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| **Sergio I. Martínez Monteagudo, PhD** | |
| Assistant Professor of Bioprocessing  Department of Family and Consumer Science  Chemical & Materials Engineering Department  New Mexico State University | Mobile: 605-690-9891  E-mail: Sergiomm@nmsu.edu |

**Education**

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| **Ph.D., Bioresource and Food Engineering**  University of Alberta, Canada | 2008-2013 |
| **M.Sc. Food Science & Technology**  Autonomous University of Chihuahua, Mexico | 2003-2005 |
| **BSc. Chemical Engineering**  Autonomous University of Chihuahua, Mexico | 1998-2003 |

**Positions and Employment**

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| **New Mexico State University**  Department of Family and Consumer Science  Chemical & Materials Engineering Department  *Position:* Assistant professor in Bioprocessing | 2020-current |
| **South Dakota State University**  Dairy and Food Science Department  *Position:* Assistant professor in Dairy Manufacturing | 2016-2020 |
| **The Ohio State University**  Department of Food Science and Technology  *Position:* Postdoctoral Researcher | 2013-2015 |
| **Center for Dairy Industry Technology and Developing (Mexico)**  *Position:* Director  *Principal activities*: Established and maintained research goals; coordinator of enzymatic treatments of milk to improve the yield of cheese | 2006-2008 |
| **Teleperformance (Mexico)**  *Position:* Customer Service Representative | 2005-2006 |
| **Castalia (Mexico)**  *Position:* Hygienic supervisor  *Principal activities*: Design sanitary program; preventive measure to reduce food spoilage; employee selection, and employee training | 2004-2005 |
| **RES international company (Mexico)**  *Position:* Quality inspector  *Principal activities*: Implement sampling and testing procedures for jalapeño peppers; established the criteria for measuring acceptability | 2003 |
| **Agroindustrias San Antonio de Los Arenales SA de CV (Mexico)**  *Position:* Undergraduate internship  *Principal activities*: Maintained engineering documents; design and supervised project for apple jam processing | 2002-2003 |

**Funded projects as principal investigator and co-investigator**

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| **Value Creation from Wastewater Streams through Pressure Chemistry**  *Funding agency*: RSCA Challenge Fund  *Role:* Principal Investigator | 06/2020-5/2021 |
| **One-pot synthesis: towards the next generation of lactose derivates**  *Funding agency*: Midwest Dairy Association  *Role:* Principal Investigator | 01/2020-12/2022 |
| **Synthesis of D-Tagatose**  *Funding agency*: Dairy Management Inc.  *Role:* Principal Investigator | 01/2020-12/2022 |
| **Effective Phospholipids Extraction from Dairy Byproducts using Switchable Solvents**  *Funding agency*: Dairy Management Inc.  *Role:* Principal Investigator | 04/2019-05/2021 |
| **Lactitol: Production, Properties, and Applications**  *Funding agency*: Midwest Dairy Association  *Role:* Principal Investigator | 10/2018-03/2019 |
| **Development of a two-step process for the production of food ingredients from lactose permeate**  *Funding agency*: Dairy Management Inc.  *Role:* Principal Investigator | 04/2018-03/2020 |
| **Production of D-Tagatose using pressurized fluids**  *Funding agency*: Midwest Dairy Association  *Role:* Principal Investigator | 06/2018-12/2018 |
| **Converting Ice-cream Wastewater into Value-Added Chemicals**  *Funding agency*: SD State University Enhance Scholarly Excellence  *Role:* Principal Investigator | 10/2017-08/2018 |
| **A novel spray-dried health formulation based on whey protein hydrolysate and probiotics encapsulation**  *Funding agency*: Midwest Dairy Association  *Role:* Co-Principal Investigator | 01/2017-12/2018 |
| **Scale up of hydrodynamic cavitation as an in-line process combined with milk pasteurization for sporeformer control**  *Funding agency*: Dairy Management Inc.  *Role:* Co-Principal Investigator | 01/2017-12/2018 |
| **Pressure Chemistry: Formulation and Manufacture of Reduced Sugar Dietary Supplements**  *Funding agency:* Sanford Health  *Role*: Principal Investigator | 09/2016-08/2017 |
| **Engineering technologies for novel applications in dairy manufacturing**  *Funding agency:* U.S. Department of Agriculture  *Role*: Principal Investigator | 05/2016-04/2021 |

