

# Ingrid del Carmen Montes-González

## Curriculum Vitae

January 2022

### Education

Doctor of Philosophy, Organic Chemistry 1985

University of Puerto Rico-Río Piedras Campus

Thesis advisor: Gerald Larson

Bachelor of Science, Chemistry 1980

University of Puerto Rico-Río Piedras Campus

### Professional Experience

2015- 2018 Assistant Dean of Graduate Studies and Research Program, University of Puerto Rico, Río Piedras Campus

1998 - Present Professor, Department of Chemistry, Univ. of Puerto Rico, Río Piedras Campus. Professor and Laboratory Coordinator of Organic Chemistry for Majors.

1995 - Present Coordinator Pre-MARC Program, University of Puerto Rico, Río Piedras Campus

1996 - 1998 Assistant to the Chairman in Academic Affairs

1992 - 1998 Associate Professor, Univ. of Puerto Rico, Río Piedras Campus. Professor and Laboratory Coordinator of Organic Chemistry for Majors, Professor of Organic Synthesis.

1987 - 1992 Assistant Professor, Department of Chemistry, Univ. of Puerto Rico, Río Piedras Campus. Professor of General Chemistry, Organic Chemistry, Hazardous Waste Disposal, Organic Synthesis and Laboratory Coordinator for Majors and Non-Majors Organic Chemistry.

1986 - 1988 Curriculum Specialist (Part-Time), Puerto Rico Junior College, Río Piedras, Puerto Rico. Responsible for the preparation of manuals, purchase of equipment and materials and the design and development of the General Chemistry and the Drug Analysis Courses and Laboratories.

- 1985 - 1986      Lecturer, College of Pharmacy, Medical Sciences Campus, University of Puerto Rico, San Juan, Puerto Rico. Drug Analysis and Biochemistry Laboratory Professor and Researcher in Medicinal Chemistry.
- 1984              Instructor (Part-Time), Interamerican University, Metropolitan Campus, Puerto Rico. General and Organic Chemistry Laboratory Professor.
- 1981 - 1984      Research Assistant, University of Puerto Rico, Río Piedras Campus. Laboratory Research work in Organometallic Chemistry towards completion of Ph. D. Thesis.
- 1980 - 1981      Teaching Assistant, University of Puerto Rico, Río Piedras. Organic Chemistry Laboratory Instructor.

### **Research Interest**

My research interests include organic and organometallic synthesis, and chemical education. For the past thirty-five years, I have been teaching at the University of Puerto Rico, Río Piedras Campus and performing research in the area of chemical education. During the last thirteen years, I have also been doing research in the area of synthetic organometallic chemistry.

### **Organometallic Chemistry**

Ferrocene and its derivatives constitute versatile and interesting scaffolds for the global chemical enterprise due to its multiple applications that range from biomedical to materials science. Ferrocene has proven to be an excellent bioisostere that improves bioactivity, such as anticancer, antimalarial, antioxidant, antimicrobial, low cytotoxicity, and high lipophilicity. Ferrocenyl derivatives such as chalcones, stilbenes, aromatic ethyne, and cannabidiol analogues, are the leading compounds in our research for the syntheses and characterization as well as their potential applications. These derivatives have been synthesized employing synthetic methodologies such as Claisen-Schmidt, Sonogashira, Heck, and other well know reactions, with moderate to good yields and applying a greener approach when possible. Among these derivatives, our interest is mainly focused in ferrocenyl chalcones as a framework for further derivatization. Some of the explored modifications consist on the incorporation of different substituents in the aromatic rings, heterocyclic aromatic moieties, coumarin, adamantane, urea and thiourea hybrides, among others, into the ferrocenyl chalcone core. Another modification explored is the formation of ammonium or pyridinium salts to increase water solubility. Studied ferrocenyl derivatives exhibit remarkable stability, physical, and electrochemical properties. These factors have led the approaches for them to be precursors of biologically active compounds (cancer, bacteria, malaria, and neurobiological diseases). Moreover, other potential applications include molecular materials, perovskite solar cells, and polymers. All compounds are extensively characterized by Infrared,  $^1\text{H}$  and  $^{13}\text{C}$ -NMR spectroscopy, UV-Vis spectrophotometry, single crystal x-ray diffraction and cyclic voltametry.

Antioxidant activity are studied applying DPPH radical scavenging assay and antitumor by MTS colorimetric cell proliferation assay.

### **Chemical Education**

Our research work is based upon the theoretical perspective building on constructivist and meaningful learning theory. In this respect, the construction of knowledge will therefore depend on the interaction of personal experiences with private understandings. As educators, we must be aware of student understandings and provide the adequate environment and opportunities for students to more easily create and retrieve appropriate conceptions. Our research includes three intertwined branches: the instruction (transmission of attitudes, skills and habits of inquiry to students), the practice (development of the tools and methods used to teach chemistry) and the assessment.

---

### **Outreach**

Development and Implementation of the "Festival de Química" for the American Chemical Society (ACS). It was moved to be an ACS Program (Festival Series) in August 2015.

The "Festival de Química" is a community outreach event that, through demonstrations, emphasizes the importance of chemistry in daily life. The event was initially designed, developed and implemented in Puerto Rico, since 2010 ACS adopted this model to broader its impact internationally. It includes training prior to the event using the model "Train the trainers" for those who will work as volunteers, manual for volunteer, manual for outreach coordinator and flash cards for participants.

Each event reaches out from 300 up to thousands of children and students.

- Ongoing event in Puerto Rico since 2005 (National Chemistry Week and Chemists Celebrate Earth Week)
- "29<sup>th</sup> Congreso Latinoamericano de Química (CLAQ 2010)", Cartagena, Colombia, September, 2010
- "IUPAC World Congress", San Juan, Puerto Rico, July, 2011.
- "30<sup>th</sup> Congreso Latinoamericano de Química (CLAQ 2012)", Cancún, México, October, 2012.
- "Open House" Universidad de los Andes, Bogotá, Colombia, September, 2013.
- "Semana Nacional de la Ciencia y la Tecnología" by CONICYT (Consejo Nacional de Ciencia y Tecnología); Pontificia Universidad Católica de Chile, Santiago, October, 2013.
- "Open House" at the Universidad de Concepción, Concepción, Chile, October, 2013.
- "Chinese Chemical Society Meeting", Beijing, China, August 2014.
- "Chinese Chemical Society Meeting", Dalian, China, July 2016.
- Outreach event sponsored by Ministry of Education, Panamá, December 2016.
- Outreach event sponsored by Malaysia ACS Chapter, February 2017
- Outreach event sponsored by American University of Sharjah 2018

- Outreach event sponsored by Cayetano Heredia University, Lima, Perú 2019

## **Festival Training Institutes**

Dalian, China, July 2016  
Panamá, November 2016  
Kuala Lumpur, Malaysia, February 2017  
Sharjah, United Arab Emirates, April 2018  
Lima, Perú, June 2019  
Jamaica, Summer 2020 (virtual)

## **Refereed Publications**

Frankie Wood-Black, Michael B. Blayney, Marc Reid, Ingrid Montes, Alaa Eldin Bayoumi, Lawrence Sloan, Jacob O. Rothbaum, Masoumeh Foroutan Koudehi, Ramin Zibaseresht, and Laura Bancroft "Highlights: Multilingual Safety Resources, Pd-Catalyzed Cross-Coupling Reactions, Ethylene Glycol Purification, and More" *ACS Chem. Health Saf.* 2020, 27, 313-315.

Sara M. Delgado Rivera, Jean C. González Espiet, Jesús M. Dones, Sebastián A. Henríquez López, Ana R. Guadalupe, Dalice M. Piñero, Cruz and Ingrid Montes González "Crystal structure of 1-ferrocenyl-2-(4-nitrophenyl)ethyne" *Acta Cryst.* 2020, E76, 1403–1406.

Montes-Gonzalez, I.; Alsina-Sanchez, A. M.; Aponte-Santini, J. C.; Delgado-Rivera, S. M.; Duran-Camacho, G. L. Perspectives of Ferrocenyl Chalcones: Synthetic Scaffolds Toward Biomedical and Materials Science Applications. *Pure Appl. Chem.* 2019, 91, 653-669.

Sara M. Delgado-Rivera, Giovanni E. Pérez-Ortiz, Andrés Molina-Villarino, Fabiel Morales-Fontán, Lyannis M. García-Santos, Alma M. González-Albó, Ana R. Guadalupe, Ingrid Montes-González "Synthesis and characterization of novel ferrocenyl chalcone ammonium and pyridinium salt derivatives" *Inorg. Chim. Acta*; 2017, <http://dx.doi.org/10.1016/j.ica.2017.07.050>.

Myrna Otaño, Kennett Rivero and Ingrid Montes "(E)-1-Ferrocenyl-3-(2-methoxyphenyl)prop-2-en-1-one" *Acta Cryst.*, 2014, E70, m108–m109.

Ana Guadalupe, Rocío Cardona, Kenneth Hernandez, Laura Pedro, Myrna Otaño, and Ingrid Montes "Electrochemical and Spectroscopical Characterization of Ferrocenyl Chalcones" *Journal of The Electrochemical Society*, 2010, 157, 104-110.

I. Montes, D Sanabria Ríos "Assessment of Organic Inquiry-Based Laboratory Experiences Targeting Different Learning Styles: Ethnographic Study" *The Chemical Educator*, 2010, 15, 79–89.

- I. Montes, J. Cintron-Maldonado, I. Pérez, V. Montes-Berrios and S. Román "A sticky situation: dissolving chewing gum with chocolate" *J. Chem. Ed.*, 2010, 87, 396-397.
- I. Montes, E. Valentín, W. Adam, "Counterion Effects in the Nucleophilic Substitution Reaction of the Acetate Ion with Alkyl Bromides in the Synthesis of Esters" *J. Chem. Ed.*, 2009, 86, 1315-1318.
- I. Montes, A. Padilla, A. Maldonado, S. Negretti\_" Student-Centered Use of Case Studies Incorporating Oral and Writing Skills To Explore Scientific Ethical Misconduct" *J. Chem. Ed.*, 2009, 86, 936-939.
- I. Montes, C. Lai "Hey; Where did it go? A Guided Inquiry Experiment for the Organic Chemistry" *The Chemical Educator*, 2007, 12, 175-176.
- I. Montes J. Jankowski "Celebrating 20 Years of National Chemistry Week" *J. Chem. Ed.*, **2007**, 84, 1092.
- I. Montes, D Sanabria Ríos, J. Fajardo, M. García, J. Castro "A Greener Approach to Aspirin Synthesis Using Microwave Irradiation" *J. Chem. Ed.*, 2006, 83, 628-631.
- I. Montes and C. Collazo, "ACS Student Affiliates Chapters-More than Just a Chemistry Club" *J. Chem. Ed.*, 2003, 10,1151-52.
- I. Montes, C. Lai and D. Sanabria, "Like Dissolves Like" *J. Chem. Ed.* 2003, 80, 447- 449.
- I. Montes, José A. Prieto, Marilyn García, "Using Molecular Modeling in the Organic Chemistry Course for Majors" *Journal of Chemical Educator*, 2002, 7, 293-296.
- H. Zhou. C. Lai and I. Montes, "Crystal structure of 1,5-bis(2-methoxyphenyl)-1,4-pentadien-3-one, C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>", *Z. Kristallogr. NCS* 214 (1999) 53-54.
- G. L. Larson, I. Montes and L. Rodríguez, "Alpha Diphenylmethylsilylation of Ester Enolates: 2-Methyl-2-undecene from Ethyl Decanoate", *Organic Synthesis*, 67, 125-131 (1989).
- G. L. Larson, I Montes, A. Santiago, "A Synthesis of 2,2- Ethylenedioxy -6-Ketones". *Synthetic Communication* 16, 697 (1986).
- G. L. Larson, I. Montes, A. Santiago, "A Synthesis of 2,2,-Ethylenedioxy-5- Ketones". *Synthetic Communication* 16, 705 (1986).
- G. L. Larson, D. Hernández, I. Montes, L. Torres, "Reaction of  $\alpha$ -(Diphenylmethylsilyl) esters with Grignard Reagents: A Direct, Two-Step Synthesis of Ketones from Esters", *The Journal of Organic Chemistry*, 50, 5258 (1985).

G. L. Larson, I. Montes, L. Torres, "An Efficient Synthesis of  $\beta$  Ketosilanes", *Tetrahedron Lett.*, 25, 1673-1676 (1984).

---

### **Book Chapters**

Counterion Effects in the Nucleophilic Substitution Reaction of the Acetate Ion with Alkyl Bromides in the Synthesis of Esters, Ingrid Montes, Elizabeth Valentín and Waldemar Adam

*Comprehensive Organic Chemistry Experiments for the Laboratory Classroom*, Royal Society of Chemistry, London, UK pages 68-71 (ISBN: 978-1849739634).

Chapter 5: Sowing the seeds of chemistry through Student Chapters: A journey full of commitment, enthusiasm and passion, Ingrid Montes "Building and Maintaining Award-Winning ACS Student Member Chapters Volume 1: Holistic Viewpoints.", ACS Symposium Series 1229.

Mother and Chemist: Every pitfall is an opportunity to rise with a new beginning  
Ingrid Montes

*Mom the Chemistry Professor*, 2018, 2nd ed, Springer International Publishing, , Switzerland (ISBN 978-3-319-78971-2).

Hispanic Role Models in Science: Advice for Future Scientists, Paola Mina Osorio 2021, (ISBN 978-1735172866).

### **Laboratory Manuals**

Ingrid Montes, Alejandro Burgos-Suazo, Sara M. Delgado Rivera, Johanna Fajardo Tolentino, José A. Méndez-Román, David J. Sanabria Ríos *Experimentos para el Laboratorio de Química Orgánica*, 2021, Publicaciones Puertorriqueñas Inc., San Juan, Puerto Rico, (ISBN 978-162537-03-2 edición digital).

I. Montes, P. González *Experiencias para el Laboratorio de Química Orgánica*, Pearson Custom Publishing, First edition 2003, Second edition 2005, Third edition, 2010. (ISBN 053684710X 9780536847102)

I. Montes, *Teaching Assistant Manual*, University of P.R., Río Piedras Campus, August 1992.

A. Rodríguez, I. Montes, E. Danielsen, J. Bonilla, *Safety Laboratory Manual*, University of Puerto Rico, Río Piedras Campus, August 1991.

I. Montes, *Laboratory Manual of General Chemistry*, PR Junior College, August 1988.

A. Martí, *Laboratory Manual of Biochemistry*, College of Pharmacy, University of Puerto Rico, 1984. Revised by I. Montes in March 1986.

P.I. Chavez, I. Montes, M. Sidhom, *Laboratory Manual of Drug Analysis*, University of Puerto Rico, College of Pharmacy, March 1986.

---

### **Non-Refereed Publications**

Our challenge: Increase the diversity of the chemistry pipeline, *Chemical & Engineering News*, November 29, 2021.

Strengthening partnerships with our sister societies, *Chemical & Engineering News*, October 6, 2020.

Communication, Collaboration, and Cooperation: three key elements for globalization, Ingrid Montes, *Chemical & Engineering News*, 97(30), July 29, 2019.

Effect of counterions on the antioxidant activity of ferrocenyl chalcone salt derivatives, Díaz-Rohena, D.; Delgado-Rivera, S.; Baerga, A.; Piñero, D.; Montes, I. *Revista Informativa del Programa de Estudios de Honor*, : Honores. Universidad de Puerto Rico: Río Piedras, PR. pags. 29-31

<http://preh.uprrp.edu/wp-content/uploads/2019/07/HONORES-1ra-Edicion-RevJuly2.pdf>

Embracing everyone's uniqueness to develop a more inclusive culture, Ingrid Montes, *Chemical & Engineering News*, 96(44), November 5, 2018.

Diversifying ACS's membership demographics, Ingrid Montes, *Chemical & Engineering News*, 95(29), July 17, 2017.

Balancing the global equation for women in STEM, Ingrid Montes, *Chemical & Engineering News*, 94(28), July 11, 2016.

The American Chemical Society and its Spanish resources, Ingrid Montes, *Chemical & Engineering News*, 93(45), November 16, 2015.

10 Years Of Growth For The Festival De Química, Ingrid Montes, *Chemical & Engineering News*, 93(2), January 12, 2015.

Offer Your Service-The Benefits Are Endless, Ingrid Montes, Chair, Committee on Community Activities *Chemical & Engineering News*, 87(44), June 22, 2009.

Official Reports from the Philadelphia Meeting *Chemical & Engineering News*, 86(44), November 3, 2008.

NCW, Chemists Celebrate Earth Day, And The Importance Of Outreach, Ingrid Montes, Chair, Committee on Community Activities *Chemical & Engineering News*, 86(43), October 27, 2008.

Official Reports from the New Orleans Meeting *Chemical & Engineering News*, 86(25), June 23, 2008.

'The Many Faces of Chemistry', Ingrid Montes, Chair, Committee on Community Activities *Chemical & Engineering News*, 85(43), October 22, 2007.

I. Montes, "El Uso de la Tecnología de las Telecomunicaciones en el Programa de Multimedia Interactivos para el Desarrollo de Destrezas en el Curso de Química Orgánica de la UPR", *Tecne*, Vol. 1 #2, 17 (1995).

---

### **Invited Presentations**

Synthesis, characterization and exploration of potential biological activity of ferrocenyl derivatives, ACS Rocky Mountain Regional Meeting, October 21, 2021.

An overview of Ferrocene derivatives: synthesis, characterization, and potential applications, XIII edition of the International School of Organometallic Chemistry (ISOC 2021 web edition), September 3, 2021.

Will the gender gap in STEM narrow or increase after the COVID 19 pandemic?, ACS Fall National Meeting, Atlanta, GA, August, 2021.

The power of mentoring underrepresented students, Great Lakes Regional ACS meeting. June 10, 2021.

¿Qué significa la UPR para ti? panel" (virtual), June 17, 2021.

Montes-González, Ingrid & ACS Student Chapter, Chemical Demonstration Show "The Magic of Chemistry" Amgen Bioscience STEM (B-STEM) Summit, Amgen & Museo EcoExploratorio, (virtual), April 29, 2021

El Poder de la Mujer en las Ciencias, (virtual), April 15, 2021.

Entre Café y Memorias: Eminencias de la Ciencia, American Chemical Society



Student Chapter Facultad de Química, Universidad Autónoma de México, (virtual), March 9, 2021.

