

Erik Antonio Vázquez Montelongo
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EDUCATION

- (2007-2011) Chemical Engineer, Autonomous University of Zacatecas, Zacatecas, ZAC., Mexico.
- (2012-2014) Master in Chemical Engineer Sciences, Technological Institute of Celaya, Celaya, GTO., Mexico.
- (2015-2016) PhD student in Chemistry, Wayne State University, Detroit, MI, USA.
- (2016-Currently) PhD candidate in Chemistry, University of North Texas, Denton, TX, USA.

ACADEMICS AWARDS

(December 2011) Chemical Engineering, Autonomous University of Zacatecas

- Best GPA of the Generation 2007-2011
- Bachelor's degree with honors

(January 2012-December 2013)

- Scholarship from the Consejo Nacional de Ciencia y Tecnología (CONACyT) of Mexico, to obtain my master degree.

(June-December 2013)

- Scholarship from CONACyT to do an internship at Texas A&M University.

(August 2015-Currently)

- Scholarship from CONACyT to obtain my PhD in Chemistry at University of North Texas (previously Wayne State University).

ACADEMIC AND PROFESSIONAL EXPERIENCE

- (June-August 2010) Internship in Petrochemical Complex "La Cangrejera", PEMEX, Coatzacoalcos, VER, México.
- (June-August 2011) REU summer student, Guanajuato University, Guanajuato, GTO, Mexico.
- (June-December 2013) Internship at Texas A&M University, College Station, TX, USA
- (January-June 2014) Lecturer for Integral Calculus and Lecturer for Numerical Methods for Engineers, Technological Institute of Roque, Celaya, GTO, Mexico.
- (April-July 2015) Process Engineer, Treviño Lozano y Asesores a Empresas, S.A. de C.V., Monterrey, NL, Mexico.

WORKSHOPS, CONGRESSES AND MEETINGS.

- (April, 2011) Poster: "Parameter optimization for a fixed bed reactor for chemical vapor decomposition", VIII Encuentro de la Participación de la Mujer en la Ciencia, León, Guanajuato, MX
- (May, 2011) XXXII National Meeting and 1st International Congress AMIDIQ-2011, Riviera Maya, Quintana Roo, MX
- (May, 2012) Poster: "Exergy viability to replace a cooling tower for a heat exchanger", XXXIII National Meeting and 2nd International Congress AMIDIQ-2012, San José de los Cabos, Baja California Sur, MX
- (May, 2012) Poster: "Density profiles and thermodynamic properties of water in subcritical phase using Monte Carlo methods", XXXIII National Meeting and 2nd International Congress AMIDIQ-2012, San José de los Cabos, Baja California Sur, MX.
- (August, 2012) 2nd Molecular Dynamics Workshop, Guanajuato, Guanajuato, MX.
- (December, 2012) 4th Meeting on Molecular Simulations, Mexico City, MX.
- (December, 2014) Poster: "Calculation of Adsorption Energy between Single-Walled Carbon Nanotubes and Silica Systems using Molecular Dynamics", 6th Meeting on Molecular Simulations, Mexico City, MX.
- (April 29th, 2017) Talk: "Computational Investigation of Intermolecular Interactions Between Functionalized Single-walled Carbon Nanotubes and Polyethylene Terephthalate", American Chemical Society 50th Annual Meeting-in-Miniature, Texas Christian University, Fort Worth, TX, USA.

- (July 31st-August 4th, 2017) Talk: "Theory and Applications of Hybrid QM/MM calculations", 7th Workshop on Molecular Dynamics, Institute of Physical Sciences and Genomic Sciences Center, Cuernavaca, Morelos, MX
- (March 18th-22th, 2018) Talk: "Unraveling the nature of hydrogen bonds in pincer pyrazine Pd complexes with a quantum topological criterion", American Chemical Society 255th ACS National Meeting Annual, New Orleans, LA, USA.
- (March 18th-22th, 2018) Poster: "Computational investigation of intermolecular interactions between functionalized single-walled carbon nanotubes and polyethylene terephthalate", American Chemical Society 255th ACS National Meeting Annual, New Orleans, LA, USA.
- (April 21st, 2018) Talk: "Characterizing the nature of hydrogen bonds in pincer pyrazine Pd complexes with a quantum topological criterion", American Chemical Society 51st Annual Meeting-in-Miniature, South Methodist University, Dallas, TX, USA.
- (July 9th, 2018) Poster: "Hybrid quantum mechanics/molecular mechanics calculations (QM/MM) for the limiting step dealkylation reaction catalyzed by ALKBH3", 9th International HPC Summer School, Ostrava, Czech Republic.

PUBLICATIONS

- Blanco-Diaz E.G., **Vazquez-Montelongo E.A.**, Cisneros G.A., Castrejon-Gonzalez E.O., "Computational Investigation of Non-Covalent Interactions in 1-Butyl-3-Methylimidazolium/bis(Trifluoromethylsulfonyl)imide in EMD and NEMD" , J. Chem. Phys., 148, 054303, 2018.
- Lohrman J., **Vazquez-Montelongo E.A.**, Pramanik S., Day V.W., Hix M.A., Bowman-James K., Cisneros G.A., "Characterizing Hydrogen-Bond Interactions in Pyrazinetetracarboxamide Complexes: Insights from Experimental and Quantum Topological Analyses" , Inorg. Chem., DOI: 10.1021/acs.inorgchem.8b00627, 2018.