**Teaching Experience**

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| **Instructor**  DS 790 – Graduate Seminar  South Dakota State University, USA | 01/2017-Present |
| **Instructor**  DS 321/321 L – Dairy Products Processing I  South Dakota State University, USA | 02/2016-Present |
| **Instructor**  DS 322/322 L – Dairy Products Processing II  South Dakota State University, USA | 02/2016-Present |
| **Instructor**  DS 731 – Laboratory Techniques in Dairy Science  South Dakota State University, USA | 08/2016-Present |
| **Instructor**  Undergraduate Research  South Dakota State University, USA | 08/2016-Present |
| **Instructor**  Thesis and Dissertation  South Dakota State University, USA | 08/2016-Present |
| **Sessional lecturer**  Selected Topics in Biotechnology – *Hygienic Design*  ITESM, Mexico | 04/17/2016 |
| **Sessional lecturer**  Selected Topics in Biotechnology – *Engineering in Dairy Science*  ITESM, Mexico | 03/28/2016 |
| **Sessional lecturer**  Unit operations in Food Processing - *Extrusion*  The Ohio State University, USA | 3/31/2015 |
| **Sessional lecturer**  Unit operations in Food Processing - *Extrusion*  The Ohio State University, USA | 4/10/2014 |
| **Teaching assistant**  Unit operations for Food preservation, AFNS 554  University of Alberta, Canada | 01/2011-04/2013 |
| **Sessional lecturer**  Unit operations for Food preservation – *High-pressure sterilization*  University of Alberta, Canada | 4/08/2013 |
| **Sessional lecturer**  Introduction to Food Engineering, NUF 283 - *Ultra-High-Temperature (UHT) pasteurization of milk*  University of Alberta, Canada | 01/18/2013 |
| **Sessional lecturer**  Unit operations for food preservation - *Ohmic heating*  University of Alberta, Canada | 04/09/2011 |
| **Sessional lecturer**  Unit operations for Food preservation - *Food irradiation*  University of Alberta, Canada | 04/05/2010 |
| **Marker**  Introduction to Food Engineering, NUF 283  University of Alberta, Canada | 09/2009-12/2009 |
| **Plenary lecture**  International worship of milk (Mexico)  Properties of Mennonite-style Cheese and Quality of its Milk | 07/16/2008 |
| **Lecturer**  Introduction to Physical Chemistry  Autonomous University of Chihuahua | 01/2004-06/2004 |

**Other Experience and Professional Service**

***Service to the College***

* **Dean's Faculty Advisory Committee**. I have served in this capacity since January 2017. As a committee, we reflect and acknowledge on topics of interest for faculties. These efforts are aimed at adding ideas for implementation of academic policies as well as advocacy on topics of faculty concern.
* **Undergraduate research Judge**. I served as a judge for the undergraduate research poster during the annual meeting of the Gamma Sigma Delta, Honors Society of Agriculture (April 25, 2018).

***Service to the Department***

* **Advisor**. Since October 2016, I have served as advisor of the Dairy Club, where I oversee organized activities of the Dairy Club. This effort is oriented to appreciate student's extracurricular activities and fostering their professional growth. In 2018, I wrote a narrative in the Dairy digest, highlighting the outstanding activities of the club including fundraiser and community involvement.
* **Co-Chair**. Since August 2016, I have served as co-chair of the Dairy and Food Science Department Graduate Safety Committee. As a committee, I work in developing and updating safety protocol for new staff and students. Among my contributions is the development of working alone policy and good office practices. These efforts are oriented to create a safe culture within the Department where the students can perform their research safely and consistently.
* **Participant**. Over the last three years (2016-2018), I have represented the Dairy Science Department during Central Plains Expo, Sioux Falls, SD. The expo provides an opportunity to engage with the local dairy industry.
* **Committee Member**. Over the last three years, I have served in the scholarships and awards committee. As a committee, we nominated students who qualified for a given scholarship and discussed around that topic.
* **Chaperone**. I served as a chaperone for a group of students from DS 322-322L Dairy Products Processing II (March 2016). We visited Valley Queen Cheese Factory (Millbank, SD). During the tour, I discussed with personnel of Valley Queen possible research collaborations on lactose utilization.

