS) (Grade: 8.9/10 Rank 2/12)
Dissertation: Analysis of the metabolic viability of energy plans in Catalonia using the MuSIASEM (Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism).
- 2007-08 **Zaragoza Logistics Center (Zaragoza, Spain)**
Master's degree in Logistics. (105 ECTS) (Grade: 9.1/10)
Dissertation: Sustainability Balanced Scorecard methodologies for logistics companies.
- 2002-07 **Instituto Tecnológico de Mérida (Yucatán, México)**
University degree in Industrial Engineering. (Grade: 9.4 / 10)

PUBLICATIONS, PEER REVIEWED

- 2019 A water balance model to estimate climate change impact on groundwater recharge in Yucatan Peninsula, Mexico. Journal: *Hydrological Science Journal*. Volume 65 Issue 3, Pages 470-486 <https://doi.org/10.1080/02626667.2019.1702989>
H index: 90, JCR IF 2019: 2.186 (Q2), SJR 2019: 0.92 (Q1)
- 2019 Water societal metabolism in the Yucatan Peninsula. The impact of climate change on the recharge of groundwater by 2030. Journal: *Journal of Cleaner Production*. Volume 235, October 2019, Pages 272-287 <https://doi.org/10.1016/j.jclepro.2019.06.310>
H index: 173, IF JCR 2019: 7.246 (Q1), SJR 2019: 1.89 (Q1)
- 2017 A societal metabolism approach to job creation and renewable energy transitions in Catalonia. Journal: *Energy Policy*, Volume 108, Sep 2017, Pages 551-564
<https://doi.org/10.1016/j.enpol.2017.06.024>
H index: 197, IF JCR 2019: 5.042 (Q1), SJR 2019: 2.17 (Q1)

GRANTS AND FELLOWSHIP

- 2015-19 CONACYT-Mexico under Ph.D. grant number 220474
- 2014-15 CONACYT-Mexico under Master grant number 220474
- 2014,2015 AGAUR Fellowship for Directed Academic Activities (AAD) by Agència de Gestió d'Ajuts Universitaris i de Recerca, Generalitat de Catalunya, Spain
2014 AAD2_00605 (March-14 to May-14) 2014 AAD3_00267 (January-15 to July-15)

TEACHING, DEPARTMENT TALKS AND SERVICE TO PROFESSION

- 2019 Course: "Data management and visualization for academic research. Introduction to Tableau" for Master's degree students (IT Mérida). Duration: 12 hours (Apr 6-8)
- 2019 Collaboration and co-supervision MSc students (IT Mérida) (4 months)
- 2018 Journal manuscript reviewer: Journal of Cleaner Production, Energy Policy.
- 2016 Course: "Societal Metabolism: Introduction to the MuSIASEM methodology" for Master's degree students (Instituto Tecnológico de Mérida). Duration: 4 hours (June 8).

CONFERENCE ACTIVITY

- 2019 Earth Day, 2019 (May 7 – 9). Instituto Tecnológico de Mérida (*Mérida, México*)
"Prospective of sustainability in the Yucatan Peninsula aquifer"
- 2016 Innovation Match MX 2015-2016 (April 6-8). 1st International Forum of Mexican Talent. (*Guadalajara, Mexico*). <http://innovationmatchmx.com/language/es>
"Study of the trend of renewable energies in Catalonia from the metabolic pattern."
- 2014 Seminary: 7th International Seminar on Sustainable Technology Development.
Sustainable Clothing: Production and Consumption (*Vilanova i la Geltrú, Spain*).
Case study: *A local booming sustainable clothing market in Catalonia. Applying the Participatory Backcasting*

EXTRA TRAINING

- 2020 MOOC: Ecosystem Services: A Method for Sustainable Development. University of Geneva (Coursera) (24h).
- 2020 MOOC: Objetivos del Desarrollo Sostenible para América Latina y el Caribe. Universidad de los Andes, Colombia (Coursera) (18h).
- 2019 MOOC: Sustainability of Social-Ecological Systems: The Nexus between Water, Energy, and Food. Universitat Autònoma de Barcelona (Coursera) (48h)
- 2018 MOOC: 'Writing in science.' Stanford University (Coursera) (40h).
- 2014 Course: Training Days on Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM). Organized by Liphe 4 (September 8-10) (*Terrassa, España*).

NON-ACADEMIC EXPERIENCE

- 2010-13 **JLC Corporation. Consulting and business solutions based on IT tools** (*Yucatan, México*)
Senior Project Manager and Business Intelligence Specialist.
- Managed BI and Enterprise Resource Planning (ERP) implementations.
 - Performed big data analysis, pre-processing raw data, data cleaning and data wrangling.
 - Developed ETL processes (Extract-Transform-Load) for databases (SQL and MySQL).
 - Designed dashboards to present reports to stakeholders.
 - Trained and supported customers.

SKILLS AND LANGUAGES

- Proficient: MS Office, Tableau, R, QGIS, Mendeley.
- Intermedium: SQL, MySQL, Tableau Prep, Netlogo, Cropwat.
- Basic: Python, Power BI, Vensim, InVEST.

English: Fluent. IELTS 7.0 (C1) Test date: November 2019

Spanish: Native language

REFERENCES

- Martí Rosas-Casals, Ph.D. (Doctoral director) marti.rosas@upc.edu +34 93 7398060
<https://futur.upc.edu/MartiRosasCasals>
- Laura Hernández-Terrones, Ph.D. (Doctoral co-director) lmhernandez@ucaribe.edu.mx
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