Webinar American Chemical Society- "Women in STEM panel" (virtual), March 8, 2021.

Synthesis, Characterization, and Multiple Applications of Ferrocenyl Derivatives, Department of Chemistry UPR-RP, (virtual), February 17, 2021.

Mujeres Portavoces en STEM, C3Tec, (virtual), 13 de febrero 2021.

Keynote Speaker, Webinar: Empowering Diversity in STEM: Actions to be taken, IUPAC and the International Younger Chemists Eastern US Partnership, (virtual), February 9, 2021

El Teatro Invita, Teatro de la Universidad, 27 de enero, 2021.

" Webinar: Empowering Diversity in Science" , IUPAC and the International Younger Chemists Network (virtual), December 9 2020

" Germinando la química en las semillas del futuro (Virtual Workshop)", Ciencia PR, October, 2020.

Synthesis, Characterization, and Multiple Applications of Ferrocenyl Derivatives, Keynote speaker 2020 Herty Awardee, Georgia ACS Local Section, September 14, 2020.

Biografía de las Ciencias, ACS-PR Facebook Live, September, 2020.

Entrevista a científicos, PR Observatory Facebook Live, September, 2020.

American Chemical Society Festival Training Institute, (virtual), June-September 2020.

Webinar American Chemical Society- (virtual), June, 2020.

"Demostraciones de la Magia de la Química", Montes-González, Ingrid Universidad de los Andes, Bogotá, Colombia, December 2019.

"Inspiring future generation through inclusiveness", Montes-González, Ingrid, Pacific Northwest Laboratory, Washington, September 2019.

"Panel Cientificas Borinqueñas al Programa Semillas de Triunfo-Ciencia PR", Montes-González, Ingrid, San Juan, Puerto Rico, August 2019.

"Taller: Etica en las ciencias", Montes-González, Ingrid, Orientación de estudiantes

graduados de nuevo ingreso, University of Puerto Rico, Río Piedras, August 2019.

"Simposio Conmemoración de los 150 Años de la Tabla Periódica de los Elementos, Historia, Presente y Perspectiva Futura", Montes-González, Ingrid, PR Chem, Río Grande, Puerto Rico, August 2019.

, Webinar American Chemical Society- "Introduction and History of ACS Outreach.", Montes-González, Ingrid, July, 2019.

American Chemical Society Festival Training Institute, Montes-González, Ingrid, Lima, Perú, June 2019.

Bridging Career Gaps Through Networks, Montes-González, Ingrid, Central Regional Meeting, Midland, MI, June 2019.

"Diversity and Inclusion: it's everyone responsibility", Montes-González, I. Seminar at Case Western University, Ohio, April, 2019.

Panelist Symposium: Women in Science and Technology, Colegio de Física Fundamental e Interdisciplinaria de las Américas, San Juan, PR, March 2019.

Virtual Panelist: "Empowering Women in Chemistry: A Global Networking Event," Montes, I., February 12, 2019.

"Diversidad e inclusión" – Progreso hacia una cultura de respeto", Campos-Seijo, B.; Montes-González, I. American Chemical Society-Spanish Webminar Series, February, 2019.

"Global perception of Hispanic scientists: personal view of overcoming cultural, personal and professional obstacles", Southeast Regional Meeting, American Chemical Society, Augusta, AL November, 2018.

"Project SEED in Puerto Rico: A successful Model", Southeast Regional Meeting, American Chemical Society, Augusta, AL November, 2018.

"Festival de Química" a successful model to connect the value and impact of chemistry with our daily lives, 33 Congreso Latinoamericano de Química, Habana, Cuba, October, 2018.

"Diversity and inclusion: Let's embrace people's uniqueness", PR Chem, San Juan, Puerto Rico, August 2018.

"Mother and Chemist: Every pitfall is an opportunity to rise with a new beginning",

256th American Chemical Society National Meeting, Boston, MA, August, 2018.

Panelist: Future of the Chemical Sciences "How can we improve the gender parity in academia? Is diversity in industry also an issue? What sort of positive action can we take today to ensure a more diverse academic and industry workforce?", 46th IUPAC World Chemistry Congress, São Paulo, SP – Brazil, July 2017.

Panelist: How has chemistry enabled changes and improvements vs the sustainable development goals? What are some best practices that we, as chemists, could follow to improve our world? What is needed to grow these efforts? 46th IUPAC World Chemistry Congress, São Paulo, SP – Brazil, July 2017.

Diversity and inclusion: The art of embracing everyone uniqueness, Middle Atlantic Regional Meeting (MARM), Hershey, PA, June 2017.

"Festival de Química" a successful model to communicate the value and impact of chemistry to local communities, 253<sup>rd</sup> ACS Spring National Meeting, San Francisco, CA, April, 2017.

Balancing the global equation for women in STEM, University of Puerto Rico-Cayey Campus, Puerto Rico, January, 2017.

Perspectiva para la formación integral del profesional de la química, PR Chem, San Juan, Puerto Rico, August 2016.

Historical Challenges for Women in STEM, PR Chem, San Juan, Puerto Rico, August 2016

Ongoing challenges for Hispanic Women, Women in Chemistry: Changing the Face of Science Symposium, PacificChem, Honolulu, Hawaii, December 2015.

"Festival de Química" a successful international non-formal educational model, Chemistry Education: International and Multicultural Perspectives Symposium, PacificChem, Honolulu, Hawaii, December 2015.

Synthesis, Characterization and Biological applications of ferrocenyl chalcones 13<sup>th</sup> Raymond N. Castle Conference, University of South Florida, Tampa, USA, April 2015.

Climate Science Toolkit: A successful project in Puerto Rico, Sara Delgado-Rivera | Maria Rodriguez Guzman; Ingrid Montes-González, 249<sup>th</sup> ACS National Meeting,

Denver, CO, March 25, 2015.

Ferrocenyl Chalcones: A versatile core, Universidad de Concepción, Concepción, Chile, October 2013.

Synthesis and applications of Ferrocenyl Chalcones, Pontificia Universidad Católica, Santiago, Chile, October 2013.

The versatility of Ferrocenyl Chalcones core, Universidad de los Andes, Bogotá, Colombia, September 2013.

Are there any particular challenges faced by women in STEM fields? ADVANCE Networking of Hispanic Women in STEM, San Juan, Puerto Rico, October 2012.

Química Verde -nuestro compromiso, nuestro futuro Universidad Jorge Tadeo Lozano, Bogotá, Colombia, November 2011.

Hispanic Women Underrepresentation in STEM Fields, 241<sup>st</sup> ACS National Meeting, Anaheim, CA, March 2011.

Life Stories and Educational Techniques: How to Motivate Students to Become Successful Scientists, at the Universidad Tecnológica de Bolívar, Colombia, September 2010.

Hispanic women: How to rise above challenges and move forward? Presidential Symposium: Women Chemists of Color: Staying at the Table Symposium, 240<sup>th</sup> ACS National Meeting, Boston, August 2010

Teaching Green Chemistry in the Organic Chemistry Course, Symposium: Sustainability across the Chemistry Curriculum: Green Chemistry and Beyond, 236<sup>th</sup> ACS National Meeting, Philadelphia, Pen, August 2008

New Directions in Teaching Organic Chemistry: An Inquiry-Based Approach. An International Conference on "New Directions in Teaching, Learning and Evaluation of Chemical Sciences at Tertiary Level" at Sri Lanka (SPONSORED BY IUPAC), March 2006.

Inquiry-Based Approach for Teaching Organic Chemistry- Ingrid Montes- "Active Learning in Organic Chemistry Symposium"-University of Puerto Rico-Cayey Campus, November, 2005

Chemical Demonstration Show at Festival de Química, 229<sup>th</sup> ACS National Meeting, San Diego, CA, Marzo 2005.

¿Cómo ha ido cambiando la percepción de la importancia del rol de la mujer en la química?, Ingrid Montes, UPR-Aguadilla, October 2004, Aguadilla, PR

Teaching Organic Chemistry: An Instruction, Practice and Research Experience, Primer Encuentro de Estudiantes de Química, UPR-Río Piedras, April 2003

Teaching Organic Laboratory Techniques Using The Guided Inquiry Learning Approach, Ingrid Montes 17<sup>th</sup> Biennial Conference on Chemical Education, Western Washington Univ., Bellingham, Washington, July 2002

ACS student affiliates chapters: an alternative to mentoring programs, as part of the symposium "Mentoring: A Strategic Tool for Professional Development", 223<sup>rd</sup> ACS National Meeting, Orlando, March 2002, Mentoring Symposium.

Leveraging Your Opportunities for Leadership, 223<sup>rd</sup> ACS National Meeting, Orlando, March 2002, Panelist.

A Collage Of New Alternatives For Teaching Organic Chemistry, Ingrid Montes, 6<sup>th</sup> UNCW Symposium on Chemistry and Biochemistry, NC Wilmington, January 2002.

"New Alternatives For Teaching Organic Chemistry Using Active Learning Approach". Ingrid Montes\*, Chunqiu Lai, H. Zhou, Zhiqin Ji, Zaida Diaz, Marilyn García, Margarita Melendez And Humberto Rodriguez, University of Puerto Rico, Mayaguez Campus, May 2000.

"New Alternatives To Teach Organic Chemistry Laboratory Using Guided Inquiry Learning Approach", Ingrid Montes, Chunqiu Lai And Margarita Meléndez University of Puerto Rico, Humacao, February 2000.

"The Organic Chemistry Course For Majors, As Experience Of Active Learning", Ingrid Montes, José A. Prieto and Humberto Rodríguez, 16<sup>th</sup> Chemistry Conference, Santiago, Cuba, December 1999.

"Can We Teach Organic Chemistry Laboratories Using Guided Inquiry Learning Approach?", Ingrid Montes, Chunqiu Lai, and Margarita Meléndez, 16<sup>th</sup> Chemistry Conference, Santiago, Cuba, December 1999.

"Nuevas Experiencias de Laboratorio para el curso de Química Orgánica", I. Montes, Seminar Speaker, Metropolitan University of Puerto Rico, April 1999.

"El curso de Química Orgánica: Una experiencia de Aprendizaje Activo", I. Montes, Seminar Speaker, Pontifical Catholic University of Puerto Rico, September 1997.

"Interactive Computer Modules as Teaching Aids", I. Montes, Seminar Speaker, University of Wisconsin, Madison, Madison, Wisconsin, August 1995.

## Presentations at Meetings/Conferences

"Distributed Drug Discovery (D3) Synthesis and Testing of Multiple Unnatural Dipeptides Identifies a Subset with Potent Antimicrobial Activity against *Pseudomonas aeruginosa* (Pa)" William L. Scott,\*<sup>a</sup> Martin J. O'Donnell,<sup>a</sup> J. Geno Samaritoni,<sup>a</sup> Kathy Marrs,<sup>a</sup> Gregory G. Anderson,<sup>a</sup> Amy B. Dounay,<sup>b</sup> Amelia A. Fuller,<sup>c</sup> Luis Miranda,<sup>d</sup> Ingrid Montes,<sup>e</sup> Guillermo Morales,<sup>f</sup> Doug Schirch,<sup>g</sup> Kevin Sullivan<sup>h</sup>  
<sup>a</sup>Indiana University Purdue University Indianapolis (IUPUI), <sup>b</sup>Colorado College, <sup>c</sup>Santa Clara University, <sup>d</sup>Universidad Nacional Autónoma de México, <sup>e</sup>University of Puerto Rico, <sup>f</sup>Innoventyx, <sup>g</sup>Goshen College, <sup>h</sup>University of Indianapolis, Peptide Therapeutics Symposium, La Jolla California, Oct, 2019.

"Festival de Química" a successful model to communicate chemistry Ingrid Montes, Ph.D. IUPAC International Conference on Chemical Education, Toronto, Canada, July 2014.

"Fostering Green Chemistry through a Capstone Course", Richard Rivera and Ingrid Montes, Ph.D. 244<sup>th</sup> ACS National Meeting, Philadelphia, August 2012.

"El curso de Química Orgánica: Una experiencia de enseñanza y aprendizaje integral e innovadora", Ingrid Montes Conferencia Innovación y Cambio en la Educación Superior, UPR-Río Piedras Campus, February 2009.

"Development of Laboratory Video Clips and Modules for the Organic Chemistry Course", Ingrid Montes, Patricia González and Diana L. Santiago, 26<sup>th</sup> ACS Senior Technical Meeting, San Juan, P.R., August 2002.

"Teaching Organic Laboratory Techniques Using the Guided Inquiry Learning Approach" BCCE, Ingrid Montes, Washington, July 2002.

"Active Learning Approach: A New Alternative For Teaching Organic Chemistry", I. Montes, C. Lai, H. Zhou, Z. Ji, Z. Diaz, M. García, A. Maldonado, M. Meléndez and D. Sanabria, 25<sup>th</sup> ACS Senior Technical Meeting, San Juan, P.R., November 2001.

"New Alternatives for Teaching Organic Laboratory Techniques Using The Guided Inquiry Learning Approach". Ingrid Montes, M. García, C. Lai, A. Maldonado, M. Meléndez and D. Sanabria, CETP Conference, Puerto Rico, November 2001.

"Active Learning Approach: A New Alternative For Teaching Organic Chemistry", I. Montes, C. Lai, H. Zhou, Z. Ji, Z. Diaz, M. García, A. Maldonado, M. Melendez and H. Rodriguez, 4<sup>to</sup> Congreso Internacional de Química, 222<sup>th</sup> ACS National Meeting, Chicago, August 2001.

"Kids & Chemistry Workshop". I. Montes and A. Benett, 4<sup>to</sup> Congreso Internacional de

Química, La Habana, Cuba, April 2001.

"Active Learning Approach: A New Alternative For Teaching Organic Chemistry", I. Montes\*, C. Lai, H. Zhou, Z. Ji, Z. Diaz, M. García, A. Maldonado, M. Melendez and H. Rodriguez, 4<sup>to</sup> Congreso Internacional de Química, La Habana, Cuba, April 2001.

"New Alternatives For Teaching Organic Laboratory Techniques Using The Guided Inquiry Learning Approach". Ingrid Montes, Chunqiu Lai and Margarita Meléndez, First ACS Pan American Conference, Puerto Rico, June 2000.

"The Use Of Technology In The Organic Chemistry Course For Majors", Ingrid Montes, Marilyn García, Humberto Rodríguez, 1st Fair of Technology UPR-RP, April, 2000.

"New Alternatives To Teach Organic Chemistry Laboratory Techniques Using Guided Inquiry Learning Approach", Ingrid Montes, Chunqiu Lai and Margarita Meléndez, 219<sup>th</sup> ACS National Meeting, San Francisco, March 2000.

"Can We Teach Organic Chemistry Laboratory Techniques Using Guided Inquiry Learning Approach?", Ingrid Montes, Chunqiu Lai, and Margarita Meléndez, 23<sup>th</sup> ACS Senior Technical Meeting, Humacao, P.R., November 1999.

"A New Systematic Study Of The Grignard Reaction Focused On The Guided Inquiry Approach", Margarita Meléndez, Zaida Díaz and Ingrid Montes, 218<sup>th</sup> ACS National Meeting, New Orleans, August 1999.

"New Organic Chemistry Laboratory Experiences Focused On The Problem Based Learning Approach", Ingrid Montes, Chunqiu Lai, Zaida Díaz and Margarita Meléndez, 217<sup>th</sup> ACS National Meeting, Anaheim, California, March 1999.

"New Organic Chemistry Laboratory Experiences Focused On The Problem Based Learning Approach", Ingrid Montes, Chunqiu Lai, Zaida Díaz And Margarita Meléndez, 22<sup>th</sup> ACS Senior Technical Meeting, Aguadilla, P.R., November 1998.

"The Organic Chemistry Laboratory: An Experience of Active Learning", Chunqiu Lai, I. Montes and Helena Rivera, Congreso Latinoamericano, P.R., July 1998.

"Success Stories in Science Education", I. Montes and G. Escalona, 7<sup>th</sup> Annual Quality Education for Minorities, Mathematics, Science, and Engineering Network Conference, Washington U.S.A., February, 1998.

"The Organic Chemistry course for majors: An experience of Active Learning", I. Montes and J. Prieto, 21<sup>st</sup> ACS Senior Technical Meeting, Lajas, P.R., November 1997.

"New Approach for the Organic Chemistry Laboratory", I. Montes, Chunqiu Lai and Helena Rivera, 21<sup>st</sup> ACS Senior Technical Meeting, Lajas, P.R., November 1997.

"Improving the Chemistry Teaching and Learning Experience at the Department of

Chemistry, Río Piedras", I. Montes, R. Morales, Symposium: Shaping the future of Undergraduate education and the role of University, Industry and government in the development of human Resources, San Juan, September 1997.

"ACS Student Chapters at the University of Puerto Rico, Río Piedras Campus", C. Bosques, I. Montes, 213<sup>th</sup> ACS National Meeting, San Francisco, California, April 1997.

"A Bachelor for the New Millennium" ACS Student Chapters, G. Tejada, Celia Maldonado and Eladio Rivera, I. Montes, 213<sup>th</sup> ACS National Meeting, San Francisco, California, April 1997.

"Improving the Chemistry Teaching and Learning Experience at the Department of Chemistry, Río Piedras", Morales R., Arce, J., Betancourt R., Cordero N., Danielsen E., González P., Montes I., Motta N., 4<sup>th</sup> Annual PR-AMP Meeting of Chemistry Professors, San Juan, PR, February 1997.

"Different Alternatives for the Organic Chemistry Laboratory", I. Montes, 20<sup>th</sup> ACS Senior Technical Meeting, San Juan, P.R., November 1996.

"The Use of Computer Technologies in Organic Chemistry", I. Montes, P. González, N. Cordero, R. Betancourt, T. Mendoza and A. Caraballo, 20<sup>th</sup> ACS Senior Technical Meeting, San Juan, P.R., November 1996.

"Promoting an Active Learning Experience in the Organic Chemistry Laboratory", P. González and Ingrid Montes, 24<sup>th</sup> ACS Senior Technical Meeting, La Parguera, P.R., November 1995.

"A Graduate Dean's Support of Effective Teaching Assistant Training Programs", E. Ríos, I. Montes and E. Danielsen, 5<sup>th</sup> National Conference on the Education and Employment of Graduate Teaching Assistants, Denver, Colorado, November 1995.

