G. SANTIAGO SANDI-URENA

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Department of Chemistry
University of South Florida
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RELEVANT EDUCATION

Ph.D. in Chemistry with emphasis in Chemical Education, **Department of Chemistry, Clemson University,** Clemson, South Carolina, August, 2008. "Design and Validation of a Multimethod Assessment of Metacognition and Study of the Effectiveness of Metacognitive Interventions", doctoral mentor: Professor Melanie M. Cooper.

Diverse graduate level courses in Education, **Department of Natural Sciences, National Distance University of Costa Rica,** Costa Rica, February, 2003 – May, 2005.

Diverse courses in Social Sciences and Communication, **School of Communication, University of Costa Rica,** Costa Rica, February, 1996 – December, 1997.

M.Sc. in Chemistry with emphasis in Inorganic Chemistry, **Department of Chemistry, Clemson University,** Clemson, South Carolina, August, 1992. "Iron and Cobalt Complexes of Binucleating Robson-Type Macroligands", graduate mentor: Dr. Edith Parsons.

B. S., **School of Chemistry, University of Costa Rica,** Costa Rica, July, 1989.

RESEARCH AND TEACHING

Assistant Professor, **Department of Chemistry, University of South Florida**, Tampa, FL, August, 2009 – present

Postdoctoral Fellow, Dr. Melanie M. Cooper Research Group, **Department of Chemistry, Clemson University**, Clemson, SC, August, 2008 – June, 2009

Instructor, **Department of Chemistry, Clemson University**, Clemson, S.C. August, 2008 – May, 2009

Graduate Research and Teaching Assistant, **Department of Chemistry, Clemson University**, Clemson, S.C., May, 2005 – July, 2008

Teacher, Physical Science, **Fort Dorchester High School**, Dorchester County, S.C., September, 2003 – May, 2004. South Carolina State Board of Education, Chemistry Educator Certificate, 2003-2006.

Lecturer, **School of Chemistry, University of Costa Rica**, Costa Rica, February – July, 2003; February – December, 2001; February – July, 1999; February – December, 1994.

Visiting Assistant Professor, **Department of Chemistry, The College of St. Catherine**, Saint Paul, MN, September, 1999 – August, 2000.

Lecturer, **School of Medicine, International University of the Americas**, Costa Rica, January 1996 – September, 1997.

Teaching Assistant, **Department of Chemistry, Clemson University**, Clemson, SC, August, 1989 – July, 1992

Teaching/Grading Assistant, **School of Chemistry, University of Costa Rica**, Costa Rica, July, 1986 – July 1989

SCIENTIFIC PUBLICATIONS

* Indicates paper published as graduate student, # indicates undergraduate student

Sandi-Urena, S. and Gatlin, T., manuscript in preparation, Synergy in the Dual Role of Chemistry Graduate Researcher and Teaching Assistant.

#Bergin, A., #Sharpe, K., #Gower, A., Gatlin, T. A., Villalta-Cerdas, A. and Sandi-Urena, S., submitted for review, Tapping the Goldmine: Use of RateMyProfessors.com as an Instruction Assessment Tool.

Gatlin, T. A. and Sandi-Urena, S., submitted for review, Graduate Student Self-image as Teaching Assistant and its Role in Laboratory Instruction.

Sandi-Urena, S., Cooper, M. M. and Stevens, R., (2012), Effect of Cooperative Problem Based Lab Instruction on Metacognition and Problem Solving Skills*, Journal of Chemical Education*, **89**, 700-706.

Gatlin, T.A. and Sandi-Urena, S., (2012), Experimental Chemistry Teaching: Understanding Teaching Assistants' Experience in the Academic Laboratory, invited paper for the Emergent Topics in Chemistry Education series, *Educación Química,* 23, 141-148.

Sandi-Urena, S., Cooper, M. M. and Stevens, R., (2012), Evaluación y Desarrollo de la Metacognición en la Instrucción de Laboratorio de Química Universitaria (Development and Assessment of Metacognition in College Chemistry Laboratory Instruction), *Proceedings from the II International Congress on Educational Research*, Costa Rica.

Sandi-Urena, S., Cooper, M. M., Gatlin, T. A. and Bhattacharyya, G., (2011), Students' experience in a general chemistry cooperative problem based laboratory, *Chemistry Education Research and Practice,* **12**, 434-442.

