

Curriculum vitae

Valdez-Melchor R.G.

January 29, 2021



Personal Information

Bordo nuevo Blvd., Cajeme, Sonora, México. 85010
Department of Health Science, University of Sonora
E-mail: ramon.valdez@unison.mx; Phone: +52(644)2063197

Education

2007–2010 MSc in Food Science and Technology, University of Sonora, México
2000–2006 Biochemical Engineering, Instituto Tecnológico de los Mochis, México.
1998–2000 IT Technician, COBAES 06, México.

Employment

Academic technician, University of Sonora, August 2015 - February 2021
Professor, University of Sonora, August 2011 - August 2012 and August 2013 - February 2021
Online professor, Open and Distance University of México, August 2019 - February 2021
Professor, Sonora State University, August 2013 - June 2015
Professor, College of Scientific and Technological Studies of Sonora State, August 2010 - July 2011

Teaching Experience

Bachelor Level

Chemistry
Chemistry I
Inorganic chemistry
Analytical chemistry I, II and III
General organic chemistry
Organic chemistry
Organic chemistry I
Food bromatology

Biochemistry
Biochemistry I and II
Medical Biochemistry
Nutrition Biochemistry
Sport Biochemistry
Mechanics
Electromagnetism
Data analysis applied to the sport

Graduate Level

Intervention design
Governance and institutions
Market analysis
Agricultural production analysis
Seminar I and II
Strategic planning

Publications

Research Articles

- (1) Santacruz-Ortega H.C., Ruíz-Cruz S., Cuevas-AcuA., Arias-Moscoso J.L. Torres-Arreola W., Cadena-Cadena F., **Valdez-Melchor R.G.** and Chaparro-Hernandez S. **2020**. High-intensity ultrasound pulses effect on physicochemical and antioxidant properties of tilapia (*Oreochromis niloticus*) skin gelatin. *Applied Sciences*. 10(3):1004. <https://doi.org/10.3390/app10031004>
- (2) López-Mata M.A., **Valdez-Melchor R.G.**, Quihui-Cota L. and Osuna-Amarillas P.S. **2020**. Recubrimientos para herida con Aloe-gel combinado con alginato, pectina y quitosano: aplicaciones *in vivo*. (*TIP Revista Especializada en Ciencias Químico-Biológicas*). 23:1-15. <https://doi.org/10.22201/fesz.23958723e.2020.0.279>
- (3) Osuna-Amarillas P.S., Rouzaud-Sandez O., Higuera-Barraza O.A., Arias-Moscoso J.L., López-Mata M.A., Campos-García J.C. and **Valdez-Melchor R.G.**. **2019**. Hydrophobic interaction chromatography as separation method of alkaline proteases from viscera of (*Scomberomorus sierra*). *TIP Revista Especializada en Ciencias Químico Biológicas*. 22: 1-10. <https://doi.org/10.22201/fesz.23958723e.2019.0.183>
- (4) Cuevas-Acuña D.A., Gracia-Valenzuela M.H., Santacruz-Ortega H., **Valdez-Melchor R.G.** and Arias-Moscoso J.L. **2019**. Sea urchin (*Strongylocentrotus franciscanus*) gonads chemical composition, protein and amino acid contents and morphology. *Biotechnia*. 21(3): 86-91. <https://doi.org/10.18633/biotechnia.v21i3.1015>
- (5) Gómez-Rodríguez G.H., López-Mata M.A., Valbuena-Gregorio E., **Valdez-Melchor R.G.**, Campos-García J.C., Silva-Beltran N.P., Quihui-Cota L., Ruíz-Cruz S. and Juárez J. **2018**. Microencapsulation of carvacrol using pectin Aloe-gel as a novel wound dressing films. *Current Topics in Medicinal Chemistry*. 18(14):1261-1268. <https://doi.org/10.2174/1568026618666180810141455>
- (6) Meza-Lastra H., Muy-Rangel M.D., **Valdez-Melchor R.G.** and Quintana-Obregón E.A. **2018**. Recuperation levels of hemoglobin (Hb) in wistar rats with fermented beet by (*Lactobacillus sporogenes*). *TIP Revista Especializada en Ciencias Químico Biológicas*. 21(2): 91-94. DOI: 10.22201/fesz.23958723e.2018.2.2
- (7) González-Fimbres R.A., Cárdenas-López J.L. and **Valdez-Melchor R.G.**. **2015**. Kinematic changes of basketball shooting in young women as a function of distance. *Biotechnia*. 17(3):30-33. <https://doi.org/10.18633/bt.v17i3.234>
- (8) Rentería-Gutiérrez T.R., Ayala-Mendivil A., Martín-García A.R., **Valdez-Melchor R.G.** and Valenzuela-Avendaño J.P. **2014**. Contenido calórico de alimentos no-industrializados expendidos en escuelas primarias en Hermosillo, Sonora. *Biotechnia*. 16(3): 38-41.
- (9) **Valdez-Melchor R.G.**, Ezquerria-Brauer J.M., Cinco-Moroyoqui F.J., Castillo-Yañez and Cárdenas-López J.L. **2013**. Purification and partial characterization of trypsin from the viscera of tropical sierra (*Scomberomorus sierra*) from the Gulf of California. *Journal of Food Biochemistry*. 37(6):694-701. <https://doi.org/10.1111/j.1745-4514.2012.00667.x>

