

Laura Fernández Rodríguez

PhD- Contract
Ceramics and Glass Institute
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Education

Master's Degree in Materials Chemistry, Universidad Complutense de Madrid (2016)
Bachelor's Degree in Chemistry, Universidad Complutense de Madrid (2014)

Current Position

PhD Student in the Ceramics and Glass Institute (ICV-CSIC) of Madrid. PhD programme: "Química Aplicada" of the Universidad Autónoma de Madrid (UAM).
Thesis: Propiedades de luminiscencia persistente en vitrocerámicos del sistema MgO-SrO/BaO-SiO₂
Date of reading: approx. 2021.
Supervisor: Dr. María Jesús Pascual

General quality indicators of scientific research

In 2014, I got the Chemistry Science degree by Universidad Complutense de Madrid (UCM), where I completed my final project in "Certification of reference materials: Determination of nickel in a rice paste using atomic absorption spectrophotometry with a graphite chamber" (2014). In the same university I have done the master's degree in chemistry of materials where I did the final project of the master in "Obtaining coatings of metal oxides by sol-gel processes" (2016).

I worked in the company Labaqua as a sample management technician for 5 months (2016).
I did a research stay in the CENIM-CSIC TecnoEco research group for 5 months (2017).

In February 2017, I joined the Glass Department of Ceramic and Glass Institute – CSIC for started a PhD on materials with persistent luminescence, under the direction of Dr. María Jesús Pascual. I am expanding my scientific training thanks to courses and congresses that I have been able to attend. I have carried out two stays in the summer school of Montellier of the ICG. I have made a stay at the ESRF in Grenoble for the measurement of X-ray diffraction and I have attended the V Spanish-Portuguese Congress of Ceramics and Glass with an oral presentation.

Participation in R&D Projects

Name of the project: High-optical-quality luminescent glasses and glass-ceramics for photonic applications.

Acronym: VITROPHOTON-Q+.

Principal Investigator subproject 1: Dr. María Jesús Pascual Francisco.

Principal Investigator subproject 1: Dr. Francisco Muñoz Fraile.

Principal Investigator subproject 2: Prof. Rolindes Balda

Entity of subproject 1: Ceramics and Glass Institute, Madrid, Spain.

Entity of subproject 2: Dep. Applied Physics I, Superior School of Engineering, Bilbao, Spain.

Period: 2018-2021.

Funding: MAT2017-87035-C2-1-P/2-P (AEI/FEDER, UE)

Stays in R&D Institutions

Goal of the stay: The 9th ICG Summer School

Entity: International Commission on Glass (ICG).

Place: Montpellier, France

Period: 3-7th July 2017.

Goal of the stay: Crystallization mechanisms and crystal fraction in oxyfluoride transparent glass-ceramics doped with Rare-Earth ions.

Entity: BM25 B-Spline of ESRF.

Place: Grenoble, France

Period: 19-23th June 2018.

Goal of the stay: The 10th ICG Summer School

Entity: International Commission on Glass (ICG).

Place: Montpellier, France

Period: 2-8th July 2018.

Congresses

Technical communication

- Nuevo proceso hidrometalúrgico para el tratamiento de pilas alcalinas y de Zn/C
F.A.López, I.García-Díaz, T.Cebriano, A. López-Fernández, L.Fernández-Rodríguez,
J.M.Pérez
Conama 2016, 28-1 December 2016, Madrid

Oral contributions in Congresses

- ZnO micro- and nanostructures obtained by the products of the selective ammoniacal leaching process of spent alkaline batteries
T. Cebriano, I. García-Díaz, A. López-Fernández, L. Fernández-Rodríguez, P. Fernández, F. A. López
EUROMAT 2017, 17-22 September 2017, Thessaloniki Greece
- Propiedades de luminiscencia en vitrocerámicos del sistema MgO-SrO-SiO₂.
L. Fernández-Rodríguez, A. Durán, M.J. Pascual.
VII Jornadas de Jóvenes Investigadores, 27 Junio 2018, Madrid

- Luminescence properties of glass-ceramics in the system MgO-SrO-SiO₂
L. Fernández-Rodríguez, M. Zayat, D. Levy, A. Durán and M.J. Pascual
V Congreso Hispano-Luso de Cerámica y Vidrio, LVI congreso Nacional de la SECV, 8-10
October 2018, Barcelona

Memberships

Sociedad Española de Cerámica y Vidrio (SECV).
<http://www.secv.es/>

Publications

- Luminescence properties of glass-ceramics in the system MgO-SrO-SiO₂. L. Fernández-Rodríguez, M. Zayat, D. Levy, G. Mather, A. Durán, M. J. Pascual. Journal of the European Ceramic Society (enviada)