"Interactive Computer Modules as Teaching Aids for Spanish Speaking Students in Organic Chemistry", I. Montes, P. González, N. Cordero, R. Betancourt and T. Mendoza, 3<sup>rd</sup> Pan American Chemical Congress, San Juan, P.R., September 1995.

"ACS Student Chapters, Abroad Spectrum of Possibilities", R. Delgado, I. Montes, 209<sup>th</sup> ACS National Meeting, Anaheim, California, April 1995.

"An Interactive Computer Approach to Develop Problem-Solving Skills for Organic Chemistry Students", I. Montes, N. Cordero, P. González, 209<sup>th</sup> ACS National Meeting, Anaheim California, April 1995.

"Using Interactive Multimedia to Help Organic Chemistry Students to Develop Problem-Solving Skills", I. Montes, T. Mendoza, Second Symposium of Interactive Multimedia, Interamerican University, San Juan, P.R., March 1995.

"Using Interactive Computer Modules to Develop Problem Solving Skills in Organic



Chemistry", 18<sup>th</sup> Senior Technical Meeting, Aguadilla, P.R., November 1994.

"Hazardous Material Management", I. Montes, Association of Science Teachers San Juan, PR, February 1994.

"ACS Student Chapters as Promoters of Chemistry Awareness and Agents to Attract Students to the Field", R. Delgado, I. Montes, R. Betancourt, ACS National Meeting, April 1994.

"Teaching Assistant Training", I. Montes, University of Puerto Rico, Río Piedras, Puerto Rico, August 1991 and 1992.

"Microchemistry", I. Montes, Science Teacher Association Convention, San Juan, Puerto Rico, April 1991.

"Teaching Assistant Training", I. Montes, University of Puerto Rico, Río Piedras, Puerto Rico August 1990.

"Facile Synthesis of Monoprotected 1,4 and 1,5 Diketones", G. L. Larson, A. Santiago, I. Montes First Pan American Chemical Congress, San Juan, Puerto Rico, October 1985.

"Alpha-Silyl Esters in Synthesis", G. L. Larson, I. Montes, V. Cruz, L. E. Torres, ACS 189<sup>th</sup> National Meeting, Miami, Florida, April 1985.

"Alpha-Silyl Esters in Synthesis", G. L. Larson, I. Montes, 8<sup>th</sup> Annual Senior Technical Meeting, American Chemical Society Puerto Rico Section, San Juan, Puerto Rico, December 1984.

"Alpha-Silyl Esters in Synthesis", I. Montes, University of Puerto Rico, Río Piedras, Puerto Rico, December 3, 1984.

"Synthesis of Monoprotected 1,4, and 1,5 diketones", G. L. Larson, Angel Santiago, I. Montes, 8<sup>th</sup> Annual Senior Technical Meeting, American Chemical Society, Puerto Rico Section, San Juan, Puerto Rico, December 1984.

"Direct Synthesis of  $\alpha$ -Silyl Ketones and Ketones from Silyl Esters", G. L. Larson, I. Montes, D. Hernández, L. Torres, ACS 187<sup>th</sup> National Meeting, St. Louis, Missouri, April 1984.

"Synthesis of Substituted Olefins and  $\alpha$ -Silyl Ketones from  $\alpha$ -Silyl Esters", G. L. Larson, I. Montes, D. Hernández 7<sup>th</sup> Annual Senior Technical Meeting, ACS Puerto Rico section, Mayagüez, Puerto Rico, December 1983.

"La Conversión de Lactonas a Dihidrofuranos; Cetonas 1,4 y Ciclopentenonas", G. L. Larson, E. Pérez, I. Montes, 18<sup>th</sup> ACS Junior Technical Meeting, Ponce, Puerto Rico, April 1983.

"Lactones to Dihydrofurans and diketones", G. L. Larson, I. Montes, XV Congreso Latinoamericano de Química, Centro de Convenciones, San Juan, Puerto Rico, October 1982.

"The Conversion of d-Valerolactones to 1,4-Diketones and Cyclopentenones", G. L. Larson, I. Montes, 6<sup>th</sup> Annual Senior Technical Meeting, American Chemical Society, Puerto Rico Section, San Juan, Puerto Rico, December 1981.

"Synthesis of  $\alpha$ -Functionalized Organosilanes", G. Larson, I. Montes, XV Junior Technical Meeting, Ponce, Puerto Rico, April 1980.

"Synthesis and Reactions of  $\alpha$ -Carbo Functional Organosilanes", G. Larson, I. Montes, MBS Symposium, Atlanta, Georgia, April 1980.

"Synthesis of Functionalized Organosilanes", G. L. Larson, I. Montes, 4<sup>th</sup> Senior Technical Meeting, San Juan, Puerto Rico, December 1979.

"Reaction of  $\beta$ -Hydroxyorganosilanes", G. L. Larson, I. Montes, 14<sup>th</sup> Junior Technical Meeting, Río Piedras, Puerto Rico, April 1979.

---

### **Student's Presentations**

Synthesis, characterization and biological application of Adamantane Ferrocenyl Derivatives, Caraballo-Rodríguez, Delvin; Montes-González, Ingrid, Ph.D., 2021 Annual Biomedical Research Conference for Minority Students (ABRCMS)- virtual, November 13, 2021

Synthesis and Characterization of Ferrocenyl Derivatives for Applications in Materials Science, Alejandro Burgos-Suazo; Edwin Ortiz-Muñoz; Ingrid Montes-González, Ph.D.; Dalice Piñero-Cruz, Ph.D., 44th Senior Technical Meeting, November 15, 2021.

Synthesis, characterization and biological application of Adamantane Ferrocenyl Derivatives, Caraballo-Rodríguez, Delvin; Montes-González, Ingrid, Ph.D. 2021 Gulf Coast Undergraduate Research Symposium (GCURS) – Rice University, Texas, October 16, 2021.

Synthesis, characterization and biological application of Adamantane Ferrocenyl Derivatives, Caraballo-Rodríguez, Delvin; Montes-González, Ingrid, Ph.D., 2021 ACS Eastern US YCC Partnership Virtual Research Symposium and Chemistry Career Expo! August 4, 2021.

Synthesis Characterization, and Biological Activity Exploration of Furanyl Derivatives of Ferrocenyl Chalcones, Alemán Marrero, Paola & Montes-González, Ingrid April 23-24, 2021, JTM PRISM online.

Synthesis & Characterization of Ethynyl-Substituted Ferrocenyl Chalcones for Electrochemical and Biological Applications, Ortiz Muñoz, Edwin & Montes-González, Ingrid April 23-24, 2021, JTM PRISM online.

Synthesis, characterization, and biological applications of Adamantane Ferrocenyl Derivatives, Caraballo-Rodríguez, Delvin; Montes-González, Ingrid April 23-24, 2021, JTM PRISM online.

Synthesis and characterization of novel heterocyclic ferrocenyl chalcones, Alsina-Sánchez, Ámbar M.1; Bonilla-Crespo, Paola M. 1; Delgado-Rivera, Sara M.; Montes-González, Ingrid, ACS Spring Meeting, April 14, 2021 online.

Donepezil Ferrocenyl derivatives of acetylcholine esterase inhibitors for the treatment of Alzheimer's, Nieves-Santiago, Miguel A.; Delgado-Rivera, Sara M.; Baerga-Ortiz, Abel, PhD.; Montes-González, Ingrid, PhD. ACS Spring Meeting, April 14, 2021 (Online Poster Presentation).

Reinventing ourselves to fulfill the chapter's mission throughout the pandemic Aquino, Jean; Bonilla, Paola; Cantres, Alexander; Cedeño Moran, Alejandro; CruzBerríos, Melanie; De León-Rodríguez, Fabiola; Delgado-Vergara, Rafael A.; Díaz González, Karlie; Moreno, Maria; Sáez Santos, Fabiola A. and Montes, I, Ph.D. ACS Spring Meeting, April, 2021 (Online Poster Presentation).

Ferrocenyl derivatives with potential cholinergic effects, Nieves Santiago, Miguel A; Montes González, Ingrid; Delgado Rivera, Sara M; Baerga Ortiz, Abel J; Piñero Cruz, Dalice M, Noviembre 9-13 2020, ABRCMS online

Synthesis and Characterization of Ferrocenyl Derivatives as Photosensitizers for Dye Sensitized Solar Cells. Burgos-Suazo, A.; Ortiz-Muñoz, E.; Montes-González, I. SACNAS The National Diversity in STEM Conference, Virtual Conference, October 2020. Oral Presentation.

"Synthesis, Characterization and Biological activity of Ferrocenyl Furan Chalcone" Rodríguez-Rolón, Alondra S.; Delgado-Rivera, Sara M.; Baerga-Ortiz, Abel; Cabrera-Martínez, Carlos; Piñero Cruz, Dalice M.; and Montes González, Ingrid, PhD. SACNAS The National Diversity in STEM Virtual Conference, October 2020.

(Poster Presentation)

"Synthesis, Characterization and Biological Properties of Ferrocenyl Uracil Derivatives", Hernández Meléndez, José R.1; Delgado Rivera, Sara M.1; Baerga Ortiz, Abel, and Montes González, Ingrid, ACS Senior Technical Meeting, Mayaguez, PR, November 2019.

"Transforming tomorrow's society through the power of chemistry" Montes, Ingrid; Blanché Adán, Emilie; Bonilla Crespo, Paola; Burgos Caldero, Valeria; Cedeño Morán, Alejandro E.; Cruz-Berrios, Melanie; Díaz Rohena, Daisy Y.; Maldonado Ménez, José J.; Miranda, Glorimar; Rivera, Génesis; Rosario Rodríguez, Yarelis; Soto Biliboni, Ariadna; Sotomayor, Xaymara; Vázquez Marrero, Arianna, ACS Senior Technical Meeting, Mayaguez, PR, November 2019.

"Synthesis and Characterization of Ferrocene Derivatives as Photosensitizers for Dye Sensitized Solar Cells (DSSC)", Alejandro Burgos-Suazo and Ingrid Montes, PREM CIE2M site visit, November 2019

"Effect of counterions on the biological activity of ferrocenyl chalcone salt derivatives: Antioxidant activity" Díaz-Rohena, Daisy Y; Delgado-Rivera, Sara M; Piñero, Dalice; Baerga, Abel; Montes, Ingrid, Jr. Thesis dissertation, Programa de Estudios de Honor, UPR-RP, May 2019. (oral)

"Synthesis, Characterization and Biological Evaluation of Novel Ferrocenyl Naphthyridinium Salts Derivatives" Duran-Camacho, G. L.; Delgado-Rivera, S. M.; Baerga-Ortiz, A.; Montes-Gonzalez, I. 53rd Junior Technical Meeting and the 38<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (JTM/PRISM), Mayagüez, Puerto Rico. May, 2019. (oral)

"Structure-activity relationship of novel ferrocenyl chalcone salts: effect of counterions", Díaz-Rohena, Daisy; Delgado-Rivera, Sara; Piñero, Dalice; Baerga, Abel; Montes, Ingrid, 53rd Junior Technical Meeting and the 38<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (JTM/PRISM), Mayagüez, Puerto Rico, May, 2019. (oral)

"Ferrocenyl curcumin analogs as potential antioxidant and anticancer agents" Hernández-Meléndez, José R.; Delgado-Rivera, Sara M.; Piñero-Cruz, Dalice M.; Baerga-Ortiz, Abel; Sanabria-Ríos, David; Montes-González, Ingrid, 38th Puerto Rico Interdisciplinary Scientific Meeting 53rd ACS Junior Technical Meeting (PRISM/JTM), Mayagüez, PR, May, 2019. (oral)

"Synthesis and Characterization of Ferrocenyl Indanones" Henríquez López, Sebastián A.; Delgado Rivera, Sara M.; Baerga Ortiz, Abel, Ph.D.; Montes González, Ingrid Ph.D, 53rd Junior Technical Meeting and the 38<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (JTM/PRISM), Mayagüez, Puerto Rico, May 2019 (oral)

"Synthesis and Characterization of the Ferrocenyl Chalcones and Dicarbonyl derivatives" Rodríguez-Rolón, Alondra S.; Delgado-Rivera, Sara M.; Montes-González, Ingrid Ph.D, 53rd Junior Technical Meeting and the 38<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (JTM/PRISM), Mayagüez, Puerto Rico. (oral)

"Biological Activity of Ferrocenyl Derivatives: Study of the effect of different core moieties and substituents on anticancer and antioxidant activity" Delgado-Rivera, Sara, Hernández-López Sebastián; Pérez-Ortiz, Giovanni; Baerga-Ortíz, Abel, Ph.D.; Piñero-Cruz, Dalice, Ph.D, and Montes-González, Ingrid, Ph.D., 257<sup>th</sup> ACS Spring 2019 National Meeting & Expo, Orlando, FL, April 2019 (oral) and 2019 Lilly Academy Technical Forum, San Juan, PR, April 2019. (poster)

"Synthesis, Characterization and Biological Properties of Mono and Disubstituted Ferrocenyl Chalcones" Henríquez López, Sebastian A.; Delgado Rivera, Sara M.; Perez Ortiz, Giovanni E.; Baerga Ortiz, Abel, Ph.D. ; Piñero Cruz, Dalice M. Ph.D.; Montes González, Ingrid Ph.D; 257<sup>th</sup> ACS Spring 2019 National Meeting & Expo, Orlando, FL, April 2019 and 2019 Lilly Academy Technical Forum, San Juan, PR, April 2019. (poster)

"Selection of the optimal counterion of ferrocenyl chalcone salt derivatives to enhance their biological activity" Díaz-Rohena, Daisy; Delgado-Rivera, Sara; Piñero, Dalice; Baerga, Abel; Montes, Ingrid. 257<sup>th</sup> ACS Spring 2019 National Meeting & Expo, Orlando, FL, April 2019 and 2019 Lilly Academy Technical Forum, San Juan, PR, April 2019. (poster)

"Synthesis, Characterization and Biological Properties of Mono and Disubstituted Ferrocenyl Chalcones" Henríquez López, Sebastian A.; Delgado Rivera, Sara M.; Perez Ortiz, Giovanni E.; Baerga Ortiz, Abel, Ph.D. ; Piñero Cruz, Dalice M. Ph.D.; Montes González, Ingrid Ph.D, 257<sup>th</sup> ACS Spring 2019 National Meeting & Expo, Orlando, FL, April 2019 and 2019 Lilly Academy Technical Forum, San Juan, PR, April 2019. (poster)

"Synthesis, characterization and biological activity of ferrocenyl curcumin analogs" Hernández-Meléndez, José R.; Delgado-Rivera, Sara M.; Piñero-Cruz, Dalice M.; Baerga-Ortíz, Abel; Montes-González, Ingrid, 257<sup>th</sup> ACS National Meeting, Orlando, FL, April, 2019 and 2019 Lilly Academy Technical Forum, San Juan, PR, April, 2019. (poster)

"Heterocyclic Ferrocenyl Chalcone Salts Derivatives as Potential Anticancer and Antioxidant Candidates" Duran-Camacho, G. L.; Delgado-Rivera, S. M.; Baerga-Ortiz, A.; Montes-Gonzalez, I., 257<sup>th</sup> ACS National Meeting & Exposition, Orlando, Florida, March, 2019. (oral)

"Synthesis of  $\alpha$ -branched heterocyclic Ferrocenyl Chalcones" Rodríguez-Rolón, Alondra S.; Delgado-Rivera, Sara M.; Montes-González, Ingrid Ph.D, MARC Seminar, University of Puerto Rico Rio Piedras Campus. (oral)

"Effect of the counterion on the radical scavenging activity of ferrocenyl chalcone salt derivatives" Díaz-Rohena, Daisy; Delgado-Rivera, Sara; Piñero, Dalice; Baerga, Abel; Montes, Ingrid, Emerging Researchers National Conference, Washington D. C., February, 2019. (oral)

Thesis Proposal Defense: "Effect of counterions on the biological activity of ferrocenyl chalcone salt derivatives" Díaz-Rohena, Daisy; Delgado-Rivera, Sara; Montes, Ingrid. Programa de Estudios de Honor, UPR-RP, December, 2018.

"Synthesis and Characterization of Ferrocenyl Stilbene Derivatives in Aqueous Media" Delgado Rivera, Sara M.; Henríquez López, Sebastián A.; Baerga Ortiz, Abel, Ph.D.; Piñero Cruz, Dalice M., Ph.D.; and Montes González, Ingrid, Ph.D., 41st ACS Senior Technical Meeting, Guayanilla, PR, November 2018. (oral)

"Synthesis and Characterization of Mono and Disubstituted 4-acetamidophenyl and Pyridinyl Ferrocenyl Chalcones as Potential Antioxidants" Henríquez López, Sebastian A.; Delgado Rivera, Sara M.; Perez Ortiz, Giovanni E.; Baerga Ortiz, Abel, Ph.D. ; Piñero Cruz, Dalice M. Ph.D.; Montes González, Ingrid Ph.D, 41st Senior Technical Meeting, Guayanilla, Puerto Rico, November 2018. (poster)

"ONE YEAR PARTICIPATING OF PR-LSAMP: Enriching experiences leading my path as a holistic scientists" Díaz-Rohena, Daisy; Delgado-Rivera, Sara; Montes, Ingrid, PR-LSAMP Advisory Board Meeting, UPR-RP (September, 2018) (oral)

"Effect of Counterions on the biological activity of ferrocenyl chalcone salt derivatives" Díaz-Rohena, Daisy; Delgado-Rivera, Sara M.; Montes-González, Ingrid, PRISM / 52<sup>nd</sup> ACS Junior Technical Meeting, Universidad del Turabo, Puerto Rico, April 2018.

"Aminopyridines Ferrocenyl Chalcones as Potential Anticancer and Antioxidant Candidates" Duran-Camacho, Geraldo L; Delgado-Rivera, Sara M, MS.; Montes-González, Ingrid, PhD, PRISM / 52<sup>nd</sup> ACS Junior Technical Meeting, Pontifical Catholic Universidad del Turabo, Puerto Rico, April 2018.

"Aminopyridines ferrocenyl chalcones and other heterocyclic derivatives as potential anticancer and antioxidant candidates" Duran-Camacho, Geraldo L.; Delgado-Rivera, Sara M, MS.; Montes-González, Ingrid, PhD, ABRCMS Conference, Phoenix, AZ, November 2017.