Sandi-Urena, S., Cooper, M. M. and Gatlin, T. A., (2011), Graduate Teaching Assistants' Epistemological and Metacognitive Development, *Chemical Education Research and Practice*, **12**, 92-100.

*Sandi-Urena, S. and Cooper, M. M., (2011), Enhancement of Metacognition Use and Awareness by Means of a Collaborative Metacognitive Intervention, *International Journal of Science Education*, **33**, 323-340.

Sandi-Urena, S. and Cooper, M. M., (2010), Evaluación y Desarrollo de la Metacognición en Enseñanza de la Química (Assessment and Development of Metacognition in Chemistry Education), *Ciencia y Tecnología, Universidad de Costa Rica*, **26** (1, 2), 47-57.

*Sandi-Urena, S. and Cooper, M. M., (2009), Design and Validation of an Inventory to Assess Metacognitive Skillfulness in Chemistry Problem Solving, *Journal of Chemical Education*, **86**, 240-245.

Cooper, M. M., *Sandi-Urena, S. and Stevens, R., (2008), Reliable Multi Method Assessment of Metacognitive Use in Chemistry Problem Solving, *Chemistry Education Research and Practice*, **9**, 18-24.

Sandi-Urena, S., Vargas-Calvo, C. E. and Mena-Rivas, R., (2004), *Ciencias, 8vo Año: Química* (Science, 8th Grade: Chemistry), San José, Costa Rica: Santillana Editorial.

Sandi-Urena, S., (1998), Aspectos Generales de la Espectroscopía de Emisión por Plasma Acoplado Inducido, ICP-OES (General Aspects of Induced Coupled Plasma Emission Spectroscopy Technique, ICP-OES), *Ingeniería y Ciencia Química*, **18**, 35-39.

*Sandi-Urena, S. and Parsons, E. J., (1994), Binuclear Iron (III) Coordination Compounds with Robson Type Shiff Bases, *Inorganic Chemistry*, **33**, 302-305.

*Sandi-Urena, S. and Parsons, E. J., (1993), Mononuclear versus Binuclear Cobalt Coordination Compounds with Binucleating Schiff Base Ligands, *Inorganica Chimica Acta*, **214**, 177-180.

SCHOLARLY PRESENTATIONS (last five years)

INVITED

Gordon Research Conference: Chemical Education Research and Practice, Newport, Rhode Island, June 9-14, 2013.

"Effectiveness of instructional activities in promoting self-explaining in general chemistry courses", S. Sandi-Urena, A. Villalta-Cerdas, **Latin American Chemistry Congress (CLAQ), Cancun, Quintana Roo, Mexico,** October 27-31, 2012.

"Laboratory Instruction in Chemical Education: Research and Practice", **VI Meeting of the Colombian Chemistry Professional Council, Bogota,** October 4-5, 2012.

"Design of Learning Experiences in College Chemistry", **'Talentos' Graduate Program, Universidad del Valle Cali, Colombia,** tele-conference, May 28, 2011 (Spanish: "Diseño de Oportunidades de Aprendizaje en Química Universitaria").

"Understanding Learning in the General Chemistry Laboratory to Facilitate Enhancement of Instruction", **Department of Chemistry, University of North Carolina-Wilmington, Wilmington, North Carolina,** April 21, 2011.

"Metacognition and Problem Solving Skills Development in the Academic Chemistry Laboratory", **Department of Chemistry and Physics, Florida Southern College, Lakeland, Florida**, March 18, 2011.

"Higher Education from the Disciplinary Perspective: Assessment and Development of Metacognition in College Chemistry", **Graduate Studies System, Universidad de Costa Rica, San José, Costa Rica,** April 6, 2011 (Spanish: "La Educación Superior desde la Perspectiva Disciplinaria: Evaluación y Desarrollo de la Metacognición en la Química Universitaria").

"Assessment and Development of Metacognitive Skills in Science Education", **MADEMS Program, Universidad Nacional Autónoma de México, Mexico City, Mexico,** December 6, 2010 (Spanish)

"Virtualization of College Education from the Perspective of Chemical Education Research"**, IV Meeting for the Analysis of Chemistry Education in Colombia, Chemistry Professional Council of Colombia, XXIX Latin American Chemistry Congress, Cartagena, Colombia,** September 28, 2010 (Spanish)

"From International Grad Student to Assistant Professor: Opportunities and Challenges", **Society for the Advancement of Chicanos and Native Americans in Science, Clemson Chapter, Clemson University, Clemson, SC,** November 6, 2009.