Book chapters

- (10) **Valdez-Melchor R.G.**, Ocaño-Higuera V.M., Sumaya-Martínez M.T., Sánchez-Herrera L.M., Ballois-Morales R. and Márquez-Ríos E. **2015**. La química y bioquímica: su relación con la calidad e inocuidad de productos pesqueros. In Márquez-Ríos E., Del Toro-Sánchez C.L., Ocaño-Higuera V.M., Ezquerria-Brauer J.M., Ramírez de León J.A. and Uresti-Marín R. (Eds.), *análisis, calidad y procesamiento de alimentos en México* (pp. 179-198). México city, México: Plaza y Véldez. ISBN: 978-607402-821-8.
- (11) Jiménez-Ruiz E.I., Sumaya-Martínez L.M., Sánchez-Herrera L.M., Márquez-Ríos E., Mouawad Alexa, Higuera-Barraza O.A., Ocaño Higuera V.M., Montoya-Camacho N. and **Valdez-Melchor R.G.**. **2015**. Uso de biosensores amperométricos para la detección de aminos biogénicos en alimentos de origen marino. In Márquez-Ríos E., Del Toro-Sánchez C.L., Ocaño-Higuera V.M., Ezquerria-Brauer J.M., Ramírez de León J.A. and Uresti-Marín R. (Eds.), *análisis, calidad y procesamiento de alimentos en México* (pp. —). México city, México: Plaza y Véldez. ISBN: 978-607402-821-8.
- (12) Jiménez-Ruiz E.I., Moreno-Vázquez M.J., Canizales-Rodríguez D.F., **Valdez-Melchor R.G.** and Montoya-Camacho N. **2015**. aditivos: una herramienta para extender la vida de anaquel de los productos de la pesca. In Márquez-Ríos E., Del Toro-Sánchez C.L., Ocaño-Higuera V.M., Ezquerria-Brauer J.M., Ramírez de León J.A. and Uresti-Marín R. (Eds.), *análisis, calidad y procesamiento de alimentos en México* (pp. —). México city, México: Plaza y Véldez. ISBN: 978-607402-821-8.

- (13) Canizalez-Rodríguez D.F., Ocaño-Higuera V.M., Márquez-Ríos E., Montoya-Camacho N. Yepiz-Gómez M.S., Cárdenas-López J.L. and **Valdez-Melchor R.G.**. 2014. Alimentos marinos y salud. In Aguilera-Ort., Reynoso-Camacho R., G-Aldapa C.A., Uresti-Mar.M., Ramz de LeA. (Eds.), *los alimentos en México y su relación con la salud*(pp. 53-71). México city, México: Plaza y Valdés. ISBN: 978-607-402-718-1
- (14) Tolano-Villaverde I.J., Ocaño-Higuera V.M., Ezquerra/Brauer J.M., Torres-Arreola W., **Valdez-Melchor R.G.** and Márquez-Ríos E. 2014. Calidad de las proteínas de productos pesqueros. In Aguilera-Ort., Reynoso-Camacho R., G-Aldapa C.A., Uresti-Mar.M., Ramz de LeA. (Eds.), *los alimentos en México y su relación con la salud*(pp. 73-84). México city, México: Plaza y Valdés. ISBN: 978-607-402-718-1
- (15) **Valdez-Melchor R.G.**, Márquez-Ríos E., Ocaño-Higuera V.M., Jiménez-Ruiz E.I., Osuna-Amarillas P.S. and Higuera-Barraza O.A. 2014. Efecto de las altas presiones hidrostáticas sobre los alimentos de origen acuático: calidad e inocuidad. In Aguilera-Ort., Reynoso-Camacho R., G-Aldapa C.A., Uresti-Mar.M., Ramz de LeA. (Eds.), *los alimentos en México y su relación con la salud*(pp. 577-589). México city, México: Plaza y Valdés. ISBN: 978-607-402-718-1
- (16) **Valdez-Melchor R.G.**, Márquez-Ríos E., Ocaño-Higuera V.M., Arias-Moscato J.L., Valdez-Hurtado S. and Castillo-Yáñez. 2013. Características fisicoquímicas de tripsinas de peces y su aplicación en la industria alimentaria en México. In Ramírez de León J.A., Aldana-Madrid M.L. and Loarca-Piña M.G.F. (Eds.), *avances de ciencia y tecnología en México* (pp. 419-434). ISBN: 978-607-402-576-7.