**Service to Disciplinary and Professional Societies or Associations**

* **Chair**. In 2018, I chaired a session of Dairy Products within the 2018 Conference in Food Engineering, where I served as the point of contact for speakers and audience. As a chair, I was responsible for ensuring the session runs on time.
* **Member**. Over the last three years, I have been an active member of the American Dairy Science Association (ADSA).
* **Member**. Since 2018, I have been an active member of the newly formed Society of Food Engineering (SoFE) whose main purpose is the advancement of food engineering.
* **Organizer**. In 2017, I organized a workshop on Dairy Chemistry and Processing for a group of a representative of Nucritcal (Mexico). The workshop was very extensive, where concepts on dairy chemistry and processing were covered. The memorandum of Agreement is provided in the supplemental material.

***Service to Funding Agencies***

* **Ad Hoc Reviewer** for one proposal submitted to the John R. Evans Leaders Fund for the Canada Foundation for Innovation in collaboration with the Fonds de recherche du Québec – Nature et technologies.
* **Ad Hoc Reviewer** for one proposal in the field of food engineering submitted to the 2018 cycle of National Science Foundation of Mexico.
* **Grant Panelist** for theNational Institute of Food and Agriculture. 2017. I served as a panelist for the National Institute of Food and Agriculture, where I ranked research proposals in terms of potential for advancing quality of education, cooperative linkages, and cost-effectiveness of the proposals.
* **Ad Hoc Reviewer** for one proposal for The Board of Regents of the University of Nebraska. 2017. Research proposal reviewed regarding scientific merit and relevance of the proposal as well as the potential for achieving the proposed objectives.
* **Ad Hoc Reviewer** for one proposal submitted to the Natural Sciences and Engineering Research Council of Canada. 2017. Research proposal reviewed regarding scientific quality and potential contribution to the training of highly qualified personnel.

***Editorships of journals***

Journal of Food Science, Journal of Dairy Science, Journal of Food Science and Technology, Food Research International, Foods, Food Bioscience, The Journal of Chemical Physics, Frontiers in Microbiology, Innovative in Food Science and Technology, Bioelectrochemistry, Food Engineering Reviews, Processes, Food Control, Dairy Science & Technology, European Food Research and Technology, Food and Bioproducts Processing, Beverage, Journal of Food Process Engineering, Critical Reviews in Biotechnology, Mexican Journal of Chemical Engineering, Molecules.

**Awards and Honors**

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| **National Researcher Level I**  CONACYT, Government of Mexico | 2019-2021 |
| **National Researcher Level I**  CONACYT, Government of Mexico | 2017-2019 |
| **AFNS travel award**  Department of Agricultural and Nutritional Science  University of Alberta, Canada | 09/2013 |
| **Winter differential tuition award**  Department of Agricultural and Nutritional Science  University of Alberta, Canada | 01/2013 |
| **Second best oral presentation**  24th Canadian conference on fats and oils  Edmonton, AB, Canada | 09/27/2011 |
| **CONACYT Scholarship**  Government of Mexico | 03/2010-08/2012 |
| **Graduate Research Assistantship Fund**  Department of Agricultural and Nutritional Science  University of Alberta, Canada | 01/2009 |
| **Graduate Research Assistantship Fund**  Department of Agricultural and Nutritional Science  University of Alberta, Canada | 09/2008 |
| **Partners in Excellence**  Teleperformance, Mexico | 03/2006 |
| **Quality award**  Teleperformance, Mexico | 02/2006 |
| **Runner-up National prize in Food Science and Technology**  Coca-Cola Company, Mexico | 09/2005 |
| **CONACYT Scholarship**  Government of Mexico | 01/2004-08/2005 |
| **Winner of new Food products**  Autonomous University of Chihuahua, Mexico | 10/21/2002 |

**Publications**

Enteshari, M., & **Martinez-Monteagudo, S. I**. (2020). Hydrothermal conversion of ice-cream wastewater. Journal of Food Processing Engineering. Accepted.

Aljutaily, T., Huarte, E., **Martinez-Monteagudo, S. I**., Gonzalez-Hernandez, J. L., Rovai, M., & Sergeev, I. N. (2019). Effects of probiotic dairy products on the mouse gut microbiota and body weight. Nutrition Research, Accepted.

Osorio-Arias, J. C., Pérez-Martínez, A., Vega-Castro, O., & **Martinez-Monteagudo, S. I.** (2020). Rheological, texture, structural, and functional properties of Greek-style yogurt fortified with cheese whey-spent coffee ground powder. LWT, 109523.