"Effect of Cooperative Problem Based Laboratory Instruction on Graduate Teaching Assistants' Development as Scientists", **Chemical Education Research Symposium, 61st South Eastern Regional Meeting of the American Chemical Society (SERMACS), San Juan, Puerto Rico,** October 21-24, 2009.

"Mixed Methods Evidence of the Impact of Cooperative, Problem Based Laboratory Instruction on Metacognition Use and Chemistry Problem Solving Skills", **Department of Engineering and Science Education Seminar Series, Clemson University, Clemson, SC,** March 6, 2009.

CONTRIBUTED (# indicates undergrad student, presenter underlined)

"Current state of research in chemistry learning in the academic college laboratory" S. Sandi-Urena, T. A. Gatlin, A. Villalta-Cerdas, **Biennial Conference on Chemical Education (BCCE),** College Park, PA, July 31-August 2, 2012.

"Epistemological development of chemistry graduate teaching assistants", T. A. Gatlin, S. Sandi-Urena, **Biennial Conference on Chemical Education (BCCE),** College Park, PA, July 31-August 2, 2012.

"Students' framing of the learning experience in an expository general chemistry laboratory", A. Villalta-Cerdas, S. Sandi-Urena, **Biennial Conference on Chemical Education (BCCE),** College Park, PA, July 31-August 2, 2012.

"Learning Chemistry through the generation of self-explanations", S. Sandi-Urena, **Joint International Conference on Chemical Education (ICCE) and European Conference on Research in Chemical Education (ECRICE),** Rome, Italy, July 15-20, 2012.

"Use of Problem Solving to Elicit Self-explaining in General Chemistry", A. Villalta-Cerdas, S. Sandi-Urena, **Joint International Conference on Chemical Education (ICCE) and European Conference on Research in Chemical Education (ECRICE),** Rome, Italy, July 15-20, 2012

"Chemistry graduate teaching assistants' epistemological development in a non-traditional learning environment", T. A. Gatlin, S. Sandi-Urena, **Joint International Conference on Chemical Education (ICCE) and European Conference on Research in Chemical Education (ECRICE),** Rome, Italy, July 15-20, 2012.

"Self-explaining experiences in large enrollment general chemistry courses", A. Villalta-Cerdas, S. Sandi-Urena, **ACS Florida Annual Meeting and Exposition, Inninsbrook**, FL, May 19, 2012.

"Clarifying the credentials: Judging criteria of Ratemyprofessors.com as an instruction assessment tool", #Kevan Sharp, #Patrick McKena, Todd Gatlin, Adrian Villalta-Cerdas, Santiago Sandi-Urena, **ACS Florida Annual Meeting and Exposition, Inninsbrook**, FL, May 19, 2012.

"Self-explaining experiences in large enrollment general chemistry courses", Adrian Villalta-Cerdas, Santiago Sandi-Urena, **10th Raymond Castle Research Conference, Department of Chemistry, University of South Florida, Tampa, Florida,** April 14, 2012.

"Clarifying the credentials: Judging criteria of Ratemyprofessors.com as an instruction assessment tool", #Kevan Sharp, #Patrick McKena, Todd Gatlin, Adrian Villalta-Cerdas, Santiago Sandi-Urena, **10th Raymond Castle Research Conference, Department of Chemistry, University of South Florida, Tampa, Florida,** April 14, 2012, poster presentation.

"Current state of research in chemistry learning in the academic college laboratory", S. Sandi-Urena, D. Jayawardana, A. Villalta-Cerdas, **243rd American Chemical Society National Meeting, San Diego, California, USA**, March 25-29, 2012.

"Learning from teaching: Chemistry graduate teaching assistants' epistemological development", T. A. Gatlin, S. Sandi-Urena, **243rd American Chemical Society National Meeting, San Diego, California, USA**, March 25-29, 2012.

"Self-explaining experiences in large enrollment general chemistry courses", Adrian Villalta-Cerdas, Santiago Sandi-Urena, **McKnight 2012 Mid-year Research and Writing Conference, Tampa, Florida,** February 25, 2012.