Presentations

- (1) Cuevas-Acuña D.A., Ruiz-Cruz S., Arias-Moscato J.L., Torres-Arreola W. and **Valdez-Melchor R.G.**. Presentation: effect of ultrasonic pulses on the antioxidant and physicochemical properties of tilapia (*Oreochromis niloticus*) skin gelatinin. 70th Annual Meeting of the Pacific Fisheries Technologists (PFT). February 24-27, 2019. San Carlos, Sonora, México.
- (2) **Valdez-Melchor R.G.**, Ávila-Villa L.A., Corona-Martínez D.O. and Higuera-Barraza O.A. Presentation: Study of adapted bacter to extrem temperatures through amino acid sequence of DNA Polymerase I as protein model. International Congress in Food Science and Biotechnology. November 14-18, 2016. Hermosillo, Sonora, México
- (3) **Valdez-Melchor R.G.**, Cárdenas-López J.L., Ezquerra-Brauer J.M., Cinco-Moroyoqui F.J., Barrón-Hoyos J.M. and Castillo-Yáñez F.J. Presentation: purification and some physicochemical features of trypsin from viscera of sierra (*Scomberomorus sierra*) captured in the Gulf of California. VII Northwest Congress and III National Congress in Food Science and Biotechnology. November 10-13, 2010. Hermosillo, Sonora, México
- (4) Cárdenas-López J.L., **Valdez-Melchor R.G.**, Ezquerra-Brauer J.M., Cinco-Moroyoqui F.J., Barrón-Hoyos J.M. and Castillo-Yáñez F.J. Presentation: purification of trypsin from viscera of tropical sierra (*Scomberomorus sierra*) captured in the Gulf of California. 61st Pacific Fisheries Technologist Conference (PFT). February 21-24, 2010. Seattle, Washington, USA.
- (5) **Valdez-Melchor R.G.**, Cárdenas-López J.L. and Rouzaud-Sandez O. Presentation: rheological behavior of wheat dough treated with trypsin from sierra (*Scomberomorus sierra*) pyloric ceca extracts. 58th Annual Meeting of the Pacific Fisheries Technologist (PFT). February 18-21, 2007. Hermosillo, Sonora, México.

Courses and Workshops

Bioinformatics

- (1) Assembly and Annotation of Genomes and Metagenomes. Center of Genomics Science, UNAM Cuernavaca. August 3-7, 2020. 40 Hours. Web site: <http://www.nnb.unam.mx/TIB2020/t3-ensamble-y-anotacion-de-genomas-y-metagenomas/>
- (2) Theoretical and Practical HiC Workshop: Wet-Lab and Bioinformatics. The Royal Society and Cinvestav UGA-Langebio. November 4-9, 2019. 42 Hours. Web site: <https://liz-fernandez.github.io/HiC-Langebio/>
- (3) Exploratory and Statistical Analysis of Biological Data Using R. Center of Genomics Science, UNAM Cuernavaca. Web site: <http://congresos.nnb.unam.mx/TIB2018/t2-analisis-exploratorio-y-estadistico-de-datos-biologicos-usando-r/>. 40 Hours
- (4) I Summer School in Bioinformatics. Institute of Mathematics, UNAM Juriquilla. June 12-26, 2016. Web site: <https://paginas.matem.unam.mx/bioinformatica/es/antiores-2/i-es>.

Food Science and Technology

- (5) Innovations in Seafood Processing and Technology. University of Sonora. 2016. 20 Hours
- (6) Chemistry of Food Protein. University of Sonora. 2009. 20 Hours
- (7) Advances in Food Process Engineering. 2007. 20 Hours
- (8) Biochemistry Propedeutic Course. 2007. University of Sonora. 20 Hours
- (9) Physochemistry Propedeutic Course. 2007. University of Sonora. 40 Hours
- (10) Enzymatic kinetic. 2003. Instituto Tecnológico de los Mochis. 4 días

Statistics

- (11) Validation and Estimation of the Uncertainty of Analytical Methods. 2018. University of Sonora. 40 Hours
- (12) Statistical Analysis of Experimental Data. 2014. Sonora State University. 20 Hours
- (13) Statistical Analysis of Sport Research Data. 2014. Sonora State University. 20 Hours

General

- (14) Advanced Microscopy and Micrography. 2018. University of Sonora. 40 Hours
- (15) Basic Security for the personal who work in areas with academic or research labs of the University of Sonora. 2018. University of Sonora. 22 Hours