HECTOR SANCHEZ-MORAN

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EDUCATION

AUG 2019 - PRESENT
PHD. CHEMICAL ENGINEERING, UNIVERSITY OF COLORADO BOULDER.
Kaar Lab & Schwartz Lab.

JAN 2017 - MAY 2019
M.S.E. CHEMICAL ENGINEERING, THE UNIVERSITY OF ALABAMA IN HUNTSVILLE.
Thesis: "*Oxime cross-linked alginate hydrogels with tunable stress relaxation for immune cell encapsulation*". Advisor: Dr. Kyung-Ho Roh.

SEP 2011 - JUN 2016
B.S.E. CHEMICAL ENGINEERING, UNIVERSITY OF SALAMANCA (SPAIN).
End of degree project: "*Ethylene glycol production plant*". Advisor: Dr. M. Carmen Márquez.

RESEARCH EXPERIENCE

AUG 2019 – PRESENT
GRADUATE RESEARCH ASSISTANT, KAAR LAB & SCHWARTZ LAB
(UNIVERSITY OF COLORADO BOULDER)
P.I: Dr. Joel L. Kaar & Dr. Daniel K.Schwartz.

MAY 2017 – MAY 2019
GRADUATE RESEARCHER, ROH LAB (THE UNIVERSITY OF ALABAMA IN HUNTSVILLE)
Synthesis and characterization (chemical and rheological) of polymeric biomaterials for immune cell encapsulation. P.I: Dr. Kyung-Ho Roh.

JUNE 2016 – DECEMBER 2016
POSTGRADUATE FELLOW, CHEM. ENG. DEPARTMENT (UNIVERSITY OF SALAMANCA)
Modelling and simulation of the hydrodynamics and mass transfer in a multiphase absorption column through computational fluid dynamics. P.I: Dr. Francisco J. Montes & Dr. M. Elena Díaz.

WORKING EXPERIENCE

JAN 2017 – MAY 2019
GRADUATE TEACHING ASSISTANT, THE UNIVERSITY OF ALABAMA IN HUNTSVILLE.
Mass and Energy Balances, Materials Science, Reactor Design, Unit Operations Laboratory I & II.

JUN 2015 - SEP 2015
INTERNSHIP, ENUSA INDUSTRIAS AVANZADAS. (JUZBADO, SPAIN).
Laboratory technician in analytical chemistry at Environmental Laboratory section.
Voluntary position.

TEACHING EXPERIENCE

JAN 2019 - MAY 2019
LAB TEACHING ASSISTANT, SUPERVISOR AND LECTURER. THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
CHE 339: Unit Operations Laboratory I.

AUG 2017 - DEC 2018
LAB TEACHING ASSISTANT AND SUPERVISOR, THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
CHE 439 and CHE 440: Unit Operations Laboratory I & II.

MAY 2017 - AUG 2017
TEACHER OF PROBLEM RECITATIONS, THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
Recitations of CHE 244: Introduction to Chemical Engineering systems (Mass and Energy Balances).

PUBLICATIONS

- **Sánchez-Morán, H**.; Ahmadi, A.; Vogler, B.; Roh, K. Oxime cross-linked alginate hydrogels with tunable stress relaxation. *Biomacromolecules*. 2019, in press. [Link]

- **Sánchez-Moran, H;** Terleira, M.; Díaz, M. E.; Montes, F.J. A novel sieve plate hole pattern: effect on gas hold-up and flow regimes in a bubble column. Chemical Engineering Communications. 2019. [Link]

HONORARY RECOGNITIONS AND MEMBERSHIPS

THE UNIVERSITY OF ALABAMA IN HUNTSVILLE (JAN 2017 – DEC 2018)

- **OUTSTANDING GRADUATE STUDENT OF 2018,** FEB 2018
- **TAU BETA PI,** MAY 2018
- **OMEGA CHI EPSILON,** MAY 2018

UNIVERSITY OF SALAMANCA (SEP 2012 – SEP 2016)

- **10 HONORABLE MENTIONS.**
- **HONORS IN INDIVIDUAL FINAL DEGREE PROJECT,** SEP 2016
  "Ethylene glycol production plant". Advisor: Dr. M. Carmen Márquez.

OTHERS

- **INSTITUTION OF CHEMICAL ENGINEERS (ICHEME),** MAY 2016 – PRESENT
  Elected Associate member, (AMIChemE).

POSTERS AND CONFERENCES

NOV 12, 2019
2019 AICHE MEETING (ORLANDO, FL)
Presentation: "Oxime Crosslinked Alginate Hydrogels with Tunable Stress Relaxation for Immune Cell Encapsulation."

JAN 24, 2019
2019 MATERIALS SCIENCE GRADUATE STUDENT SYMPOSIUM (TUSCALOOSA, AL)
Presentation: "*Oxime crosslinked alginate hydrogel threads with tunable stress relaxation*."

SEP 7, 2018
2018 ESPCOR SCIENCE AND TECHNOLOGY OPEN HOUSE (MONTGOMERY, AL)
Poster: "*Modification of sodium alginate structures in organic environments to form an oxime cross-linked hydrogel network*."