"Learning from teaching: An opportunity for scientific skills development for chemistry GTAs", S. Sandi-Urena, T. A. Gatlin, **4th Eurovariety in Chemistry Education Conference, Bremen, Germany**, September 2, 2011.

"Learning from teaching: Impact on graduate teaching assistants' self-image and epistemological beliefs", T. A. Gatlin, S. Sandi-Urena, **Gordon Research Conference: Chemical Education Research and Practice**, **Davidson, N.C**., June 26 – July 1, 2011, poster presentation.

"Phenomenological approach to understanding learning in the laboratory", Susana S. Lopez, Todd A. Gatlin, Santiago Sandi-Urena, **ACS Florida Annual Meeting and Exposition, Innisbrook,** May 14, 2011.

"Phenomenological study of graduate teaching assistants' experiences in two diverse general chemistry laboratory programs", Todd A. Gatlin, Santiago Sandi-Urena, **ACS Florida Annual Meeting and Exposition, Innisbrook,** May 14, 2011.

"Tapping the goldmine: Use of Ratemyprofessors.com as an instruction assessment tool", #Adam Bergin, #Austin Gower, Todd Gatlin, Susana Lopez, Santiago Sandi-Urena, **9th Undergraduate Research Symposium and Celebration, Office of Undergraduate Research, University of South Florida, Tampa, Florida,** April 15, 2011, poster presentation.

"Tapping the goldmine: Use of Ratemyprofessors.com as an instruction assessment tool", #Adam Bergin, #Austin Gower, Todd Gatlin, Susana Lopez, Santiago Sandi-Urena, **9th Raymond Castle Research Conference, Department of Chemistry, University of South Florida, Tampa, Florida,** April 9, 2011, poster presentation.

"Phenomenological study of two diverse general chemistry laboratory environments", Todd A. Gatlin, S. Sandi-Urena, **241st American Chemical Society National Meeting, Anaheim, California, USA, March 27-31, 2011.**

"Assessment and development of metacognition in college chemistry laboratory instruction", **II International Congress on Educational Research, San José, Costa Rica, February 3, 2011**, oral presentation (Spanish: "Evaluación y desarrollo de la metacognición en la instrucción de laboratorio de química universitaria").

"Mixed-methods study of the impact of cooperative, problem-based instruction on metacognition and problem solving skills"), S. Sandi-Urena, T. A. Gatlin, **29th National Chemical Education Congress, Rivera Maya, Quintana Roo, Mexico**, September 19, 2010, oral presentation (Spanish: "Estudio de métodos-mixtos del impacto de la instrucción cooperativa basada en problemas sobre el uso de la metacognición y las habilidades de resolver problemas").

"Learning in the general chemistry laboratory: Student and TA gains in different instructional environments", S. Sandi-Urena, T. A. Gatlin, **240th American Chemical Society National Meeting, Boston, Massachusetts, USA,** August 25, 2010.

"Design of an Instrument for the Assessment of College Students' Epistemological Sophistication", Todd A. Gatlin, S. Sandi-Urena, **240th American Chemical Society National Meeting, Boston, Massachusetts, USA,** August 25, 2010.

"Impact of Participating in Diverse, Multi-National Chemical Education Forums on a Researcher's Practice", **Biennial Conference in Chemical Education, Denton, Texas**, August 3, 2010.

"Comparison of TAs' Experiences in Two General Chemistry Laboratory Programs Using Diverse Levels of Inquiry", S. Sandi-Urena, T. A. Gatlin, **Biennial Conference in Chemical Education, Denton, Texas**, August 1, 2010.

"Effect of a Cooperative Problem-Based Laboratory Environment on Students' and GTAs' Development of Scientific Skills", Todd A. Gatlin, S. Sandi-Urena, **Biennial Conference in Chemical Education, Denton, Texas**, August 1, 2010.

"GTA Gains from General Chemistry Laboratory Instruction", Teresa Eckart, S. Sandi-Urena, T. A. Gatlin, **Biennial Conference in Chemical Education, Denton, Texas**, August 1, 2010.

"Mixed-methods Study of the Impact of Cooperative, Problem-Based Laboratory Instruction on Metacognition Use and Chemistry Problem Solving Skills", S. Sandi-Urena, T. A. Gatlin, **10th European Conference on Research in Chemical Education, Krakow, Poland**, July 4-7, 2010.