"Novel synthesis of ferrocenyl epoxides derivatives to explore their biological potential as anticancer and antioxidant compounds" Dávila-Calderón, Jesse.; Montes-González, Ingrid, Ph.D.; Aponte-Santini, Juan C., 253<sup>rd</sup> ACS National Meeting, San Francisco, CA, April, 2017.

"Synthesis and characterization of heterocyclic ferrocenyl chalcones and their potential biological applications" Alsina-Sánchez, Ámbar M.<sup>1</sup>; Delgado-Rivera, Sara M.<sup>1</sup>; Montes-González, Ingrid<sup>1</sup>; Guadalupe-Quiñones, Ana R.<sup>1</sup>; Colón-Lorenzo, Emilee

E.2; Serrano-Brizuela, Adelfa E., ., 253rd ACS National Meeting, San Francisco, CA, April, 2017.

"Synthesis, characterization and biological applications of ferrocenyl curcumin analogs" Santiago, Xaimara.; Montes-González, Ingrid, Ph.D.; 253rd ACS National Meeting, San Francisco, CA, April, 2017.

"Ferrocenyl Chalcone Salt Derivatives: A study of their possible biological applications" Delgado-Rivera, Sara M.; Pérez-Ortiz, Giovanni E.; Morales-Lozada, Yermay; Montes-González, Ingrid; Guadalupe-Quiñones, Ana R.; Colón-Lorenzo, Emilee E.; Serrano-Brizuela, Adelfa E.; Sanabria-Ríos, David J.; Baerga-Ortiz, Abel, 253rd ACS National Meeting, San Francisco, CA, April, 2017.

"Advancing Ferrocenyl Derivatives Pharmacophores throughout the Incorporation of Heterocycles in their Scaffolds" Juan C. Aponte-Santini; Ingrid Montes-González, Ph.D.; Jesse Dávila-Calderón' David J. Sanabria-Ríos, Ph.D.; Ana Guadalupe-Quiñones, Ph.D.; Emilee Colón-Lorenzo; Adelfa Serrano-Brizuela, Ph. D.; Fathi Hallawish, Ph.D. 253<sup>rd</sup> ACS National Meeting, San Francisco, California, April 2017.

"Synthesis and Characterization of Heterocyclic Ferrocenyl Chalcones and their Potential Biological Applications" Ambar Alsina-Sánchez, Sara Delgado-Rivera, Ingrid Montes-González, Guadalupe-Quiñones AR, Colón-Lorenzo E, Serrano-Brizuela A.. ABRCMS Conference, Tampa, FL, November 2016.

"Shaping the biological potential of ferrocenyl derivatives: An enhancement with heterocycles." Juan C. Aponte-Santini, Ingrid Montes-González, Jesse Dávila-Calderón, David Sanabria-Ríos, Ana Guadalupe-Quiñones, Emilee Colón-Lorenzo, Adelfa Serrano-Brizuela, Fathi Halawish,..SciFinder® Future Leaders CAS. Columbus, OH, August 2016.

"Synthesis and Characterization of Curcumin Analogues from Acetylferrocene" Xaimara Santiago Maldonado, Josué Rivera Hernández, Myrna R. Otaño, David Sanabria Ríos, Ingrid Montes González Ph.D., 5<sup>th</sup> Lilly Academy Technical Forum, San Juan, P.R., May 2016.

"Approaching the biological enhancement of ferrocenyl derivatives via heterocyclic moieties improvements" Juan C. Aponte-Santini; Ingrid Montes-González; Jesse Dávila-Calderón; David J. Sanabria-Ríos; Andrés Villarino-Molina; Ana R. Guadalupe-Quiñones; Emilee Colón-Lorenzo; Adelfa Serrano-Brizuela; Fathi Halawish; Valance Washington, 11<sup>th</sup> RISE Area Conference, San Juan, PR March 2016 & 5<sup>th</sup> Lilly Academy Technical Forum, San Juan, PR, May 2016.

"Synthesis of Chalcone Derivative's Ferrocene Polymers for Potential Multi-Functional Materials" Rodríguez-Díaz, Giovanni; Fajardo-Tolentino, Johanna; Guadalupe-Quiñones, Ana R., Ph.D.; Montes-González, Ingrid, Ph.D., 251<sup>th</sup> ACS National Meeting, San Diego, CA, March 2016 and 5<sup>th</sup> Lilly Academy Technical Forum, San Juan, PR, May, 2016.

"Synthesis and Characterization of Monosubstituted Ferrocenyl Chalcone Salt Derivatives: Study of their Electrochemistry and Antibacterial properties" Pérez-Ortiz, Giovanni E.; Delgado-Rivera, Sara M.; Montes-González, Ingrid, Ph.D.; Guadalupe-Quiñones, Ana R., Ph.D.; Gutierrez, Ricardo; Rivera-Torres, Yartiza, MS ; and Sanabria-Ríos, David J., Ph.D., 251th ACS National Meeting San Diego, CA, March 2016 and 5th Lilly Academy Technical Forum, San Juan, PR, May, 2016.

"Ferrocenyl Chalcones Salts Derivatives as Potential Antimalarial Agents" Delgado-Rivera, Sara M.; Pérez-Ortiz, Giovanni E.; Montes-González, Ingrid, Ph.D.; Guadalupe-Quiñones, Ana R., Ph.D.; Colón-Lorenzo, Emilee E., Ph.D.; Serrano-Brizuela, Adelfa E., Ph.D., 251th ACS National Meeting, San Diego, CA, March 2016 and 5th Lilly Academy Technical Forum, San Juan, PR, May, 2016.

"Ferrocenyl Chalcones based scaffolds containing heterocyclic moieties as potential antimalarial agents" Alsina-Sánchez, Ámbar M., Delgado-Rivera, Sara M., Montes-González, Ingrid, Guadalupe-Quiñones, Ana R., Colón-Lorenzo, Emilee, Serrano-Brizuela, Adelfa, 251th American Chemical Society National Meeting & Exposition, San Diego, CA, March, 2016 and 5th Lilly Academy Technical Forum, San Juan, PR, May, 2016

"Towards the biological enhancement of ferrocenyl derivatives: An improvement with heterocyclic moieties" Juan C. Aponte-Santini; Ingrid Montes-González; Jesse Dávila-Calderón; David J. Sanabria-Ríos; Andrés Villarino-Molina; Ana R. Guadalupe-Quiñones; Emilee Colón-Lorenzo; Adelfa Serrano-Brizuela; Fathi Halaweish; Valance Washington, 251<sup>st</sup> ACS National Meeting & Exposition, San Diego, CA, March 2016.

"Synthesis and Characterization of Curcumin Analogs to Improve its Bioavailability" Xaimara Santiago Maldonado, Josué Rivera Hernández, Myrna R. Otaño, David Sanabria Ríos, Ingrid Montes González Ph.D., 251th ACS National Meeting, San Diego, CA, March 2016.

"Ferrocenyl Chalcones Salts Derivatives as Potential Antimalarial Agents" Delgado-Rivera, Sara M.; Pérez-Ortiz, Giovanni E.; Montes-González, Ingrid, Ph.D.; Guadalupe-Quiñones, Ana R., Ph.D.; Colón-Lorenzo, Emilee E., Ph.D.; Serrano-Brizuela, Adelfa E., Ph.D., 251th ACS National Meeting, San Diego, CA, March 2016 and 5th Lilly Academy Technical Forum, San Juan, PR, May, 2016.

"Exploring methodologies for the synthesis and characterization of 1,1'-symmetric ferrocenyl chalcones from 1,1'-diacetylferrocene" Naishka E. Caldero Rodríguez; Ingrid Lehman Andino, Ingrid Montes, Ph.D., 251th ACS National Meeting, San Diego, CA, March 2016.

"Exploring methodologies for the synthesis and characterization of 1,1'-symmetric ferrocenyl chalcones from 1,1'-diacetylferrocene" Naishka E. Caldero Rodríguez; Ingrid Lehman Andino, Ingrid Montes, Ph.D., 11<sup>th</sup> RISE Area Conference, San Juan, Puerto Rico, March 2016.



"Synthesis and characterization of 1,1'-symmetric ferrocenyl chalcones from 1,1'-diacetylferrocene" Naishka E. Caldero Rodríguez; Ingrid Montes, Ph.D., PRISM / 51<sup>th</sup> ACS Junior Technical Meeting, Pontifical Catholic University of Puerto Rico, Ponce, Puerto Rico, March 2016.

"Synthesis and Characterization of Chalcone Derivatives Ferrocene Polymers for Potential Applications as Stimuli Responsive Sensors" Rodríguez-Díaz, Giovanni; Fajardo-Tolentino, Johanna; Guadalupe-Quiñones, Ana R., Ph.D.; Montes-González, Ingrid, Ph.D., PRISM / 51<sup>st</sup> ACS Junior Technical Meeting, Pontifical Catholic University of Puerto Rico, Ponce, PR, March 2016.

"Synthesis and characterization of Curcumin Analogs" Xaimara Santiago Maldonado, Josué Rivera Hernández, Myrna R. Otaño, David Sanabria Ríos, Ingrid Montes González Ph.D., PRISM / 51<sup>st</sup> ACS Junior Technical Meeting, Pontifical Catholic University of Puerto Rico, Ponce, PR, March 2016.

"Synthesis and Characterization of Monosubstituted Ferrocenyl Chalcone Salt Derivatives" Pérez-Ortiz, Giovanny E.; Delgado-Rivera, Sara M.; Montes-González, Ingrid, Ph.D.; Guadalupe-Quiñones, Ana R., Ph.D.; Gutierrez, Ricardo; Rivera-Torres, Yartiza, MS; and Sanabria-Ríos, David J., Ph.D., PRISM/ 51<sup>th</sup> ACS Junior Technical Meeting, Pontifical Catholic University of Puerto Rico, Ponce, Puerto Rico, March 2016.

"Exploring methodologies for the synthesis and characterization of 1,1'-symmetric ferrocenyl chalcones from 1,1'-diacetylferrocene" Naishka E. Caldero Rodríguez; Ingrid Lehman Andino, Ingrid Montes, Ph.D., 2016 Lilly Academy Technical Forum, San Juan, Puerto Rico, May 2016.

"Synthesis of Novel Chalcone Derivatives' Ferrocene Polymers" Giovanni Rodríguez-Díaz; Johanna Fajardo-Tolentino; Yanira Enríquez-González; Ana Guadalupe-Quiñones, R. Ph.D and Ingrid Montes-González, Ph.D, 13<sup>th</sup> Raymond N. Castle Conference, University of South Florida, Tampa, USA, April 2015.

"Heterocycles: An enhancement in the ferrocenyl derivatives pharmacophores" Juan C. Aponte-Santini, Ingrid Montes-González, Soraya Abdul-Hadi-Martínez, Fernando J. Correa-Delgado, David J. Sanabria-Ríos, María Del M. García-Maldonado, Ana R. Guadalupe-Quiñones, Emilee Colón-Lorenzo, Adelfa Serrano-Brizuela, and Fathi Halaweish, 249<sup>th</sup> ACS National Meeting, Denver, CO, March 25, 2015.

"An improved methodology for the synthesis of nonsymmetric ferrocenyl chalcone derivatives" Stephany M. Ramos De Dios; Myrna Otaño; Ingrid Montes-González, Ph.D., 249<sup>th</sup> ACS National Meeting, San Francisco, CA, March 2015.

"A Greener Approach to the Grignard Reaction" Adrian E. Burgos-Avilés; Ingrid Montes, Ph.D., 249<sup>th</sup> ACS National Meeting, Denver, CO, March 2015.

"Oximes derivatives from Ferrocenyl Chalcone as potential antibacterial agents" Naishka E. Caldero Rodríguez; Ingrid Montes, Ph.D., 249<sup>th</sup> ACS National Meeting, Denver, CO, March 2015.

"Thiosemicarbazone-derivatives from Ferrocenyl Chalcones as Potential Antibacterial and Atimalarial Agents" Andrés Molina Villarino, Ingrid Montes González, 249<sup>th</sup> ACS National Meeting & Exposition: Chemistry of Natural Resources, Denver, CO, March 2015.

"Laboratory Experience for the Organic Chemistry Course based on a greener approach for the Grignard Reaction" Adrian E. Burgos-Avilés; Ingrid Montes-González, Ph.D.; 50<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Rio Piedras Campus, San Juan Puerto Rico, March 2015.

"Synthesis and characterization of Ferrocenyl Oximes" Naishka E. Caldero Rodríguez; Ingrid Montes, Ph.D., 50<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Rio Piedras Campus, San Juan Puerto Rico, March 2015.

"Thiosemicarbazone-derivatives from Ferrocenyl Chalcones as Potential Antibacterial and Atimalarial Agents" Andrés Molina Villarino, Ingrid Montes González, 50<sup>th</sup> ACS Junior Technical Meeting and 50<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM), University of Puerto Rico, Río Piedras Campus, PR, March 2015.

"Synthesis of Ferrocenyl Polymers for Potential Uses in Material Sciences" Rodríguez-Díaz, Giovanni; Fajardo-Tolentino, Johanna; Enríquez-González, Yanira; Guadalupe-Quiñones, Ana R., Ph.D and Montes-González, Ingrid, Ph.D, 50<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Rio Piedras Campus, San Juan, PR, March 2014.

"Synthesis and Characterization of nonsymmetric ferrocenyl chalcone derivatives" Stephany M. Ramos De Dios and Ingrid Montes-González, Ph.D.

50<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Rio Piedras Campus, San Juan, PR, March 2014.

"Synthesis of nonsymmetric ferrocenyl chalcone derivatives". Stephany M. Ramos De Dios; Myrna Otaño; Ingrid Montes-González, 38<sup>th</sup> ACS Senior Technical Meeting, San Juan, PR November 7, 2014.

"Heterocyclic ferrocenyl derivatives: An improvement in the backbone of bioactive compounds" Juan C. Aponte-Santini, Ingrid, Montes-González, Soraya Abdul-Hadi-Martínez, Fernando J. Correa-Delgado, David J. Sanabria-Ríos, María Del M. García-Maldonado, Ana R. Guadalupe-Quiñones, Emilee Colón-Lorenzo, Adelfa Serrano-

Brizuela, and Fathi Halaweish, 38<sup>th</sup> ACS Senior Technical Meeting, San Juan, PR November 7, 2014.

“Programa de mentorías para química general: Un enfoque exitoso para capacitar a los estudiantes de primer año” Juan C. Aponte-Santini, Ingrid Montes-González, and Víctor E. Bonilla, 31<sup>er</sup> Congreso Latinoamericano de Química CLAQ-2014, XXVII Congreso Peruano de Química, Lima, Perú, October 16, 2014.

“Synthesis and characterization of 3-(4-hydroxy-3-methoxyphenyl)ferrocenyl chalcones” Josué Rivera-Hernández; Myrna Otaño-Vega; María García; David Sanabria-Ríos, Ph.D.; Y. Rivera-Torres; R.Gutierrez-García; Ana Guadalupe, Ph.D.; Ingrid Montes, Ph.D. , 248 th ACS National Meeting, San Francisco, CA, August 2014.

“Ferrocenyl Chalcones as Potential Precursors for Biosensors” Rodríguez-Díaz, Giovanni ; Fajardo-Tolentino, Johanna; Cedeño-Alicea, Julio; Enríquez-González, Yanira; Guadalupe-Quiñones, Ana R., Ph.D and Montes-González, Ingrid, Ph.D, 2014 Lilly Academy Technical Forum, Centro de Convenciones de Puerto Rico, San Juan, PR, March 2014.

“1,1'-Ferrocenyl chalcones derivatives: synthesis, characterization and electrochemical properties of potential biological active compounds” Ingrid Lehman Andino, Myrna R. Otano Vega, Ingrid Montes González, Ph. D, 247 th ACS National Meeting, Dallas, TX, March 2014.

“Chemistry Ambassadors for Climate Science: a successful non-formal education program” María Rodríguez Guzman, Alba González, Joel Pérez, Ingrid Montes González, 247 th ACS National Meeting, Dallas, TX, March 2014.

“University of Puerto Rico - Río Piedras Campus: Leading an ongoing trajectory of impact” Adolfo Barragán Cabrera; Raúl E. Martínez Quiñones; Edmarie Santiago Aponte; Ingrid Montes González; 247 th ACS National Meeting, Dallas, TX, March

“Ferrocenyl chalcones framework: Leading the synthesis of biological active compounds” Juan C. Aponte-Santini, and Ingrid Montes-González, 247 th ACS National Meeting, Dallas, TX, March

“Synthesis of the Ferrocenyl Stilbene Derivatives” Sara M. Delgado-Rivera; Giovanni Rodríguez, and Ingrid Montes-González, Ph.D, 247 th ACS National Meeting, Dallas, TX, March 2014.

“Synthesis, Characterization, and Potential Applications of Ferrocenyl Chalcones Derivatives from 1, 1'-Diacetylferrocene” Ingrid Lehman Andino, Myrna R. Otano Vega, Naishka E. Caldero Rodríguez, Ingrid Montes González, 49<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Cayey Campus, Cayey Puerto Rico, March 2014.

“Solvent free stereoselective reduction of cyclohexanone derivatives: an

investigative approach for the undergraduate organic chemistry laboratory” Emmanuel López-Nogueras; Sara M.; Delgado-Rivera; David Sanabria and Ingrid Montes-González, 49<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Cayey Campus, Cayey Puerto Rico, March 2014.

“Synthesis and characterization of Curcumin analogue” Josué Rivera Hernández, Myrna R. Otano Vega, María del Mar García, David Sanabria-Ríos, Ph. D., Ana R. Guadalupe, Ph. D., Ingrid Montes, Ph. D., 49<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Cayey Campus, Cayey Puerto Rico, March 2014.

“Chemistry Ambassadors for Climate Science: a successful non-formal education program” María Rodríguez Guzmán, Ingrid Montes González, 49<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Cayey Campus, Cayey Puerto Rico, March 2014.

“Ferrocenyl Chalcones as potential precursors for Ferrocene Polymers” Julio Cedeño, Johanna Fajardo, Ingrid Montes, Ph.D., Ana Guadalupe, Ph.D., 49<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, University of Puerto Rico-Cayey Campus, Cayey Puerto Rico, March 2014.

“Synthesis and characterization of 1,1'-diacetylferrocene derivatives as promising biological active compounds” Ingrid Lehman Andino, Myrna R. Otano Vega, Ingrid Montes González, ABRCMS, Nashville, TN, November 2013.