Cheng, S., Metzger, L. E., & **Martinez-Monteagudo, S. I.** (2020). One-pot synthesis of sweetening syrup from lactose. Scientific Reports, 10(1).

Cheng, S., Hummel, M., Dahal, B., Gu, Z., Kharel, P., & **Martínez-Monteagudo, S. I.** (2020). A two-step process for the synthesis of sweetening syrup from aqueous lactose. LWT – Food Science & Technology, 117, 108659.

Cheng, S., Rathnakumar, K., & **Martinez-Monteagudo, S. I.** (2019). Extraction of Dairy Phospholipids Using Switchable Solvents: A Feasibility Study. Foods. 8(7):265-275.

**Martinez-Monteagudo, S. I**., Enteshari, M., & Metzger, L. E. (2019). Lactitol: Production, properties, and applications. Trends in Food Science & Technology. 83:180-191.

Cheng, S., & **Martinez-Monteagudo, S. I.** (2018). Hydrogenation of lactose for the production of lactitol. Asia-Pacific Journal of Chemical Engineering. 14(1):1-18.

Enteshari, M., & **Martinez-Monteagudo, S. I.** (2018) Subcritical hydrolysis of ice-cream wastewater: modeling and functional properties of hydrolysate, Food and Bioproducts Processing, 111: 104-113.

Chourio, A. M., Salais-Fierro, F., Mehmood, Z., **Martinez-Monteagudo, S. I.**, & Saldaña, M. D. A. (2018) Inactivation of peroxidase and polyphenoloxidase in coconut water using pressure-assisted thermal processing, Innovative Food Science & Emerging Technologies 49: 41-50.

**Martinez-Monteagudo, S. I.** (2018) Analysis of thermoxidation kinetics of milk fat. Revista Mexicana de Ingeniería Química 17(2): 587-602.

Yan, B., **Martinez-Monteagudo, S. I.**, Cooperstone, J. L., Riedl, K. M., Schwartz, S. J., & Balasubramaniam, V. M. (2017) Impact of thermal and pressure-based technologies on carotenoid retention and selected quality parameters in tomato juice. Food and Bioproducts Proces, 10(5): 808-818.

**Martinez-Monteagudo, S. I.**, Yan, B., & Balasubramaniam, V. M. (2017) Engineering process characterization of high-pressure homogenization – from laboratory to industrial scale. Food engineering Reviews 9(3): 143-169.

**Martinez-Monteagudo, S. I.**, Kamat, S., Patel, N., Konuklar, G., Rangavajla, N., & Balasubramaniam, V. M. (2017). Improvements in emulsion stability of dairy beverages treated by high-pressure homogenization: A pilot-scale feasibility study Journal of Food Engineering 193:42-52.

**Martinez-Monteagudo, S. I.**, & Saldaña, M. D. A. (2015). Combined effect of pressure-assisted thermal processing and antioxidants on the retention of conjugated linoleic acid in milk Foods 4 (2), 65-79.

**Martinez-Monteagudo, S. I.**, & Saldaña, M. D. A. (2015). Kinetic of lactulose formation in bovine milk treated with pressure assisted thermal sterilization. Innovative Food Science & Emerging Technologies 28, 22-30.

**Martinez-Monteagudo, S. I.**, Leal-Dávila, M., Saldaña, M. D. A., & Curtis, J. (2015). Oxidative stability of UHT milk rich in conjugated linoleic acid and *trans*-vaccenic acid. International Dairy Journal 43, 70-77.

Balasubramaniam, V. M., **Martinez-Monteagudo, S. I**., & Gupta, R. (2015). Principles and applications of pressure-based technologies. Annual review of food science and technology 6, 435-462.

**Martinez-Monteagudo, S. I.**, & Saldaña MDA. (2015). Retention of bioactive lipids in heated milk: experimental and modeling. Food and Bioproducts Processing. 94: 290–296.

Balasubramaniam, V. M. & **Martinez-Monteagudo, S. I**. (2014). Getting past pasteurization: consider high-pressure processing of dairy foods and beverages. Dairy Food Magazine. October 2014.