"Metacognitive development and epistemological reflection in chemistry problem solving environments", Todd A. Gatlin, S. Sandi-Urena, **10th European Conference on Research in Chemical Education, Krakow, Poland**, July 4-7, 2010.

"Learning from Teaching: GTA Development of Scientific Skills Through General Chemistry Laboratory Instruction", Todd A. Gatlin, S. Sandi-Urena, **10th European Conference on Research in Chemical Education, Krakow, Poland**, July 5, 2010, poster presentation

"Enhancement of Metacognition Use and Problem Solving Skills in Two Distinct Learning Environments", Todd A. Gatlin, S. Sandi-Urena, **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May, 2010

"Gaining Understanding of Teaching Assistants' Experiences in the Academic Laboratory Through a Phenomenological Approach", Teresa Eckart, S. Sandi-Urena, T. A. Gatlin, **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May, 2010

"Effect of Facilitating General Chemistry Laboratories on Graduate Teaching Assistants' Development as Scientists", S. Sandi-Urena, Todd A. Gatlin, **239th American Chemical Society National Meeting, San Francisco, California,** March 21, 2010.

"Enhancement of Metacognition Use and Problem Solving Skills in General Chemistry", Todd A. Gatlin, S. Sandi-Urena, **Chemical Education Poster Session, 61st South Eastern Regional Meeting of the American Chemical Society (SERMACS), San Juan, Puerto Rico,** October 21-24, 2009.

"Use of IMMEX Technology for the Automated, Rapid Assessment of Metacognition use in Chemistry Problem Solving", **238th American Chemical Society National Meeting, Washington DC,** August 19, 2009.

"Mixed Methods Evidence of the Impact of Cooperative, Problem Based Laboratory Instruction on Metacognition Use and Chemistry Problem Solving Skills", **International Congress of Science Education, Cartagena, Colombia,** July 17, 2009.

"Metacognitive Development in the Cooperative Problem Based Laboratory: Perspectives of First Year Teaching Assistants", **237th American Chemical Society National Meeting, Salt Lake City, Utah,** March 25, 2009.

"Cybernetic Model of Task Performance: Understanding Chemistry Learning", Postdoctoral Research Poster Session, **Society for Advancement of Chicanos and Native Americans in Science (SACNAS), National Conference, Salt Lake City, Utah**, October 9-12, 2008

"Mixed Methods Evidence of the Impact of Metacognitive Instruction on Chemistry Problem Solving", poster session **National Conference and Summer Academy, University of Maine, Orono, Maine**, June 23, 2008

"Mixed Methods Evidence of the Impact of Metacognitive Instruction on Chemistry Problem Solving", **235th American Chemical Society National Meeting, New Orleans, Louisiana,** April, 2008.

"Effect of Cooperative Problem Based Projects on Problem Solving Skills, Performance and Use of Metacognition", **235th American Chemical Society National Meeting, New Orleans, Louisiana,** April, 2008.

"Effect of Cooperative Problem-based Projects on Problem Solving Skills and Performance", **59th South Eastern Regional Meeting of the American Chemical Society (SERMACS), Greenville, South Carolina,** Poster Session, October 26, 2007.

"Combined effect of Metacognitive Activities in Chemistry Problem Solving", **234th American Chemical Society National Meeting, Boston, Massachusetts,** August 21, 2007.

"Effect of Cooperative Problem Based Projects on Problem Solving Skills and Performance", **Gordon Research Conference, Chemistry Education Research and Practice, Lewiston, Maine,** Poster Session, June 25, 2007.

"Multi-Method Assessment of Metacognition Use and its Impact on Problem Solving", **Graduate Student Research Seminar Series, Department of Chemistry, Clemson University, Clemson, South Carolina,** April 20, 2007.

"Impact of Metacognitive Instruction on Chemistry Problem Solving Skills", **233rd American Chemical Society National Meeting, Chicago, Illinois,** March 26, 2007.

"Measurement and Impact of Metacognitive Activity Use in Chemistry Problem Solving", **8th European Conference on Research in Chemistry Education (ECRICE), Budapest, Hungary,** August 31, 2006.

"Measurement and Impact of Metacognitive Activity use in Chemistry Problem Solving", **19th Biennial Conference in Chemistry Education, West Lafayette, Illinois,** August 1, 2006.