“Designing a biological active framework based on ferrocenyl chalcones core”; Juan C. Aponte-Santini, Ingrid Montes-González, Fernando J. Correa-Delgado; David J. Sanabria-Ríos; Ana Guadalupe-Quñones; Fathi Halaweish, Senior Technical Meeting PR Local Section, Aguadilla, PR, November 2013.

“University of Puerto Rico-Río Piedras ACS Student Chapter leading a footprint in our society” Adolfo E Barragán Cabrera; Raúl Martínez Quiñones; Edmarie Santiago Aponte; Ingrid Montes González, Senior Technical Meeting PR Local Section, Aguadilla, PR, November 2013.

“Solvent free stereoselective reduction of carbonyl groups” Emmanuel López-Nogueras; Sara M.; Delgado-Rivera, David Sanabria, and Ingrid Montes-González, 245<sup>th</sup> ACS National Meeting, New Orleans, April 2013.

“Ferrocene Heterocyclic Derivatives: As potential biological active drugs” Juan C. Aponte-Santini, and Ingrid Montes-González, 245<sup>th</sup> ACS National Meeting, New Orleans, April 2013.

“Synthesis of the Phenylethyne Ferrocene Derivatives” Jesús M. Dones-Monroig, Sara M Delgado-Rivera and Ingrid Montes-González, 245<sup>th</sup> ACS National Meeting, New Orleans, April 2013.

"Non-symmetric ferrocenyl chalcones as possible anti-cancer drugs" Sara M. Delgado-Rivera, and Ingrid Montes-González, 245 th ACS National Meeting, New Orleans, April 2013.

"History of Chemistry Capstone Course: New Solutions to an Old Problem" Alan Rodríguez and Ingrid Montes-González, 245 th ACS National Meeting, New Orleans, April 2013.

"Celebrating the 25<sup>th</sup> Anniversary of the National Chemistry Week" Orlando José Morales Martínez<sup>1</sup> and Ingrid Montes-González, 245 th ACS National Meeting, New Orleans, April 2013.

"Synthesis and Characterization of Ferrocenyl Chalcones as precursors for Ferrocene Polymers " Stephanie Rivera, Johanna Fajardo, and Ingrid Montes, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Bridges Towards Sustainability: Non-traditional Strategies for Science Learning" Israel Méndez Bermúdez, María Rodríguez, Sara M. Delgado Rivera, Guzman, Isatis M. Cintrón Rodríguez, Carla Coste Sánchez, Ingrid Montes González, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Bridging formal and non-formal learning to promote global sustainability" María Rodríguez, Sara M. Delgado Rivera, Guzman, Israel Méndez Bermúdez, Isatis M. Cintrón Rodríguez, Carla Coste Sánchez, Ingrid Montes González, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Synthesis and characterization of a Curcumin analogue" Josué Rivera Hernández, Myrna R. Otano Vega, Ingrid Montes Gonzalez, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Solvent Free Synthesis and Characterization of 1,1'-diacetylferrocene derivatives" Ingrid Lehman Andino, Myrna R. Otano Vega, Ingrid Montes González, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Synthesis and Characterization of Ferrocenyl Chalcones Derivatives" Fernando J. Correa Delgado, Juan C. Aponte-Santini, and Ingrid Montes González, 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Turabo Puerto Rico, March 2013.

"Solvent free stereoselective reduction of carbonyl groups: an investigative approach for the undergraduate organic chemistry laboratory" Emmanuel López - Nogueras; Sara M. Delgado-Rivera; David Sanabria and Ingrid Montes González , 48<sup>th</sup> ACS Junior Technical Meeting, University of Puerto Rico, Carolina Campus,

Turabo Puerto Rico, March 2013.

"Heterocyclic Derivatives: Potential Biological Activity Enhancement of Ferrocenyl Chalcones" Aponte-Santini, Juan C. and Montes-González, Ingrid, RISE Area Conference, Isla Verde, Puerto Rico, March 2013.

"Applying Solvent-Free Conditions to the Synthesis of Ferrocenyl Chalcones Derivatives" Fernando J. Correa Delgado, Juan C. Aponte-Santini, and Ingrid Montes González, 244 th ACS National Meeting, Philadelphia, August 2012.

"Synthesis and characterization of ferrocenyl chalcones from Claisen-Schmidt reaction in alcoholic and solvent-free media", Myrna R. Otaño-Vega, Ingrid Montes, Ph. D., 244 th ACS National Meeting, Philadelphia, August 2012.

"Mentorship Program for the Freshmen General Chemistry Course", Juan C. Aponte-Santini<sup>(a)</sup>, Ingrid Montes, Ph.D.<sup>(a)</sup> and Víctor E. Bonilla, Ph.D., 244 th ACS National Meeting, Philadelphia, August 2012.

"Green Chemistry Gleam: A New Point of View in a Capstone Course", Sara M. Delgado-Rivera, Richard Rivera-Ocasio and Ingrid Montes-González, Ph.D. 16<sup>th</sup> Annual Green Chemistry & Engineering Conference, Washington, D.C., USA, June 2012.

"Green Chemistry: A New Approach for the Synthesis of Ferrocenyl Chalcones Derivatives", Juan C. Aponte-Santini and Ingrid Montes-González, Ph.D. 16<sup>th</sup> Annual Green Chemistry & Engineering Conference, Washington, D.C., USA, June 2012.

"Intercalation of a ferrocene derivative in zirconium phosphate layers", Francisco Martínez; Barbara Casañas; Ingrid, Montes; Jorge L. Colón; Intel International Science and Engineering Fair (ISEF), Pennsylvania, USA, Poster Presentation, May 2012.

"Intercalation of a ferrocene derivative in zirconium phosphate layers", Francisco Martínez; Barbara Casañas; Ingrid, Montes; Jorge L. Colón; Junior Science and Humanities Symposium (JSHS), Maryland, USA, Poster Presentation, May 2012.

"Heterocycles Functionalizing Ferrocenyl Chalcones Core", Juan C. Aponte-Santini, and Ingrid Montes González, 243 rd ACS National Meeting, San Diego, CA, March 2012.

"Ferrocenyl Chalcones: A Claisen – Schmidt reaction for mono-, bis- and unsymmetrical derivatives", Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 47<sup>th</sup> Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Carolina Puerto Rico, March 2012.

"A Greener Approach for the Synthesis of Ferrocenyl Chalcones Derivatives", Fernando J. Correa Delgado, Juan C. Aponte-Santini, and Ingrid Montes González, . 47<sup>th</sup> Junior Technical Meeting, University of Puerto Rico, Carolina Campus, Carolina

Puerto Rico, March 2012.

"Intercalation of a ferrocene derivative in zirconium phosphate layers", Francisco Martínez; Barbara Casañas; Ingrid, Montes; Jorge L. Colón; 2012 Junior Science and Humanities Symposium (PRJSHS), Puerto Rico, Poster Presentation, February 2012.

"Intercalation of a ferrocene derivative in zirconium phosphate layers", Francisco Martínez; Barbara Casañas; Jorge L. Colón; 35<sup>th</sup> American Chemical Society (ACS) Senior Technical Meeting PR Local Section, Dorado, PR, Poster Presentation, November 2011.

"Ferrocenyl Chalcones: Synthesis and Characterization of New Ferrocene Polymers" Johanna Fajardo, Janice Soto and Ingrid Montes, Ph.D., 35<sup>th</sup> Senior Technical Meeting, Embassy Suites Dorado Del Mar, Dorado, P.R., November 2011.

"Ferrocenyl Chalcones: Precursors for Heterocyclic Compounds", Juan C. Aponte-Santini, and Ingrid Montes González, 35<sup>th</sup> Senior Technical Meeting, Embassy Suites Dorado Del Mar, Dorado, P.R., November 2011.

"Ferrocenyl Chalcones as Precursors for Ferrocenyl Homopolymers", Johanna Fajardo, Janice Soto and Ingrid Montes, Ph.D., 35<sup>th</sup> Senior Technical Meeting, Embassy Suites Dorado Del Mar, Dorado, P.R., November 2011.

"Puerto Rico Local Section Women Chemists Committee", Rodríguez-Escudero, Idaliz; Otaño, Myrna R.; Casañas Montes, Bárbara; Fajardo, Johanna; Montes, Ingrid, , 35<sup>th</sup> American Chemical Society (ACS) Senior Technical Meeting PR Local Section, Dorado, PR, Poster Presentation, November 2011.

"Synthesis and characterization of Ferrocenyl Chalcones: Advances to the syntheses of mono-, bis-, and unsymmetrical derivatives", Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 35<sup>th</sup> Senior Technical Meeting, Embassy Suites Dorado del Mar, Dorado Puerto Rico, November 2011.

"Synthesis of ferrocenyl chalcones derivatives: Are we really "greening"it up?" Adriana Rodríguez, Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 35<sup>th</sup> Senior Technical Meeting, Embassy Suites Dorado del Mar, Dorado Puerto Rico, November 2011.

"Synthesis and Characterization of New Ferrocene Polymers from Ferrocenyl Chalcones", Johanna Fajardo, Janice Soto and Ingrid Montes, Ph.D., 43<sup>rd</sup> IUPAC World Chemistry Congress/ 46<sup>th</sup> IUPAC General Assembly/ 70<sup>th</sup> CQPR Annual Conference and Exhibition, Conventional Center, San Juan, P.R., July 2011.

"Synthesis and Characterization of mono-, bis-, and unsymmetrical ferrocenyl chalcones", Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 43<sup>rd</sup> IUPAC World Chemistry Congress, Puerto Rico Convention Center, San Juan Puerto Rico, July 2011.

"New approach for the preparation of alkyl iodides", Sara M. Delgado-Rivera, Ingrid Montes-González, Ph.D., Francisco J. Arnáiz, Ph.D. 43<sup>rd</sup> IUPAC World Chemistry Congress, Puerto Rico Convention Center, San Juan Puerto Rico, July 2011.

"A greener approach for the synthesis of ferrocenyl chalcone derivatives", Adriana Rodríguez, Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 46<sup>th</sup> Junior Technical Meeting, Interamerican University, Bayamón Campus, Bayamón Puerto Rico, March 2011.

"Ferrocenyl Chalcones as Precursors for Ferrocene Polymers", Johanna Fajardo, Janice Soto and Ingrid Montes, Ph.D., PRISM/ ACS 46<sup>th</sup> Jr. Technical Meeting-Interamerican University of Puerto Rico, Bayamón, PR, March 2011.

"Synthesis and Characterization of New Ferrocene Polymers from Ferrocenyl Chalcones" Johanna Fajardo, Janice Soto and Ingrid Montes, Ph.D., PRISM/ ACS 46<sup>th</sup> Jr. Technical Meeting-Interamerican University of Puerto Rico, Bayamón, PR, March 2011.

"Ferrocenyl Chalcones: Precursors For Heterocyclic Compounds" Juan C. Aponte-Santini, Ingrid Montes-González, Ph.D. 35<sup>th</sup> ACS Senior Technical Meeting, Puerto Rico, November 2011.

"Functionalization of the Ferrocenyl Chalcones Framework", Juan C. Aponte-Santini, Ingrid Montes, Ph. D. 43<sup>rd</sup> IUPAC World Chemistry Congress, Puerto Rico, August 2011.

"Incorporation of Heterocycles in Ferrocenyl Chalcone Cores", Juan C. Aponte-Santini, Ingrid Montes, Ph. D., 241<sup>th</sup> ACS National Meeting, Anaheim, CA, March 2011.

"Synthesis and Characterization of Ferrocenyl Chalcones Heterocyclic Derivatives", Juan C. Aponte-Santini, Ingrid Montes, Ph. D., PRISM/ACS Jr Technical Meeting, Puerto Rico, March 2011.

"Synthesis and characterization of ferrocenyl chalcones: Potential compounds against some diseases" Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. 240<sup>th</sup> ACS National Meeting, Boston MA, August, 2010.

"A greener approach for esterification reactions", Silvette Castro, Javier Escudero and Ingrid Montes, Ph.D. PRISM/ ACS 45<sup>th</sup> Jr. Technical Meeting-UPR-Mayagüez, Puerto Rico, March 2010.

"Synthesis of ferrocenyl chalcones from 1,1'- diacetylferrocene using new synthetic approach", Ninoshka M. Lafontaine, Myrna R. Otaño-Vega, Ingrid Montes González, Ph.D. PRISM/ ACS 45<sup>th</sup> Jr. Technical Meeting-UPR-Mayagüez, Puerto Rico, March 2010.



"Synthesis of Ferrocenyl Chalcones from Acetylferrocene and 1,1'- Diacetylferrocene and Some Applications", Myrna R. Otaño, Rocío Cardona, Ana Guadalupe, Ph.D. and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Synthesis of Ferrocenyl Chalcones From 1,1'- Diacetylferrocene", Ninoshka Lafontaine, Myrna R. Otaño and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Esterification Reactions Applying a Greener Approach", Silvette Castro, Javier Escudero and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Melting Point Prediction of Different Organic Compounds", Iván Ojeda, Myreisa Morales, Natalia Hernandez and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Electrochemical Studies of Ferrocene Chalcones Derivatives Immobilized in Nafion and Their Role as Mediators for the Oxidation of Compounds of Biological Importance" Kenneth Hernandez, Rocío del A. Cardona, Myrna R. Otaño, Ana Guadalupe, Ph.D. and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Electrochemical and Spectroscopical Characterization of Ferrocene Chalcones Derivatives: Cyclic Voltammetry, Diffusion Coefficients, Kinetics and UV-Visible", Rocío del A. Cardona, Kenneth Hernandez, Myrna R. Otaño, Ana Guadalupe, Ph.D. and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Chemical Characterization of Metallocenes Derivatives Intercalated Into Zirconium Phosphate Layers", Barbara Casanas Montes, Jorge Colón, Ph.D. and Ingrid Montes, Ph.D. 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"How Does a Mentoring Program Influences the Freshmen Students of the General Chemistry Course?" Juan C. Aponte-Santini, Víctor E. Bonilla, Ph.D. and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"How the Affective Aspects Influencing the Students' Achievement in the Organic Chemistry Course?" Johanna Fajardo, Víctor E. Bonilla, Ph.D. and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Enhancing the Academic Experience of the Graduate Students", Richard Rivera-Ocasio, Sara M. Delgado-Rivera and Ingrid Montes, Ph.D., 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"Community Service in Action: Chem-Clubs, UPR-RP ACS Chapter and SEGQuim", Yishara Chandler, Zulmarie Péerez, Soleyl Vázquez, Iliá Pérez and Ingrid Montes, 61st Southeast Regional Meeting, San Juan, Puerto Rico, October 2009.

"How Does a Mentoring Program Influences the Freshmen Students of the General Chemistry Course?" Juan C. Aponte-Santini, Víctor E. Bonilla, Ph.D. and Ingrid Montes, Ph.D., 238th ACS National Meeting and Exposition, Washington, DC, August 2009.

"How the Affective Aspects Influencing the Students' Achievement in the Organic Chemistry Course?" Johanna Fajardo, Víctor E. Bonilla, Ph.D. and Ingrid Montes, Ph.D., 238th ACS National Meeting and Exposition, Washington, DC, August 2009.

"Synthesis of Ferrocenyl Chalcones from Acetylferrocene and 1,1'-Diacetylferrocene and Some Applications", Myrna R. Otaño, Rocío Cardona, Ana Guadalupe, Ph.D. and Ingrid Montes, Ph.D., 238th ACS National Meeting and Exposition, Washington, DC, August 2009.

"Nickel Oxide Hydroxide: A Potential Oxidizing Agent", De la Torre, Sonia B.; Montes, Ingrid, 237th ACS National Meeting and Exposition, Salt Palace Convention Center in Salt Lake City, Utah. March 2009.

"Assessment of How the Selected Topics in Chemistry Course Influences in the Students of the General Chemistry Course" Juan C. Aponte-Santini, Ingrid Montes, Ph.D. and Víctor E. Bonilla, Ph.D., X Puerto Rican Congress of Investigation in the Education, San Juan, PR, March 2009.

"How the Affective Aspects of Students with Different Learning Styles Influence their Achievement in the Organic Chemistry Course", Johanna Fajardo, Ingrid Montes, Ph.D. and Víctor E. Bonilla, Ph.D., X Puerto Rican Congress of Investigation in the Education, San Juan, PR, March 2009.

"How the Affective Aspects of Students with Different Learning Styles Influence their Achievement in the Organic Chemistry Course" Johanna Fajardo, Ingrid Montes, Ph.D. and Víctor E. Bonilla, Ph.D., PRISM/ ACS 44<sup>th</sup> Jr. Technical Meeting-UPR-RP, PR, March 2009.

"Synthesis of Ferrocenyl Chalcones from Acetylferrocene and 1,1'-Diacetylferrocene", Otaño Vega, Myrna R., Montes, Ingrid, Ph. D. and Guadalupe, Ana Ph. D. PRISM/ACS 44<sup>th</sup> Jr. Technical Meeting UPR-RP, PR, March, 2009.

"Chemical and Electrochemical Characterization Of Metallocenes Derivatives Intercalated Into Zirconium Phosphate Layers", Casañas Montes, Bárbara; Morales, Mara; Miller, Andrismery; Ramirez, Jonathan; Sanchez, Yariel; Montes, Ingrid; Colón, Jorge L., 29th Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 44th Jr. Technical Meeting, Río Piedras, PR, March 2009.

"Assessment of How the Selected Topics in Chemistry Course Influences in the Students of the General Chemistry Course", Juan C. Aponte-Santini, Ingrid Montes, Ph.D. and Víctor E. Bonilla, Ph.D., PRISM/ ACS 44<sup>th</sup> Jr. Technical Meeting-UPR-RP, PR, March 2009.

"Chemical and Electrochemical Characterization of Metallocenes Derivatives Intercalated into Zirconium Phosphate Layers", Casañas Montes, Bárbara; Miller, Andrismery; Morales, Mara; Ramirez, Jonathan; Sanchez, Yariel; Montes, Ingrid; Colón, Jorge L., The American Association for the Advancement of Science (AAAS) Annual Meeting, Chicago, IL, USA, Poster Presentation, February 2009.

"Oxidation Reactions using Nickel Oxide Hydroxide as the Oxidizing Agent", De la Torre, Sonia B.; Montes, Ingrid, University of Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico. Annual Biomedical Research Conference for Minority Students 2008, Disney's Coronado Spring Resort in Orlando, Florida. November 2008.

