

Estel Rueda Hernández



PERSONAL INFORMATION:

Barcelona, 6th July 1995

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EDUCATION

PhD in environmental engineering (September 2018-Present)

- Environmental engineering and microbiology group, Polytechnic University of Catalonia (EEBE-UPC).
- Photosynthetic production of Polyhydroxybutyrates with isolated cyanobacteria and mix cultures.

MSc in Biological and environmental engineering (September 2017- February 2019)

- School of Engineering, Universitat Autònoma de Barcelona (UAB)
- 90 ECTS

BEng in Chemical engineering (September 2013- June 2017)

- Barcelona east school of engineering, Polytechnic University of Catalonia (EEBE-UPC)
- 240 ECTS
- Bachelor's thesis: Effect of nutrient limitation and light in the production of polyhydroxybutyrates and glycogen by cyanobacteria cultivated in wastewater
- Award to the best academic record of the degree 2017



HONORS/AWARDS

PhD grant for researchers training (FI) (April 2019 – Present)

- Grant from Catalan government.

Collaboration grant with Severo Ochoa centres and María de Maeztu excellence units - CSIC (October 2017- March 2018)

- Collaboration in the Superconducting Materials and Large-Scale Nanostructures group (SUMAN) in the Institute of material science in Barcelona (ICMAB)

Collaboration grant of the Spanish Ministry of education and culture (MEC) (September 2016- June 2017)

- Collaboration with the Environmental engineering and microbiology group, Polytechnic University of Catalonia (EEBE-UPC).



WORK EXPERIENCE

Internships

Researcher in institute of material science in Barcelona (ICMAB). (October 2017-March 2018)

- Development of new materials for photovoltaic cells based on bismuth and iron oxides (BFO).

Researcher in I+D at Leitat Technological Centre. (April 2016-July 2017)

- Participation in two I+D projects in the *Tribology and metal processing group* (TMP), for the development of industrial cleaners and analytical techniques for their evaluation.

Volunteer work**Vice-president of the UPC BCN AIChE Student Chapter** (September 2015- September 2016)

- Direction of the project "Aichemia- Pilot plant for beer production"
- Organization of CEP Journal Club

**PUBLICATIONS**

- Dulce Arias, **Estel Rueda**, María Jesús García-Galán, Enrica Uggetti, Joan García. *Selection of cyanobacteria over green algae in a photo-sequencing batch bioreactor fed with wastewater.* Science of the total environment. 2018
- Pamela Machado, Mateusz Scigaj, Jaume Gazquez, **Estel Rueda**, Antonio Sánchez-Díaz, Ignasi Fina, Martí Gibert-Roca, Teresa Puig, Xavier Obradors, Mariano Campoy-Quiles, and Mariona Coll. Band Gap Tuning of Solution-Processed Ferroelectric Perovskite BiFe_{1-x}CoxO₃ Thin Films

**CONFERENCES**

- **Estel Rueda**, Pamela Machado. *All-oxide photovoltaics by cost-effective chemical routes.* 6th Jornada d'investigadors Predoctorals interdisciplinària (JIPI). February 2018 (Oral presentation)
- Organization committee at the 10th World Congress of Chemical Engineering (October 2017)
- Organization committee at the 2nd World congress on civil, Structural, and Environmental Engineering (CSEE'17) (April 2017)

**LANGUAGES****Catalan and Spanish:** Native**English: Cambridge certificate in Advanced English (CAE). C1 Level** (September 2015)

-40 h course C1 level in oxford School of English (August 2013 Oxford, England)

-B2 level course in EF International Language Centre (August 2012 Brighton, England)

German Level A1

-A1 level course in Official School of languages (September 2016- June 2017, Martorell, Spain)

**SOFTWARE****Chemical engineering software**

Aspen Hysys ● ● ● ○ ○ Good

Mathematical and programming software

Matlab ● ● ● ● ○ Very good

Maple ● ● ● ● ○ Very good

Visual basic ● ● ● ○ ○ Good

General software

Microsoft Office ● ● ● ● ● Excellent