"Across-Method-and-Time Design for Measurement of Metacognitive Use in Chemistry Problem Solving", **231st American Chemical Society National Meeting, Atlanta, Georgia,** March 29, 2006.

INTERNATIONAL PROFESSIONAL SERVICE (Last five years)

Invited Symposium Organizer and Speaker: "Chemistry Education Research", S. Sandi-Urena, A. Garritz Ruiz, **30th Latin American Chemistry Congress (CLAQ), Cancun, Quintana Roo, Mexico**, October 27-31, 2012.

Invited Symposium Organizer: "Problem Solving in Chemistry: Skill Development and Assessment", S. Sandi-Urena, **22nd International Conference in Chemistry Education and 11th European Conference on Research in Chemical Education, Rome, Italy**, July 15-20, 2012.

International Editorial Board Member, Educación Química (Chemistry Education), this it the Spanish language leading journal in the field, Universidad Nacional Autónoma de México, July 2010-present.

Scientific Committee Member, 10th European Conference on Research in Chemical Education, Krakow, Poland, July 4-7, 2010

Workshop: "Intervention for the Development of Metacognition in Problem Solving", **MADEMS Program, Universidad Nacional Autónoma de México, Mexico City, Mexico,** December 6, 2010 (Spanish)

Workshop: "Activities for the Development of Metacognition in Science Education", **MADEMS Program, Universidad Nacional Autónoma de México, Mexico City, Mexico,** December 7, 2010 (Spanish)

NATIONAL PROFESSIONAL SERVICE (Last five years)

SYMPOSIUM AND CONFERENCE ORGANIZER

"Research on Learning in the Laboratory: Evidence and Assessment", S. Sandi-Urena, J. Schroeder, T. Gatlin, A. Villalta-Cerdas, **Biennial Conference on Chemical Education, University Park, PA**, July 29 – August 2, 2012.

Chemical Education Program co-Chair, **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May, 2012.

"Learning in the Academic Chemistry Laboratory: Perspectives from Instructors", **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May, 2012.

"Meaningful Learning from Laboratory Work: Evidence and Assessment", S. Sandi-Urena, T. Gatlin, J. Schroeder, **243rd American Chemical Society National Meeting, San Diego, CA**, March 25-29, 2012.

"Chemistry Education: International and Multicultural Perspectives", S. Sandi-Urena, S. Raje, **243rd American Chemical Society National Meeting, San Diego, CA**, March 25-29, 2012.

Chemical Education Program co-Chair, **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May 15, 2011

"Meaningful Learning from Laboratory Work: Evidence and Assessment", S. Sandi-Urena, T. Gatlin, J. Schroeder, **241st American Chemical Society National Meeting, Anaheim, CA**, March 29, 2011.

Session Presider, Research in Chemical Education Symposium, **240th American Chemical Society National Meeting, Boston, Massachusetts, USA,** August 25, 2010.

"Learning in the Laboratory: Evidence and Assessment", S. Sandi-Urena, T. Gatlin, J. Schroeder, **Biennial Conference on Chemical Education, Denton, Texas**, August 2-3, 2010.

WORKSHOPS

"Instructional Approaches to Improve Meaningful Learning in the General Chemistry Laboratory", S. Sandi-Urena, T. Gatlin, A. Villalta-Cerdas, **Florida Annual Meeting and Exhibition (FAME), Inninsbrook, Florida**, May, 2012

"Assessing Student Learning in the Instructional Science Lab", D. Domin, G. Bhattacharrya, S. Sandi-Urena, T. Gatlin, **Biennial Conference on Chemical Education, Denton, Texas**, August 3, 2010

"Creating Significant Instructional Laboratory Experiences", D. Domin, G. Bhattacharrya, S. Sandi-Urena, T. Gatlin, **Biennial Conference on Chemical Education, Denton, Texas**, August 2, 2010

"Metacognitive Strategies for Improving Problem Solving", workshop on problem solving for K-16 teachers, M.M. Cooper, S. Sandi-Urena, **National Conference and Summer Academy, University of Maine, Orono, Maine**, June 22-25, 2008

ORGANIZATIONS

American Chemical Society (ACS), 2006-present

Division of Chemical Education, ACS, 2006-present

National Association for Research in Science Teaching, NARST, 2011-present

International Activities Committee, Division of Chemical Education, ACS, appointed member, 2010-2012

Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), 2006-present

MentorNet, 2008-present