"Ferrocene Chalcones Derivatives: Pyridines", Cardona, Rocío del A.; Hernández, Kenneth; Otaño, Myrna; Montes, Ingrid and Guadalupe, Ana R. Annual Biomedical Research Conference for Minority Students 2008, Disney's Coronado Spring Resort in Orlando, Florida. November 2008.

"Oxidation Reactions using Nickel Oxide Hydroxide as the Oxidizing Agent" De la Torre, Sonia B.; Montes, Ingrid; University of Puerto Rico, Río Piedras Campus, San Juan, Puerto Rico. 32<sup>nd</sup> Senior Technical Meeting, Rincón of the Seas, Rincón, Puerto Rico. November 2008

"Oxidations Reactions: A Greener Approach" Sonia De la Torre and Ingrid Montes, Ph.D., 236<sup>th</sup> ACS Spring Nacional Meeting, Philadelphia, August 2008.

"How the Affective Aspects Influence the Students Achievement in the Organic Chemistry Course" Johanna Fajardo, Charlotte Cabello, Rafael Ramos Linnette Pruna, and Ingrid Montes, Ph.D., Latin American Federation of Chemical Associations (FLAQ) 28<sup>th</sup> Latin American Chemical Congress, Convention Center, PR., August 2008.

"Counterion Effects in the Nucleophilic Substitution Reaction of the Acetate Ion with Alkyl Bromides in the Synthesis of Ester", Elizabeth M. Valentín, Ingrid Montes and Waldemar Adam, Latin American Federation of Chemical Associations (FLAQ) 28<sup>th</sup> Latin American Chemical Congress, Convention Center, PR., August 2008.

"Oxidations Reactions: A Greener Approach", Sonia De la Torre and Ingrid Montes, Ph.D., Latin American Federation of Chemical Associations (FLAQ) 28<sup>th</sup> Latin American Chemical Congress, Convention Center, PR., August 2008.

"Implementing Portfolios as an Assessment Technique for the Organic Chemistry Laboratory", Johanna Fajardo, Rafael Ramos and Ingrid Montes, PR AGEB, San Juan, PR, July 2008.

"Synthesis and Potential Applications of Ferrocenyl Chalcone", Otaño Vega, Myrna R.; Cruz Montañez, Alejandra; Díaz Borrero, Cristina; Montes González, Ingrid and Guadalupe, Ana PR AGEP, San Juan, PR, July 2008.

"Immobilization of Ferrocene Chalcones Derivatives in the Presence of MW-Carbon Nanotubes: Biosensor Construction", Cardona, Rocío del A.; Díaz, Aileen; Otaño, Myrna; Montes, Ingrid and Guadalupe, Ana R. 28<sup>th</sup> Latin American Chemical Congress, San Juan, Puerto Rico. July 2008.

"Chemical and Electrochemical Characterization of Ferrocene Derivatives Intercalated into Zirconium Phosphate Layers by Direct Ion Exchange", Casañas Montes, Bárbara; Morales, Mara; Santiago, Mitk'El; Miller, Andrismery; Montes, Ingrid; Colón, Jorge L., 28<sup>th</sup> Latin American Chemical Congress, San Juan, PR, Poster Presentation, July 2008.

"Ferrocene Chalcones Derivatives as Labels for DNA Electrochemical Sensors", Cardona, Rocío del A.; Díaz, Aileen; Otaño, Myrna; Montes, Ingrid and Guadalupe, Ana R. 6<sup>th</sup> Annual ACS Summer School on Sustainability and Green Chemistry, Golden, Colorado. July 2008.

"Enhancing the Academic Experience in Graduate Chemistry School at the University of Puerto Rico at Río Piedras Campus", Idaliz Rodríguez, Rubenier Montano and Ingrid Montes 235<sup>th</sup> ACS Spring Nacional Meeting, New Orleans, April 2008.

"Community Service ACS-Student Affiliate Chapter at the University of Puerto Rico, Río Piedras Campus", Anabel Pizarro, Sara M. Delgado, Melanie Rivera, Iliá Pérez, Glorimar Rivera, Gabriel J. Reyes, and Ingrid Montes 235<sup>th</sup> ACS Spring Nacional Meeting, New Orleans, April 2008.

"Chemical and Electrochemical Characterization of Ferrocene Derivatives Intercalated into Zirconium Phosphate Layers by Direct Ion Exchange", Casañas Montes, Bárbara; Morales, Mara; Santiago, Mitk'El; Miller, Andrismery; Montes, Ingrid; Colón, Jorge L., EPSCOR Annual Meeting, San Juan, PR, Poster Presentation, April 2008.

"Chemical and Electrochemical Characterization of Ferrocene Derivatives Intercalated into Zirconium Phosphate Layers by Direct Ion Exchange", Casañas Montes, Bárbara; Morales, Mara; Santiago, Mitk'El; Miller, Andrismery; Montes, Ingrid; Colón, Jorge L., 235<sup>th</sup> ACS National Meeting and Exposition, New Orleans, Louisiana, USA, Poster Presentation, April 2008.

"Chemical and Electrochemical Characterization of Ferrocene Derivatives Intercalated into Inorganic Layered Materials of Zirconium", Casañas Montes, Bárbara; Morales, Mara; Santiago, Mitk'El; Miller, Andrismery; Montes, Ingrid; Colón, Jorge L., phosphate, 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008.

"Synthesis and Characterization of Ferrocenyl Chalcones", Myrna R. Otaño Vega, Alejandra Cruz, Cristina Díaz, Ingrid Montes, Ph. D. and Ana Guadalupe, Ph. D. 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008.

"A Greener Approach for Oxidations Reactions", Sonia de la Torre and Ingrid Montes, Ph.D. 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008.

"How the Affective Aspects of Students with Different Learning Styles Influence their Achievement in the Organic Chemistry Course", Johanna Fajardo, Charlotte Cabello, Rafael Ramos Linnette Pruna, and Ingrid Montes 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008.

"Synthesis of Ferrocenyl Alkenes Compounds", Mara Morales, Bárbara Casañas and Ingrid Montes, 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008.

"The Use of the Evaluation Portfolio in the Organic Chemistry Laboratory as an Assessment Technique", Fajardo, Johanna, Ramos Rafael and Montes, Ingrid, Ph.D., 28<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 43<sup>rd</sup> Junior Technical Meeting, Arecibo, PR, Poster Presentation, March 2008

"A Guided Inquiry Experiment for Organic Chemistry: Synthesis of Ferrocene Derivatives" by a Claisen-Schmidt Condensation Reaction, Alejandra Cruz, Wanda Cuadrado, Cristina Díaz, Myrna Otaño and Ingrid Montes, 31<sup>st</sup> ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"Synthesis of 1-aryl-3-ferrocenylprop-2-ene-1-ones", Mara Morales and Ingrid Montes, 31<sup>st</sup> ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"Characterization of Ferrocene Derivatives Intercalation Into Zirconium Phosphate Layers By Direct Ion Exchange For Electrochemical Applications", Casañas Montes, Bárbara, Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid and Colón, Jorge L, 31<sup>st</sup> ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"Implementing Portfolios as an Assessment Technique for the Organic Chemistry Laboratory", Fajardo, Johanna, Ramos Rafael and Montes, Ingrid, 31<sup>st</sup> ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"Synthesis of Ferrocenyl Chalcones", Myrna Otaño, Alejandra Cruz, Cristina Díaz, Ingrid Montes, Ph.D. and Ana Guadalupe, Ph.D., 31<sup>st</sup> ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"An Innovative Way to Introduce Students to Discuss Ethics", Adriana Padilla,

Atenaida Maldonado, Solymar Negretti, and Ingrid Montes, Ph.D., 31st ACS Senior Technical Meeting, Mayaguez, PR, November 2007.

"Ferrocene Chalcone Derivatives as Labels for DNA Electrochemical Sensors", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe, Ph.D., Partnership for Research and Education in Materials (PREM)-NSF 4<sup>th</sup> Site Visit. University of Puerto Rico; Humacao, Puerto Rico, November 2007.

"Ferrocene Derivatives and their Application in Biotechnology", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe, Ph.D., 31st ACS Senior Technical Meeting. Mayaguez Resort and Casino; Mayaguez, Puerto Rico. (Poster Presentation) November 2007.

"Ferrocene derivatives intercalated in 10.3 A ZrP", Casañas Montes, Bárbara; Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid; Colón, Jorge, AAAS Caribbean Division Annual Conference, Bayamón, PR October 2007.

"Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe, AAAS Caribbean Division Annual Conference, Bayamón, PR October 2007.

"Characterization of inorganic complexes intercalated into zirconium phosphate layers for electrochemical applications", Casañas Montes, Bárbara Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid Ph.D., Colón, Jorge, Ph.D.; AAAS Caribbean Division Annual Conference, Bayamón, PR October 2007.

"Characterization of Inorganic Complexes Intercalated into Zirconium Phosphate Layers for Electrochemical Applications", Casañas Montes, Bárbara Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid; Colón, Jorge, "2007 Annual Best Practices Conference on Teaching and Learning", Embassy Suites Hotel, Dorado del Mar, October 2007.

"Characterization of Inorganic Complexes Intercalated into Zirconium Phosphate Layers for Electrochemical Applications", Casañas Montes, Bárbara; Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid; Colón, Jorge L. JAM-NSF, Washington D.C., USA, August 2007.

"Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe Ph.D., AGEF 5<sup>th</sup> Poster Presentation for Graduate Research. University of Puerto Rico; Río Piedras, Puerto Rico, July 2007.

"Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe, Ph.D., International Symposium on Advanced Material: Building Functional Systems via Self-assembly. Palmas del Mar; Humacao, Puerto Rico, April 2007.

"Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes,

Ph.D. and Ana Guadalupe, Ph.D., MGE- WAESO. Arizona State University; Arizona, USA, April 2007.

"Electrochemical and Spectrophotometric Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ph.D. and Ana Guadalupe, Ph.D., 243<sup>rd</sup> ACS National Meeting. Chicago; Illinois, USA, March 2007.

"Characterization of Inorganic Complexes Intercalated into Zirconium Phosphate Layers for Electrochemical Applications", Casañas Montes, Bárbara; Morales García, Mara; Santiago Berríos, Mitk'El B.; Montes, Ingrid; Colón, Jorge L, 27th Puerto Rico Interdisciplinary Scientific Meeting (PRISM) and the 42nd JUNIOR TECHNICAL MEETING, Bayamón, PR, March, 2007.

"An Integrated Inquiry-Guided Approach Laboratory Experience to Teach: Extraction, Recrystallization and Melting Point Determination", Linnette Pruna, Johanna Fajardo and Ingrid Montes, ACS-233st National Meeting, Chicago, March 2007.

"A Greener Approach for Esterification Reactions", Javier Escudero and Ingrid Montes, Ph.D., ACS-233st National Meeting, Chicago, March 2007.

"A History of Outstanding Activities of the ACS-Student Affiliates Chapter at the University of Puerto Rico, Río Piedras Campus", Anabel Pizarro and Ingrid Montes\*, ACS-233st National Meeting, Chicago, March 2007.

"An Innovative Way To Introduce Students To Discuss About Ethical Misconduct", Adriana Padilla, Atenaida Maldonado, Solymar Negretti and Ingrid Montes, ACS-233st National Meeting, Chicago, March 2007.

"Electrochemical Characterization of Novel Ferrocene Derivatives", Maria del Mar García, Rocío Cardona, Ingrid Montes, Ana Guadalupe, ACS-233st National Meeting, Chicago, March 2007.

"An Integrated Inquiry-Guided Approach Laboratory Experience to Teach: Extraction, Recrystallization and Melting Point Determination", Linnette Pruna, Johanna Fajardo and Ingrid Montes, PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"A Greener Approach for Esterification Reactions", Javier Escudero and Ingrid Montes, Ph.D., PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"Synthesis of Ferrocenyldienones Derivatives, Alejandra Cruz", Ingrid Montes, Ph.D., Ana Guadalupe, Ph.D., PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"An Innovative Way To Introduce Students To Discuss About Ethical Misconduct", Adriana Padilla, Atenaida Maldonado, Solymar Negretti and Ingrid Montes, PRISM/

ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"Characterization of Inorganic Complexes Intercalated into Zirconium Phosphate Layers for Electrochemical Applications", Barbara Casanas, Mara Morales, Ingrid Montes, Jorge Colon, Mitk'el Santiago, PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"Spectroscopic Characterization of Novel Ferrocene Derivatives", Yanira Enriquez, Christia Rivera, Laura Pedro, Ingrid Montes, Ana Guadalupe, PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"Electrochemical Characterization of Novel Ferrocene Derivatives", Maria del Mar García, Rocío Cardona, Ingrid Montes, Ana Guadalupe, PRISM/ ACS Jr. Technical Meeting-Inter-Bayamón, PR, March 2007.

"Celebrating Fifty Years of History for the University of Puerto Rico-Río Piedras ACS Student Affiliate Program", Anabel Pizarro and Ingrid Montes, Senior Technical Meeting, Dorado, PR, November 2006.

"Electrochemical and Spectrophotometric Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ana Guadalupe, Partnership for Research and Education in Materials (PREM)-NSF 4<sup>th</sup> Site Visit. University of Puerto Rico; Humacao, Puerto Rico, November 2006.

"Electrochemical and Spectrophotometric Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ana Guadalupe, 13<sup>th</sup> Chemical and Engineering Symposium XXX Senior Technical Meeting of the ACS. Embassy Suites; Dorado, Puerto Rico, November 2006.

"An Ethnographic Study of How Newly Designed Inquiry-Based Organic Experiments that Address Different Learning Styles Affect the Teaching-Learning Process in the Laboratory Course", Sanabria-Ríos, David and Montes, Ingrid, 232<sup>nd</sup> ACS Meeting, San Francisco, CA, September 2006 and BCCE, Purdue University, August 2006.

"Guided Inquiry Approach for a Systematic Study on the Stereoselective Reduction of Carbonyl Moiety Using Microwave Irradiation", Alejandra Cruz, David Sanabria, Ingrid Montes Ph.D., ACS-231<sup>st</sup> National Meeting, Atlanta GA., March 2006.

"Alternative approach to teach ethics and green chemistry", Vilmali López, Atenaida Maldonado, Adriana Padilla, Luis A. Serrano and Ingrid Montes, Ph.D., ACS-231<sup>st</sup> National Meeting, Atlanta GA, March 2006.

"Celebrating Fifty Years of History for the University of Puerto Rico-Río Piedras ACS Student Affiliate Program", Manuel Rodríguez and Ingrid Montes, Ph.D., ACS-231<sup>st</sup> National Meeting, Atlanta GA, March 2006.



"A Greener Systematic Study on the Stereoselective Reduction of Carbonyl Moiety Using Microwave Irradiation", Alejandra Cruz, David Sanabria, Ingrid Montes, Ph.D, PRISM/ ACS Jr. Technical Meeting-UPR-Cayey, PR, March 2006.

"Guided Inquiry Approach for a Systematic Study on the Stereoselective Reduction of Carbonyl Moiety Using Microwave Irradiation", David Sanabria, Alejandra Cruz, Ingrid Montes, Ph.D., PRISM/ ACS Jr. Technical Meeting-UPR-Cayey, PR, March 2006.

"Electrochemical and Spectrophotometric Characterization of Novel Ferrocene Derivatives", Rocío Cardona, Ingrid Montes, Ana Guadalupe, AGEP 4<sup>th</sup> Poster Presentation for Graduate Research. University of Puerto Rico; Río Piedras, Puerto Rico, July 2006.

"An Ethnographic Study of How Newly Designed Inquiry-Based Organic Experiments that Address Different Learning Styles Affect the Teaching-Learning Process in the Laboratory Course", Sanabria-Ríos, David and Montes, Ingrid, 29<sup>th</sup> ACS Senior Technical Meeting, Lajas, P.R., November 2005.

"The Portfolio: A Valuable Assessment Technique for the Organic Chemistry Laboratory", Fajardo, Johanna and Montes, Ingrid, 29<sup>th</sup> ACS Senior Technical Meeting, Lajas, P.R., November 2005.

"A Guided Inquiry Approach for the Synthesis of Artificial Flavorings. Studying the Effect of the Acetate Counterion in an SN<sub>2</sub> Reaction", Elizabeth Valentín, Ingrid Montes, 29<sup>th</sup> ACS Senior Technical Meeting, Lajas, P.R., November 2005.

"An Ethnographic Study of How Newly Designed Inquiry-Based Organic Experiments that Address Different Learning Styles Affect the Teaching-Learning Process in the Laboratory Course", Sanabria-Ríos, David and Montes, Ingrid, 230<sup>th</sup> ACS National Meeting, Washington, DC, August 2005.

"A Guided Inquiry Approach for the Synthesis of Artificial Flavorings. Studying the Effect of the Acetate Counterion in an SN<sub>2</sub> Reaction", Elizabeth Valentín, Ingrid Montes, Third Poster Presentation-College of Natural Sciences, July 2005.

"An Ethnographic Study of How Newly Designed Inquiry-Based Organic Experiments that Address Different Learning Styles Affect the Teaching-Learning Process in the Laboratory Course", Sanabria-Ríos, David and Montes, Ingrid, Third Poster Presentation-College of Natural Sciences, July 2005.

"Innovative Activities Grant for the 2004-05 ACS-Student Affiliates Chapter at the University of Puerto Rico, Río Piedras Campus", Manuel Rodríguez, Ingrid Montes, 229 ACS National Meeting, San Diego, CA, March 2005.

"A Green Chemistry Multi-step Synthesis of Ferrocene Derivatives Using the Guided Inquiry Approach", Wanda Cuadrado, Cristina Díaz and Ingrid Montes, 226<sup>th</sup> ACS National Meeting, New York, September 2003.

"The Application of Stereochemistry in the Pharmaceutical Industry: An Innovative Way to Teach Stereochemistry Using Molecular Modeling", Marilyn García, Michelle

Burgos, José A. Prieto and Ingrid Montes, , 226th ACS National Meeting, New York, September 2003.

"A Greener Approach to Synthesize Aspirin Using Microwave Irradiation", David Sanabria Ríos, Marilyn García and Ingrid Montes, 226th ACS National Meeting, New York, September 2003.

"A Greener Approach to Synthesize Aspirin Using Microwave Irradiation",\_David Sanabria Ríos, Marilyn García and Ingrid Montes, Primera Presentación de Afiches para Estudiantes Graduados-Facultad de Ciencias Naturales, Univ. De Puerto Rico-Recinto de Río Piedras, July 2003.

