

## Alejandra A. SALAS Chávez

### EDUCATION

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High School Studies at Colegio Peruano Británico (IB Certificates)  
2010- 2016: Universidad Peruana Cayetano Heredia (UPCH), Lima, Perú  
Degrees: B.Sc. in Biology and B.Sc. in Chemistry  
2019-2020: Warwick University, England, U.K.  
MSc. in Polymer Science (graduated with honors)  
Polymerisation techniques used: RAFT, ATRP, SET-LRP, ionic polymerization, ROMP, Free Radical polymerization & Step-growth polymerization.  
2021-2023 Politecnico di Torino  
PhD. Electrical, Electronics & communications engineering (in progress)

### LANGUAGES

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ITALIAN (Level: Intermediate)/ ENGLISH (Level: Advanced-CEFR: C1)/ FRENCH (Level: Intermediate Certification: DELF)/ PORTUGUESE (Level: Intermediate)

### OPERATING SYSTEMS AND SCIENTIFIC SOFTWARES

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Operating systems: Microsoft Office, IOS X & Ubuntu.  
Scientific Softwares: STATA, XPSS, Excel, Origin, Chemdraw, Openchrome & TopSpin.

### WORK EXPERIENCE & RESEARCH

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- “The Soluble Erythropoietin Receptor in High-Altitude Excessive Erythrocytosis and Chronic Mountain Sickness”. Authors: Francisco C. Villafuerte. Conference: Keystone Symposia on Cellular and Molecular Biology. Sensing and Signalling of Hypoxia: Interfaces with Biology and Medicine. At: Breckenridge, CO, USA.
- “Blood Pressure and Metabolic Parameters Associated to Cardiovascular Risk Factors in Patients with Excessive Erythropocytosis at High Altitude”. Authors: Francisco C. Villafuerte, José L. Macarlapú, Fabiola León-Velarde. UPCH. Conference: X World Congress on High Altitude Medicine and Physiology, May 25-31, 2014. At: Bolzano, Italy. Volume: HIGH ALTITUDE MEDICINE & BIOLOGY Volume 15, Number 2, 2014
- Thesis on Biology: The role of macroinvertebrates as biosensors on water toxicology. Universidad Peruana Cayetano Heredia- UPCH
- Thesis on Chemistry: Synthesis & Ag<sup>+</sup> incorporation on MOFs sodalite structures (SodMOF & ZIF-8).
- 2013- 2015: HISA “Hidroquímica Industrial SA” Lab assistant (part-time position). References: (01)711-9586 Ing. Cesar Salas. Quality control & Analyses in water treatment according to GLP (Good Laboratory Practices)
- 2016- Organic Chemistry Teacher’s Assistant at UPCH. Lead professor: PhD. Guillermo Santillan (UCSD).
- 2016 – Experimental Chemistry Teacher’s Assistant (TA) at UPCH. Lead Professor: MSc. Gilma Fernandez.

- 2017 (April-June) Internship on ICP-CSIC- Instituto de Catálisis y Petroleoquímica de Madrid, Spain. Lead Investigator: PhD. Isabel Diaz. Email: [idadiaz@icp.csic.es](mailto:idadiaz@icp.csic.es)
- 2017-2019: Investigation Assistant on Hidroquímica Industrial SA (HISA)
- 2020: MSc. Thesis “Modelling Hansen Solubility Parameters for Dispersant chemistry”
- 2021: Polymeric Dispersants for Polar Environments. To be published in: Soft Matter, emerging authors.

## **COURSES & CONGRESS ASSISTANCE**

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October 2011: Biology Students Congress, Asociación de Estudiantes de Biología Chile- AEBCH, Antofagasta-Chile

June 2012: Corrosion Course at Baker Hugues, Sugarland-Houston, EEUU.

January 2013: Macro- Excel at UNI-Universidad Nacional de Ingeniería.

October 2013: Course “Biorremediation & Bacterio-Lixiviation”, UPCH-Universidad Peruana Cayetano Heredia. Dr. Jasmin Hurtado. Email: [jasmin.hurtado@upch.pe](mailto:jasmin.hurtado@upch.pe)

July 2014: Bio-inorganic Course, given at UPCH-Universidad Peruana Cayetano Heredia by teachers from UNAM- Universidad Nacional Autónoma de México. PhD. Lena Ruiz.

October 2014: Biology Students Congress, AEBCH, Temuco-Chile. Poster Exposition: “Determination of the Microbiologic quality of *Lactobacillus spp.* in market and supermarket yogurts”. Study made in Peru.

July-December 2014: Course “GLP, ISO 17025 and ISO 9001”, given at Universidad Peruana Cayetano Heredia. Lead Professors: MSc. Maria Salas y MSc. Alfonso Zavaleta.

January 2015: Seminar “Investigation in natural products using RMN” Given by: PhD. Gerald B. Hammond from Louisville University and Dr. Carla Gallo, Lic. Giovanni Poletti, Dr. Abraham Vaisberg. Email: [Giovanni.poletti@upch.pe](mailto:Giovanni.poletti@upch.pe) , [gb.hammond@louisville.edu](mailto:gb.hammond@louisville.edu)

April 2015: “Sales Coaching-SSP”. Sponsored by Hidroquímica Industrial SA.

January 2017: Electrochemistry Course at Universidad Peruana Cayetano Heredia, given by Dr. Luis Antonio Ortiz Frade, from UNAM- Universidad Autónoma de México.

June 2017: Residues Manipulation & storage course given by: Gestión y Valorización Integral del Centro, S.L. at Madrid, España as an intern from CSIC- Instituto de Catálisis y Petroleoquímica.

July 2018: Introduction on Metal Organic Frameworks MOFs and Applications. Given by: Dr. Alejandro Fracaroli from Universidad Nacional de Córdoba. email: [a.fracaroli@unc.edu.ar](mailto:a.fracaroli@unc.edu.ar)

June 2021: 6th European Symposium of Photopolymer Science (June 15-17)

December 2021: Italian Photochemistry Meeting 2021 (Torino, 16-18 December). Poster Exposition: Introducing 3D printable MXene/composites for further electronic applications.

## **EXTRACURRICULARS**

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- Mentor and tutor of freshman students and regular students from BECA 18 (UPCH) 2013-2014

## **REFERENCES**

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From UPCH:

- PhD. Guillermo Santillan. Mail: [guillermo.santillan.z@upch.pe](mailto:guillermo.santillan.z@upch.pe)

From Warwick University:

- Dr. Remzi Becer- Mail: [remzi.becer@warwick.ac.uk](mailto:remzi.becer@warwick.ac.uk)

From Politecnico di Torino:

- Dr. Ignazio Roppolo. Mail: [ignazio.roppolo@polito.it](mailto:ignazio.roppolo@polito.it)