**Martinez-Monteagudo, S. I.**, Saldaña, M. D. A., & Gaenzle, M. (2014). High-pressure and temperature effects on the inactivation of *Bacillus amyloliquefaciens*, alkaline phosphatase and storage stability of conjugated linoleic acid in milk. Innovative Food Science & Emerging Technologies. 26: 59–66.

**Martinez-Monteagudo, S. I.**, & Saldaña, M. D. A. (2014). Chemical reactions in food systems at high hydrostatic pressure. Food Engineering Reviews. 6(4): 105-127.

**Martinez-Monteagudo, S. I.**, Khan, M., Saldaña, M. D. A., & Temelli, F. (2014). Obtaining milk fat fraction enriched in conjugated linoleic acid and trans-vaccenic acid. International Dairy Journal. 36(1): 29-37.

**Martinez-Monteagudo, S. I.**, & Saldaña, M. D. A. (2014). Modeling the retention kinetic of conjugated linoleic acid (CLA) during high-pressure sterilization. Food Research International. 62: 169-176.

**Martinez-Monteagudo, S. I.,** & Salais-Fierro F (2014) Moisture Sorption Isotherms and Thermodynamic Properties of Mexican Mennonite-Style Cheese. Journal of Food Science and Technology. 51(10): 2393-2403.

**Martinez-Monteagudo, S. I.**, Saldaña, M. D. A., Torres, J. A., & Kennelly, J. J. (2012) Effect of pressure assisted thermal sterilization on conjugated linoleic acid (CLA) content in CLA-enriched milk. Innovative Food Science and Emerging Technologies. 16: 291-297.

**Martinez-Monteagudo, S. I.**, Saldaña, M. D. A., Kennelly, J. J. (2012) Kinetics of non-isothermal oxidation of anhydrous milk fat rich in conjugated linoleic acid using differential scanning calorimetry. Journal of Thermal Analysis and calorimetry, 107(3):973-981.

**Martinez-Monteagudo, S. I.**, Leal-Dávila, M., Saldaña, M. D. A., Torres, J. A., & Welti-Chanes, J. (2011) Nuevas Tecnologias para la industria de alimentos en Mexico utilizando la alta presion hidrostática. Parte II. Industria Alimentaria, 33(1): 44-48.

**Martinez-Monteagudo, S. I.**, Leal-Dávila, M., Saldaña, M. D. A., Torres, J. A., Welti-Chanes, J. (2010) Nuevas Tecnologias para la industria de alimentos en Mexico utilizando la alta presion hidrostática. Parte I. Industria Alimentaria, 32(6): 34-38.

Valdez-Fragoso, A., **Martinez-Monteagudo, S. I.**, Salais-Fierro, F., Welti-Chanes, J., Mujica-Paz, H. (2007) Vacuum pulse-assisted pickling whole jalapeño pepper optmimization. Journal of Food Engineering, 79(4):1261-1268.

**Martinez-Monteagudo, S. I.**, Salais-Fierro, F., Perez-Carrilo, J. R., Valdez-Fragoso, A., Welti-Chanes, J., Mujica-Paz, H. (2007) Impregnation and infiltration kinetics of isotonic solution in whole jalapeño pepper using a vacuum pulse. Journal of Food Science, 73(3): E125-E131.

**Invention disclosure**

**Martinez-Monteagudo, S. I**., Rathnakumar, K., Osorio-Arias, J. C. (2019). Process for valorization of spent coffee ground. T-00493.

**Martinez-Monteagudo, S. I**., Enteshari, M. (2020). Method for increasing creaminess of cultured cream. T-00503.

**Manuscripts under review**

Cheng, S., Wei, L., Muthukumarappan, K., & **Martinez-Monteagudo, S. I**. (2020). Kinetic analysis of non-isothermal oxidation of bioactive milk lipids. Under review. Journal of Food Processing Engineering.

Nyuydze, C., & **Martinez-Monteagudo, S. I**. (2020). Effect of soy lecithin concentration on the formation and stability of ultrasound emulsions. Under Review. Food Biophysics.

Enteshari, M., & **Martinez-Monteagudo, S. I**. (2020). One-pot synthesis of lactose derivatives from whey permeate. Under Review. Foods.

Chávez Garay, D. R., Gutiérrez-Méndez, N., Orozco-Mena, R. E., Sanchez-Ramirez, B., Salmeron, I., Hernández-Ochoa, L. R., Chávez-Flores, D., & **Martinez-Monteagudo, S. I.** (2020). Modification of oil-in-water lecithin-based emulsions with different sizes by using a phospholipase A1. Under review. Food Biophysics.