"A Greener Approach to Synthesize Aspirin Using Microwave Irradiation", David Sanabria Ríos, Marilyn García and Ingrid Montes, PRCHEM-2003, Westin Río Mar Hotel, Río Grande Puerto Rico, July 2003.

"A Green Chemistry Multi-step Synthesis of Ferrocene Derivatives Using the Guided Inquiry Approach", Wanda Cuadrado, Cristina Díaz and Ingrid Montes, 38th Junior Technical Meeting, San Juan, P.R., March 2003.

"A Guided Inquiry Approach for Several Esterification Reaction Routes to Synthesize Artificial Flavorings", Elizabeth Valentin, Myrella Aponte, Joel Cruz, Johanna Fajardo and Ingrid Montes, 38th Junior Technical Meeting, San Juan, P.R., March 2003.

"What is Beyond the University of Puerto Rico-Río Piedras ACS Student Affiliate Program", Victor Rodríguez and Ingrid Montes, 38th Junior Technical Meeting, San Juan, P.R., March 2003.

"The Application of Stereochemistry in the Pharmaceutical Industry: An Innovative Way to Teach Stereochemistry Using Molecular Modeling", Marilyn García, Michelle Burgos, José A. Prieto and Ingrid Montes, 26th ACS Senior Technical Meeting, San Juan, P.R., August 2002.

"Synthesis of Pharmaceutical Drugs Using Microwave Irradiation", David Sanabria, Marilyn García and Ingrid Montes, 26th ACS Senior Technical Meeting, San Juan, P.R., August 2002.

"A Guided Inquiry Experience Based on the Extraction Technique", Johanna Fajardo, Chunqiu Lai , Leslie Silvestriz and Ingrid Montes, 26th ACS Senior Technical Meeting, San Juan, P.R., August 2002.

"National Chemistry Week (NCW) Community Interaction Activities Conducted by the ACS Student Affiliates Chapters at the University of Puerto Rico, Río Piedras Campus", Victor Rodriguez and Ingrid Montes, 26th ACS Senior Technical Meeting, San Juan, P.R., August 2002.

"National Chemistry Week community interaction activities conducted by the ACS Student Affiliate Program At The University of Puerto Rico, Río Piedras Campus", Cruz Maldonado and Ingrid Montes, 223rd ACS National Meeting, Orlando, March 2002.

"The Use of Microwave Irradiation in the Synthesis of Pharmaceutical Drugs", David Sanabria, Marilyn García, Ingrid Montes, 37th Junior Technical Meeting, Arecibo, P.R., March 2002.

"A Guided Inquiry Experience Based on the Extraction Technique", Johanna Fajardo, Chunqiu Lai, Leslie Silvestriz and Ingrid Montes, 37th Junior Technical Meeting, Arecibo, P.R., March 2002.

"An Innovative Way to Teach Stereochemistry Using Molecular Modeling", Marilyn García, Ingrid Montes and José A. Prieto, 37th Junior Technical Meeting, Arecibo, P.R., March 2002.

"Development of web-based laboratory modules for Organic Chemistry for Chemistry Majors Course", Diana L. Santiago, Ingrid Montes and José A. Prieto, 37th Junior Technical Meeting, Arecibo, P.R., March 2002.

"Outcomes of the Innovative Activities and Community Interaction Grants Conducted by the ACS Student Affiliate Program at the University of Puerto Rico", Río Piedras Campus, Cruz Maldonado and Ingrid Montes, 222th ACS National Meeting, Chicago, August 2001.

"Using the Guided Inquiry Approach In Qualitative Organic Analysis", Alberto Maldonado and Ingrid Montes, 221th ACS National Meeting, San Diego, CA., April 2001.

"The use of Microwave Irradiation in the Organic Chemistry Laboratory", Marilyn García and Ingrid Montes, 221th ACS National Meeting, San Diego, CA., April 2001.

"A Broad Spectrum of Innovative Activities Worked by the ACS Student Affiliate Program at the University of Puerto Rico, Río Piedras Campus", Sergio Nanita and Ingrid Montes, 221th ACS National Meeting, San Diego, CA., April 2001.

"Using the Guided Inquiry Approach in Qualitative Organic Analysis", Alberto Maldonado and Ingrid Montes, 36th Junior Technical Meeting, Ponce, P.R., March 2001.

"The Use of Microwave Irradiation in the Organic Chemistry Laboratory", Marilyn García and Ingrid Montes, 36th Junior Technical Meeting, Ponce, P.R., March 2001.

"An Alternative for Teaching the "Like Dissolves Like" Concept", David Sanabria Chunqiu Lai and Ingrid Montes, 36th Junior Technical Meeting, Ponce, P.R., March 2001.

"Systematic Study of Esterification Reactions Focused on the Guided Inquiry Approach", Myrella Aponte, Joel Cruz, Michelle Burgos, Johanna Fajardo, Leslie Silvestriz and Ingrid Montes, 36th Junior Technical Meeting, Ponce, P.R., March 2001.

"Using the Guided Inquiry Approach in Qualitative Organic Analysis", Alberto Maldonado and Ingrid Montes, 24th ACS Senior Technical Meeting, Aguadilla, P.R., November 2000.

"New Alternatives for Teaching Organic Chemistry Using Molecular Modeling", Marilyn García and Ingrid Montes, 220th ACS National Meeting, Washington, D.C., August 2000.

"ACS Student Affiliate Program at the University of Puerto Rico, Río Piedras Campus: Innovative Activities and Community Interaction Grants", Lucas Hernández and Ingrid Montes, 220th ACS National Meeting, Washington, D.C., August 2000.

"New Alternatives for Teaching Organic Chemistry using Molecular Modeling", Marilyn García and Ingrid Montes, First ACS Undergraduate Pan American Conference, San Juan, Puerto Rico, June 2000.

"What is Beyond the ACS Student Affiliate Program at the University of Puerto Rico, Río Piedras Campus?", Lucas Hernández and Ingrid Montes, 219th ACS National Meeting, San Francisco, March 2000.

"A New Approach to Teach Chromatography in the Organic Chemistry Laboratory", Margarita Meléndez and Ingrid Montes, 35th Junior Technical Meeting, Río Piedras, P.R., March 2000.

"Introducing Molecular Modeling in the Organic Chemistry Course for Majors", Marilyn García, and Ingrid Montes, 35th Junior Technical Meeting, Río Piedras, P.R., March 2000.

"The use of the World Wide Web in the Organic Chemistry Course for Majors", Humberto Rodríguez, Ingrid Montes\* and José A. Prieto, 23th ACS Senior Technical Meeting, Humacao, P.R., November 1999.

"Systematic Study of the Grignard Reaction Focused on the Guided Inquiry Approach", Margarita Meléndez, Zaida Díaz and Ingrid Montes, 23th ACS Senior Technical Meeting, Humacao, P.R., November 1999.

"Introducing Molecular Modeling in the Organic Chemistry Course for Majors", Marilyn García, and Ingrid Montes, 23th ACS Senior Technical Meeting, Humacao, P.R., November 1999.

"An Innovative Way to Teach Stereochemistry with Molecular Modeling in the Organic Chemistry Course for Majors", Michelle Burgos, Marina Martínez, Marilyn García and Ingrid Montes, 23th ACS Senior Technical Meeting, Humacao, P.R.,

November 1999.

"Utilizing Ferrocene Chemistry to Merge Concepts of Organic, Inorganic and Analytical Chemistry In The Undergraduate Laboratory Experience", Zhiqin Ji, J. Colón, A. Guadalupe, J. Prieto and I. Montes, 34th Junior Technical Meeting, Bayamón, P.R., March 1999.

"Systematic Study of the Grignard Reaction Focused on the Problem Based Learning Approach", Margarita Meléndez, Zaida Díaz and Ingrid Montes, 34th Junior Technical Meeting, Bayamón, P.R., March 1999.

"A New Approach for the Synthesis of Dibenzalacetone", Chunqiu Lai, I. Montes and Helena Rivera, 33th Junior Technical Meeting, Bayamón, P.R., March 1998.

"Implementing the World Wide Web as Part of the Organic Chemistry Course for Majors", D. Reyes, I. Montes and J. Prieto, 33th Junior Technical Meeting, Bayamón, P.R., March 1998.

### **Selected Chaired/Organized Symposia at Meetings**

- 2011 PI and organizer "Are women still underrepresented in science?" IYC Challenge Grant project, 43<sup>rd</sup> IUPAC World Chemistry Congress/ 46<sup>th</sup> IUPAC General Assembly/ 70<sup>th</sup> CQPR Annual Conference and Exhibition, Conventional Center, San Juan, P.R., August 2011.
- 2011 Organizer Young Chemistry Ambassador Workshop, 43<sup>rd</sup> IUPAC World Chemistry Congress/ 46<sup>th</sup> IUPAC General Assembly/ 70<sup>th</sup> CQPR Annual Conference and Exhibition, Conventional Center, San Juan, P.R., July 2011.
- 2011 Water Global Experiment Workshop and Booth Organizer, 43<sup>rd</sup> IUPAC World Chemistry Congress/ 46<sup>th</sup> IUPAC General Assembly/ 70<sup>th</sup> CQPR Annual Conference and Exhibition, Conventional Center, San Juan, P.R., July 2011.
- 2009 General Chair of South East Regional Meeting- American Chemical Society National Meeting, Puerto Rico in Fall 2009.
- 2007 Co-chair of the Chemical Education Division Program at the American Chemical Society National Meeting, Boston in Fall 2007.
- 2006 Organizer of Green Chemistry Continuing Education - PR Chem, Puerto Rico in August 2006.
- 2005 Organizer of Capstone Symposium - Chemical Education Division Program at the American Chemical Society National Meeting,

- Washington in Fall 2005.
- 2005 Organizer of the General Posters Chemical Education Division Program at the American Chemical Society National Meeting, Washington in Fall 2005.
- 2000 Program Coordinator for the first Pan-American Congress for undergraduates, P.R.
- 2000 Program Chair for undergraduate program of the 220th ACS National Meeting, August 2000, Washington, D.C.
- 2000 P.R. Coordinator of U.S. National Chemistry Olympiad 1995.
- 1990 - 2000  
2003 - Present P.R. Coordinator of National Chemistry Week
- 1994 - Present Coordinator of Teaching Assistant Training Program, UPR, Río Piedras, Puerto Rico
- 1993 Coordinator of 28th Jr. Technical Meeting, American Chemical Society, UPR-Río Piedras, March 1993.
- 1991 Coordinator of a Symposium "The Environmental Impact of Solid Waste in Puerto Rico", Environmental Quality Board, Solid Wastes Authority, Safety-Kleen Inc. and UPR, UPR-Río Piedras, October 1991.
- 1991 Coordinator of the Teaching Assistant Training, University of Puerto Rico, Río Piedras, P.R., August 1991.
- 1991 Coordinator of the Safety Week, August 20-25, 1991, which includes conferences about safety and first aid in laboratories.
- 1990 Coordinator of the 14th Senior Technical Meeting, Río Piedras, December 1990.

## Honors and Awards

|             |  |
|-------------|--|
| 2020        | "Dr. Osvaldo Ramírez-Toro", Colegio de Químicos de PR.   |
| 2020        | Listed as one of the 100 inspiring Hispanic /Latinx scientists in America.                       |
| 2019        | "Zaida C. Morales-Martinez-Prize for Outstanding Mentoring", American Chemical Society           |
| 2019        | "Distinguish Professor" Universidad Cayetano Heredia, Lima, Perú                                 |
| 2018        | "Reconocimiento de liderato", Sociedad Química de Lima, Perú.                                    |
| 2018        | Mujer Puertorriqueña Distinguida en STEM, G Works, Inc.  |
| 2017        | IUPAC 2017 Award for Distinguished Women in Chemistry or Chemical Engineering                    |
| 2016        | Special recognition by the Puerto Rico Senate  |
| 2013 – 2018 | Director-at-Large, Board of Directors, American Chemical Society                                 |
| 2013-2018   | Honorary Member, Golden Key International Honour Society   |
| 2012        | 2012 American Chemical Society Volunteer Service Award   |
| 2010        | Fellow ACS (American Chemical Society)   |
| 2009        | Nominated for the 2009 U.S Professors Years Program sponsored by CASE                            |
| 2008        | Nominated for The National Society of Collegiate Scholars (NSCS) 2009 Inspire Integrity Award    |
| 2006        | Leonardo Igaravidez Award, American Chemical Society, Puerto Rico Section                        |
| 2006        | Fellow-IUPAC (International Pure and Applied Chemistry)  |
| 2005        | Outstanding Volunteer Service Plaque, ACS President  |
| 2004        | Salute to Excellence Awarded by Committee on Community Activities-NCW Coordinator for ten years. |

1995, 1999, 2000,  
2004, 2005, 2007, While Coordinator of the ACS Puerto Rico Local Section, National  
2008 (2), 2009, Chemistry Week and Chemists Celebrate Earth Day:  
2010, 2011(3), ChemLuminary Awards were awarded to the Puerto Rico Section.  
2012 (1), 2013 (2)  
2014 (1), 2015 (2) , 2016 (2),2019

2003 While Chair of the ACS Puerto Rico Local Section, the SOCED Certificate of Excellence was awarded to the Puerto Rico Section Best Interaction with SA.

2002 - Present Who's Who Among America's Teachers

1999 Chemical Education Award, American Chemical Society, Puerto Rico Section

1997 Excellence and Productivity Award; University of Puerto Rico, Río Piedras Campus.

1997 Nominated by the Puerto Rico Local Section for the American Chemical Society Hellen Free Award

1995 While President of the ACS Puerto Rico Local Section, the National Chemistry Week Phoenix Award and a Certificate of Excellence in the medium-small category was awarded to the Puerto Rico Section.

1981 - 1984 Research Fellow of the NIH-MBRS Program

1980 Graduated Magna Cum Laude

1979 -1980 Undergraduate Research Fellow of NIH-MBRS Program

### **Collaborators**

Jürgen Bosch Ph.D. Johns Hopkins University Bloomberg School of Public Health, Department of Biochemistry & Molecular Biology, Johns Hopkins Malaria Research Institute.

William Scott, Purdue University. "Distributed Drug Discovery (D3) Synthesis and Testing of Multiple Unnatural Dipeptides Identifies a Subset with Potent Antimicrobial Activity against *Pseudomonas aeruginosa* (Pa)" William L. Scott,\*<sup>a</sup> Martin J. O'Donnell,<sup>a</sup> J. Geno Samaritoni,<sup>a</sup> Kathy Marrs,<sup>a</sup> Gregory G. Anderson,<sup>a</sup> Amy B. Dounay,<sup>b</sup> Amelia A. Fuller,<sup>c</sup> Luis Miranda,<sup>d</sup> Ingrid Montes,<sup>e</sup> Guillermo Morales,<sup>f</sup> Doug Schirch,<sup>g</sup> Kevin Sullivan<sup>h</sup> <sup>a</sup>Indiana University Purdue University Indianapolis (IUPUI),



<sup>b</sup>Colorado College, <sup>c</sup>Santa Clara University,<sup>d</sup>Universidad Nacional Autónoma de México, <sup>e</sup>University of Puerto Rico, <sup>f</sup>Innoventyx, <sup>g</sup>Goshen College, <sup>h</sup>University of Indianapolis, Peptide Therapeutics Symposium, La Jolla California, Oct, 2019.

José Ortíz, Ph.D., Pharmacology & Toxicology, University of Puerto Rico, School of Medicine, San Juan Puerto Rico.

Mahesh Narayan, University of Texas, El Paso.

Dr, Esther Peterson, Department of Biology, University of Puerto Rico, Río Piedras Campus.

Adelfa Serrano, Ph.D., University of Puerto Rico, Medical Sciences Campus.

Dr. Fathi Halaweish from South Dakota State University in Brookyns South Dakota.

David Sanabria, Ph.D., InterAmerican University-Metropolitan Campus.

Ana Guadalupe, Ph.D.,\_Department of Chemistry, University of Puerto Rico, Río Piedras Campus.

Ana Guadalupe, Rocío Cardona, Kenneth Hernandez, Laura Pedro, Myrna Otaño, and Ingrid Montes "Electrochemical and Spectroscopical Characterization of Ferrocenyl Chalcones" *Journal of The Electrochemical Society*, **2010**, 157, 104-110.

Dalice Piñero, Ph.D., Department of Chemistry, University of Puerto Rico, Río Piedras Campus.

Jorge Colón, Ph.D., Department of Chemistry, University of Puerto Rico, Río Piedras Campus.

Victor Bonilla, Ph.D., College of Education, Department of Graduate Studies, University of Puerto Rico, Río Piedras Campus.

Reinaldo Berríos, Ph.D., College of Education, Department of Graduate Studies, University of Puerto Rico, Río Piedras Campus.

Francisco Arnáiz, Ph. D., Universidad de Burgos, Spain- Sabbatical 2010-2011.

“La reacción del yodo con el aluminio. Un proyecto para el laboratorio integrado” Sara M. Delgado, Ingrid Montes, Ph.D., Francisco J. Arnáiz, Ph.D. XXXIII Reunión Bienal de Química de la Real Sociedad Española de Química, Valencia, Spain, July, 2011.

