HORACIO LOPEZ MARQUES

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# EDUCATION:

University of Texas at Austin, Austin, Texas. 2019-Ongoing.

PhD in Chemical Engineering.

Universidad de Guadalajara, Guadalajara, Mexico. 2016-2018.

Master of Science in Chemical Engineering, GPA: 90/100

Thesis: “Síntesis y comparación de propiedades termomecánicas de copolímeros con gradiente de alimentación sintetizados vía radicálica por desactivación reversible y radicales libres” (Synthesis and comparison of thermomechanical properties of copolymers with feed gradient synthesized by free radical and reversible deactivation radical polymerization).

Universidad de Guadalajara, Guadalajara, Mexico. 2011-2016.

Bachelor of Science in Chemical Engineering,  GPA: 97/100

Thesis: “Eliminación del colorante Rojo 40 de soluciones acuosas utilizando sulfato de quitosana y compositos de poliuretano-quitosana” (Elimination of red 40 dye from aqueous solutions using chitosan sulfate and polyurethane-chitosan composites).

# HONORS:

Fulbright-García Robles Scholarship recipient , 2018.

Graduated with honors with the best GPA in the Bachelor of Science in Chemical Engineering, Universidad de Guadalajara. 2016.

First place in the team knowledge contest in the “Know Chemical Engineering” event of the Universidad de Guadalajara, 2015.

# PRESENTATIONS & PUBLICATIONS:

Memorias del XXVII Congreso Nacional de la Sociedad Polimérica de México (XXVII National Congress of the Polymeric Society of Mexico): “Adsorción del colorante rojo 40 utilizando compositos de poliuretano-quitosana y poliuretano-sulfato de quitosana”. (Adsorption of Red 40 dye using polyurethane-chitosan and polyurethane-chitosan sulfate composites). San Miguel Allende Guanajuato, 2015, pages 107-112.

Presentation of the poster “Remoción de colorante Rojo 40 mediante percolación en columna utilizando compositos de espuma de poliuretano-quitosana”. (Removal of Red 40 dye by column percolation using polyurethane-chitosan foam composites). IV Congreso de ciencia, innovación y tecnología para el desarrollo de Jalisco (IV Congress of science, innovation and technology for the development of Jalisco), 2016.

# EXPERIENCE:

**Intern** 2018

Institute of Science and Technology of Polymers (ICTP) of the Superior Council of Scientific Research (CSIC). Madrid, Spain.

 -Synthesis of a macro RAFT agent.

 -Characterization of the macro RAFT agent by NMR and GPC.

 -Characterization of gradient copolymers by NMR, GPC, DSC, DLS.

**Practicant** 2016

Zoltek de Mexico

-Project: statistical studies for the reduction of variability in the product (carbon fiber)

**Intern** 2015

University of Texas at Dallas Summer Research Program

 - Synthesis of novel 3D printing polymers.

 - Characterization of 3D printing polymers by capillary rheology and tensile test.

**Research assistant**2015

University of Guadalajara, Mexico

 - Synthesis and processing of polyurethane composites.

 - Red 40 dye removal from water by column adsorption.

 - Water characterization by UV-Vis Spectroscopy.

# SKILLS:

Spanish(Native), English (Toefl iBT 95)

Effective use of basic (Microsoft Office, Prezi, Mendeley) and specialized software (Origin, Minitab, Sigma plot).

Effective use of laboratory equipment for the synthesis, processing and characterization of polymers: Dynamic light Scattering, Differential scanning calorimeter, Universal testing machine, Nuclear Magnetic Resonance, Gel Permeation Chromatography, Electronic Transmission Microscope and Mechanodynamic Analysis.