## Research with students

### Thesis Advisor Graduates

|                       |                              |
|-----------------------|------------------------------|
| David Sanabria, Ph.D. | Fall 2001 to December 2006   |
| Myrna Otaño, MS.      | Summer 2008 to February 2014 |
| Johanna Fajardo, MS.  | January 2009 to May 2014     |
| Juan C. Aponte, Ph.D. | Summer 2009                  |
| Sara Delgado, MS      | Summer 2009                  |
| Joan Torres, Ph.D.    | Summer 2017                  |
| Sara Delgado. Ph.D.   | Summer 2017                  |
| Ambar Alsina          | Summer 2018                  |
| Alejandro Burgos      | Summer 2018                  |
| José A. Méndez        | Summer 2018                  |

### Thesis Co-Advisor

|                               |                            |
|-------------------------------|----------------------------|
| Rocío Cardona, Ph.D.          | August 2007 to August 2011 |
| Mara Morales, MS in Education | August 2011                |

### Undergraduates

|                    | Area of Research   | Current Status          |
|--------------------|--------------------|-------------------------|
| Helena Rivera      | Chemical Education | Lawyer                  |
| Margarita Meléndez | Chemical Education | Ph.D. Pharmacology      |
| Zaida Díaz         | Chemical Education | M.D.                    |
| Marilyn García     | Chemical Education | Ph.D. in Chemistry      |
| Michelle Burgos    | Chemical Education | Ph.D. in Biochemistry   |
| Johanna Fajardo    | Chemical Education | M.S. in Chemistry       |
| Alberto Maldonado  | Chemical Education | M.D.                    |
| Leslie Silvestriz  | Chemical Education | B.S. in Chemistry       |
| David Sanabria     | Chemical Education | Ph.D. in Chemistry      |
| Diana Santiago     | Chemical Education | B.S. in Chemistry       |
| Joaudimir Castro   | Chemical Education | Ph.D. in Chemistry      |
| Cristina Díaz      | Chemical Education | Education Ph.D. student |
| Wanda Cuadrado     | Chemical Education | M.S. in Chemistry       |
| Elizabeth Valentín | Chemical Education | Ph.D. in Chemistry      |
| Myrella Aponte     | Chemical Education | B.S. in Chemistry       |
| Joel Cruz          | Chemical Education | B.S. in Chemistry       |
| Nahir Vélez        | Chemical Education | Ph.D. in Chemistry      |
| Linette Pruna      | Chemical Education | M.S. in Public Health   |
| Myrna Otaño        | Chemical Education | M.S. in Chemistry       |
| Barbara Casañas    | Organic Chemistry  | M.S. in Chemistry       |
| Mara Morales       | Organic Chemistry  | M.S. in Education       |
| Alejandra Cruz     | Green Chemistry    | Ph. D. in Chemistry     |
| Vilmalí López      | Chemical Education | Ph. D. in Chemistry     |

|                     |                    |                           |
|---------------------|--------------------|---------------------------|
| Atenaida Maldonado  | Chemical Education | B.S. in Chemistry         |
| Adriana Padilla     | Chemical Education | M.S. in Public Health     |
| Solyamar Negretti   | Chemical Education | Ph.D. in Chemistry        |
| Wilnelly Martínez   | Green Chemistry    | B.S. in Chemistry         |
| Javier Escudero     | Green Chemistry    | B.S. in Computer Sciences |
| Sonia de la Torre   | Green Chemistry    | Ph.D. in Chemistry        |
| Juan Carlos Aponte  | Green Chemistry    | Chemistry Ph.D.student    |
| Rafael Ramos        | Chemical Education | Pharm.D.                  |
| José Cintrón        | Chemical Education | B.S. in Chemistry         |
| Silvette Castro     | Green Chemistry    | B.S. in Chemistry         |
| Joan Roque*         | Chemical Education | Chemistry Ph.D.student    |
| Ninoshka LaFontaine | Organic Chemistry  | B.S. in Chemistry         |
| Adriana Rodríguez   | Organic Chemistry  | M.D.                      |
| Viviana León        | Organic Chemistry  | M.S. in Chemistry         |
| Juan Corchado       | Chemical Education | Ph. D. in Chemistry       |
| Eduardo Feliciano   | Chemical Education | M.S. in Business          |
| Gabriela Falcón     | Chemical Education | M.D.                      |
| Edgardo Martínez    | Chemical Education | M.D.                      |
| Fernando Correa     | Organic Chemistry  | Ph. D. in Chemistry       |
| Janice Soto         | Organic Chemistry  | M.D.                      |
| Cristian Morales    | Organic Chemistry  | Ph. D. in Chemistry       |
| Emmanuel López      | Green Chemistry    | M.D.                      |
| Josué Rivera        | Organic Chemistry  | Pharm.D.                  |
| Ingrid Lehman       | Organic Chemistry  | Chemistry Ph.D.student    |
| Israel Méndez       | Chemical Education | M.D.                      |
| María Rodríguez     | Chemical Education | B.S. in Chemistry         |
| Jesús Dones         | Organic Chemistry  | Ph.D. in Chemistry        |
| Giovanni Rodríguez  | Organic Chemistry  | M.D. student              |
| Julio Cedeño        | Organic Chemistry  | Pharm.D.                  |
| Stephanie Ramos     | Organic Chemistry  | Chemistry Ph.D.student    |
| Adrian Burgos       | Chemical Education | Pharm.D. student          |
| Edmarie Santiago    | Organic Chemistry  | Pharm.D.                  |
| Raúl Martínez       | Organic Chemistry  | Pharm.D.                  |
| Soraya Abdul        | Organic Chemistry  | M.D. student              |
| Natalia Arrocho     | Organic Chemistry  | M.D. student              |
| Andrés Molina       | Organic Chemistry  | Chemistry Ph.D. Student   |
| Reinaldo Colón      | Organic Chemistry  | M.D. student              |
| Giovanny Pérez      | Organic Chemistry  | M.D. student              |
| Naishka Caldero     | Organic Chemistry  | Chemistry Ph.D. Student   |
| Xaimara Santiago    | Organic Chemistry  | Chemistry Ph.D. Student   |
| Jesse Dávila        | Organic Chemistry  | Chemistry Ph.D. Student   |
| Ambar Alsina        | Organic Chemistry  | Chemistry Ph.D. Student   |
| Juan Bernier        | Organic Chemistry  | Pharm. D.                 |
| Roberto Rosado      | Organic Chemistry  | M.D. Student              |
| Alejandro Burgos    | Organic Chemistry  | Chemistry Ph.D. Student   |
| Geraldo Durán       | Organic Chemistry  | Chemistry, Ph.D. Student  |
| Antonio Bon         | Organic Chemistry  | M.D. Student              |

|                     |                    |                          |
|---------------------|--------------------|--------------------------|
| José Mercado        | Organic Chemistry  | Chemistry, Ph.D. Student |
| Daisy Díaz          | Organic Chemistry  | Chemistry Ph.D. Student  |
| Alondra Rodríguez   | Organic Chemistry  | Chemistry Ph.D. Student  |
| José Hernández      | Organic Chemistry  | Chemistry Ph.D. Student  |
| Sebastián Henriquez | Organic Chemistry  | M.D. Student             |
| Miguel Nieves       | Organic Chemistry  | Chemistry Ph.D. Student  |
| Errie Gibson        | Organic Chemistry  | Undergraduate student    |
| Carlos Tirado       | Organic Chemistry  | Chemistry Ph.D. student  |
| Paola Bonilla       | Organic Chemistry  | Undergraduate student    |
| Edwin Ortiz         | Organic Chemistry  | Undergraduate student    |
| Paola Alemán        | Organic Chemistry  | Undergraduate student    |
| Delvin Caraballo    | Organic Chemistry  | Undergraduate student    |
| María Moreno        | Chemical Education | Undergraduate student    |
| José LLera          | Organic Chemistry  | Undergraduate student    |
| Amanda Conde        | Organic Chemistry  | Undergraduate student    |
| Leonardo Birriel    | Organic Chemistry  | Undergraduate student    |
| Emily Duclós        | Chemical Education | Undergraduate student    |
| Yaritza Ortega      | Chemical Education | Undergraduate student    |

\*UPR-Humacao RISE Program

Member of Graduate Committee for:

|                    |                                      |
|--------------------|--------------------------------------|
| Marilyn García     | Dr. J. Rivera's Group                |
| Elizabeth Valentín | Dr. J. Prieto's Group                |
| Mariana Martín     | Dr. J. Rivera's Group                |
| Rocío Cardona      | Dr. A. Guadalupe's Group             |
| Barbara Casañas    | Dr. J. Colón's Group                 |
| Alejandra Cruz     | Dr. J. Prieto's Group                |
| Karinél Nieves     | Dr. A. Rodríguez's Group             |
| Edwin Vázquez      | Dr. Irving Vega                      |
| Carlos Nogueras    | Dr. Irving Vega                      |
| Yermay Morales     | Dr. Abel Baerga                      |
| María Sarmiento    | Dr. Jorge Colón                      |
| Jean González      | Dr. Dalice Piñero                    |
| Keysha Cordero     | Dr. Dalice Piñero                    |
| Dara Rodríguez     | Dr. J. Rivera's Group                |
| Kathleen Lugo      | Dr. V. Anagnostopoulos's Group (UCF) |
| Alondra Rodríguez  | Dr. Eduardo Nicolau                  |

Students Graduated

|   |             |
|---|-------------|
| David Sanabria  | Ph. D. 2007 |
| "Assesment of Organic Inquiry-Based Laboratory Experiences Targeting Different Learning Styles: Ethnographic Study" |             |

Myrna Otaño MS 2014  
"Syntheses and Characterization of Ferrocenyl Chalcones"

Johanna Fajardo MS 2014  
"Syntheses and Characterization of New Ferrocene Polymers from Ferrocenyl Chalcones"

Sara Delgado MS 2017  
"Synthesis and Characterization of Ferrocenyl Chalcone Ammonium and Pyridinium Salt Derivatives"

### **Courses Taught**

|                |  |
|----------------|--|
| 2012 - 2013    | Capstone Course: From Fire to Plasma: A Journey through the History of Chemistry |
| 2011           | Capstone Course: Green Chemistry   |
| 1994 - Present | Organic Chemistry Course for Majors  |
| 1987 - Present | Organic Chemistry Laboratory for Majors  |
| 1987 - 1994    | Organic Chemistry Course for Non-Majors  |
| 1987 - 1994    | Organic Chemistry Laboratory for Non-Majors                                      |
| 1992 - 1994    | Organic Synthesis  |
| 1993           | Team Teaching Capstone Course: The Impact of Chemistry in the Environment        |
| 1987 - 1988    | General Chemistry, Lecture and Laboratory  |

### **Professional Societies**

American Chemical Society  
International Union of Pure and Applied Chemistry  
American Association for the Advancement of Science  
Society for Advancement of Chicanos/Hispanics and Native Americans in Science  
Puerto Rico Chemist's Association  
American Association of Chemistry Teachers

## Committees and National Service

### American Chemical Society

- 1989 - Present Board Member, American Chemical Society Puerto Rico Local Section
- Local Section Secretary (1993)
- Chairperson Elect of the Puerto Rico Section of the ACS (1994, 2002, 2010, 2021)
- Chairperson (1995, 2003, 2011, 2022)
- 1996, 2004, 2012 Past Chairperson of the Puerto Rico Section of the ACS
- Treasurer (1998)
- Alternate Councilor (1996 – 1998)
- Councilor (1998 – 2012)
- 1989 – 2000,  
2003,  
2005 - Present National Chemistry Week (NCW) Coordinator – Puerto Rico Section
- 2008 – Present Chemists Celebrate Earth Week (CCEW) Coordinator – Puerto Rico Section
- 2009 – 2021 Project Seed Coordinator
- 1989 – Present Faculty Advisor of UPR-RP Student Chapter of the American Chemical Society. The Chapter has been recognized as an Outstanding Chapter in 1993, 1994, 1995, 1996, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019, 2020, 2021, and as Commendable in 1997.
- 1995, 1998,  
1999, 2004 Peer Review Evaluator of the ACS Student Affiliates Chapters, Baltimore.
- 1999 – 2001 Member of the American Chemical Society Task Force in Undergraduate Education (Meeting Planning)
- 1999 – 2004 Member of the American Chemical Society Task Force for the

|             |   |
|-------------|---|
|             | National Chemistry Week   |
| August 2000 | Program Director for the Undergraduate Program of the 220 <sup>th</sup> ACS National Washington, DC                           |
| 2001 – 2009 | Member of the American Chemical Society, Society Committee on Chemical Education.   |
| 2002 – 2009 | Member of the American Chemical Society Chemical Education Division (National Meetings Program Committee)                     |
| 2004 – 2007 | Member of the American Chemical Society, Committee on Community Activities. (Chair of the Award and Recognition Subcommittee) |
| 2005        | Coordinator for the Presidential Event “Festival de Química”. Spring Meeting, San Diego, March 2005.                          |
| 2006 – 2011 | Member of the American Chemical Society, Advisory Board for ChemMatters Magazine.   |
| 2007 – 2009 | Chair of the American Chemical Society, Advisory Board for ChemMatters Magazine   |
| 2007 - 2009 | Chair of the American Chemical Society Committee on Community Activities.   |
| August 2007 | Program Co-Chair for the Division of Chemical Education of the Fall 2007 ACS National Meeting in Boston                       |
| 2008 – 2016 | Member of the American Chemical Society Chemical Education Division (Long Range Planning Committee).                          |
| 2009        | General Chair of South Eastern Regional Meeting – American Chemical Society National Meeting, Puerto Rico in Fall 2009        |
| 2009 – 2011 | Chair of the American Chemical Society Theme Team for the International Year of Chemistry celebration.                        |
| 2009 – 2011 | Representative of the American Chemical Society at the IUPAC 2011 Organizing Committee  |
| 2010 – 2012 | Member of Committee on Committees – American Chemical Society   |
| 2010        | Consultant, Committee on Community Activities   |

- 2011 – 2016 Chair of the Long-Range Planning Committee – Division of Chemical Education
- 2013-21 Board of Directors, Director-at-Large, 2013-21; Councilor ex officio, 2013-21; Working Group on Board Structure and Representation 2021; Board Liaison to Diversity, Equity, Inclusion and Respect Advisory Board 2016-21, DEIR Board Strategy Working Group 2020-21; SACNAS-ACS Task Force 2019-21; CPC Working Group on Future Council Representation 2020-21; Board Globalization Liaison 2018-19; Committee on Professional & Member Relations, 2013–21, Chair 2017; Committee on Public Affairs & Public Relations, 2019-21, 2013–14; Web Strategy & Innovation Subcommittee Chair 2014-16; Committee on Grants & Awards, 2015-16; Task Force on Governance Design 2016-18; Development Advisory Board 2015 to date; Volunteer Leader for the SEED Anniversary Appeal 2018
- 2015 Executive Committee for the ACS Scholars Program 20<sup>th</sup> Anniversary
- 2015-Present Development Advisory Board/ Volunteer Leader for the SEED Anniversary Appeal 2018
- 2015-Present Coordinator for Webinar in Spanish
- 2022 Consultant-International Activities Committee
- 2022-2024 ACS Board of Trustees
- 2022-2024 Director-SACNAS Board of Directors

### **International Union of Pure and Applied Chemistry**

- 2018-Present Coordinator of the Global Women Breakfast in Puerto Rico
- 2009 – 2011 Representative of the American Chemical Society at the IUPAC 2011 Organizing Committee
- 2009 – 2011 Chair of the Outreach Committee at the IUPAC 2011 Organizing Committee



- 2011 Organized symposium on “Are women still underrepresented in science?” 2011 IUPAC World Chemistry Congress
- 2011 Established the IUPAC Award for Distinguished Women in Chemistry and Chemical Engineering, first given at that IUPAC World Chemistry Congress in 2011
- 2011 Organized Young Chemistry Ambassador Workshop, 2011 IUPAC World Chemistry Congress
- 2011 Organized Water Global Experiment Workshop and Booth Exhibition, 2011 IUPAC World Chemistry Congress
- 2011 Organized outreach event; Festival de Química, 2011 IUPAC World Chemistry Congress
- 2006 Keynote speakers at the International Conference on “New Directions in Teaching, Learning and Evaluation of chemical Sciences at Tertiary Level” held in Sri Lanka and sponsored by International Union of Pure and Chemistry (IUPAC), Royal Society of Chemistry (London) and University Grant Commission (UGC) of Sri Lanka

### **Colegio de Químicos de Puerto Rico**

- 2005-Present Active volunteer, contributing to the Continuing Education Program Committee and annual meeting program
- 1996-98 Chair of Committee for Professional and Scientific Activities
- 1990-1994 Member of the Students’ Award Committee

### **Editorial Boards**

- 2014 – Present Member of the Editorial Advisory Board, Revista Educación Química
- 2010 – Present Member of the Editorial Advisory Board, Journal of Chemical Education
- 2006 – 2011 Member of the American Chemical Society, Advisory Board for ChemMatters Magazine

- 2007 – 2009 Chair of the American Chemical Society, Advisory Board for ChemMatters Magazine
- 2004 – Present Peer Reviewer: Journal of Chemical Educator and Journal of Chemical Education

University of Puerto Rico System

- 2007 Member of Group II (Initiative on Access and Success) – National Association of System Heads (NASH)
- 2005 - 2016 Appointed by UPR President, Chair of the UPR Systemic Committee for Improvement of the UPR Chemistry Program

University of Puerto Rico – Río Piedras Campus

- 2015-2018 Member of Graduate Studies and Research Council
- 2010 Member of the Task Force e-Learning Proposal (Title V)
- 1999 - 2003 Chair General Education Component Committee
- 1995 - 1996 Member of the Institutional Leadership Project (ACE/Kellog Project), Group II: Written and Oral Communication Skills including Telecommunications

College of Natural Sciences – University of Puerto Rico – Río Piedras Campus

- 2015-2018 Chair of Safety Committee
- 2007-2010 Member of the Academic Affairs Committee
- 2001 – 2008 Chair of the College of Natural Sciences' Committee for the Revision of the BS at the University of Puerto Rico, Río Piedras
- 1999 Member of the Strategic Plan Committee, Curriculum Component, Community Service and Continuous Education – College of Natural Sciences
- 1997 – 1998 Member of the College of Natural Sciences' Committee for evaluation of the Scientific Illustration Shop
- 1996 Member of the Faculty of Natural Sciences' Committee for Telecommunications and Informatic

## Chemistry Department – University of Puerto Rico – Río Piedras Campus

- 1989 – Present Chair, Chemistry Department Committee for Safety  
Chair, 2003-2008, 2015-Present
- 2005 – 2014 Department Strategic Planning Committee
- 1998 Member of the Strategic Plan Committee ( Curriculum Component)  
– Department of Chemistry
- 1996 – Present Chemistry Department Committee of Academic Affairs
- 1995 – 1996 Member of the Department's Committee for the  
Reconceptualization of the BS in Chemistry, University of Puerto  
Rico, Río Piedras

## Community and Professional Associations

- 2015 – Present Actively work with Ciencia PR as a mentor, ambassador of STEMM  
and offering talk, workshops, and chemistry demonstrations for girls  
(K-12).
- 1989 – Present Actively work with teachers schools' administrators and students;  
coordinating contests, offering workshops, chemistry  
demonstrations shows “The Magic of Chemistry”, hands-on  
activities, supervising students and judging scientific fairs.
- 1990 Member of Hospitality Committee, National Convention, NSTA