Minj, S., Anand, S., & **Martinez-Monteagudo, S. I.** (2020). In vitro assessment of biological properties in whey protein, whey protein hydrolysate, and conjugated whey protein hydrolysate. Under Review. International Dairy Journal.

Sim, J. Y., Beckman, S. L., Anand, S., & **Martinez-Monteagudo, S. I.** (2020). Application of Hydrodynamic Cavitation to Skim Milk Concentrate: Process Characterization and Microbial Inactivation. Under Review. Innovative Food Science and Emerging Technologies.

Osorio-Arias, J. C., Contreras-Calderon, J., **Martinez-Monteagudo, S. I**., & Vega-Castro, O. (2019). Development of a novel ingredient from two by-products of the food industry, with high nutritional and functional value. Under review in Journal of Food Process Engineering.

**Book Chapters**

Rathnakumar, K., Pandiselvam, R., Kothakota, A., Ramesh, K., & **Martinez-Monteagudo, S. I.** (2020). IFT-05. Use of Non-Thermal Technologies, In press.

**Martinez-Monteagudo, S. I.**, Rathnakumar, K., Nyuydze, C., Enteshari, M., Osorio-Arias, J. C., & Ranaweera, H. (2020). Hundred Years of Lactitol – From Hydrogenation to Food Ingredient. In Lactose, Intech in press.

Osorio-Arias, J. C., Vega-Castro, O., & **Martinez-Monteagudo, S. I.** (2020). Fundamentals of High-Pressure Homogenization of Foods. In Innovative Food Processing Technologies: A Comprehensive Review. In press.

Rathnakumar, K., & **Martinez-Monteagudo, S. I.** (2020). High-Pressure Processing: Fundamentals, Misconceptions, and Advances. In Innovative Food Processing Technologies: A Comprehensive Review. In press.

**Martinez-Monteagudo, S. I.**, & Salais-Fierro, F. (2015). Milk naturally enriched with bioactive lipids: Opportunities and challenges, in: Prathamesh Gorawala and Srushti Mandhatri (Eds.), Agricultural Research Updates. Volume 8, Nova Publishers, New York.

**Martinez-Monteagudo, S. I.** & Balasubramaniam, V. M. (2015). Fundamentals and Applications of High Pressure Processing Technology. In Principles High Pressure Processing of Food - Principles, Technology and Application. Ed. VM Balasubramaniam, GV Barbosa-Canovas. In Press.

Saldaña, M. D. A., & **Martinez-Monteagudo, S. I.** (2013) Oxidative Stability of Fats and Oils Measured by Differential Scanning Calorimetry for Food and Industrial Applications, in: Amal Ali Elkordy (Ed.), Applications of Calorimetry in a Wide Context - Differential Scanning Calorimetry, Isothermal Titration Calorimetry and Microcalorimetry, ISBN: 978-953-51-0947-1, InTech, DOI: 10.5772/54486.

**Martinez-Monteagudo, S. I.**, & Salais-Fierro, F. (2013). Engineering Properties of Mexican Chihuahua Cheese, in: Henrique Castelli and Luiz du Vale (Eds.), Handbook on cheese: production, chemistry and sensory properties, Nova Publishers, New York.

**Abstracts and complete papers presented in Conferences and Symposiums**

Cheng, S., Metzger, L. E., & **Martinez-Monteagudo, S. I**. (2019). A two-step process for the production of sweetening syrup from lactose. Abstract Number 78771. Submitted for the Annual Meeting American Dairy Science Association.

Cheng, S., Wei, L., Muthukumarappan, M., & **Martinez-Monteagudo, S. I**. (2019). Oxidation Kinetics of Bioactive Milk Lipids Using Differential Scanning Calorimetry. Abstract Number 78795. Submitted for the Annual Meeting American Dairy Science Association.

Alsaleem, K., Cheng, S., Muthukumarappan, M., & **Martinez-Monteagudo, S. I**. (2019). Using isoconversional methods to study the effect of antioxidants on oxidation kinetics of milk fat. Abstract Number 79148. Submitted for the Annual Meeting American Dairy Science Association.

Osorio-Arias, J. C., Vega-Castro, O., & **Martinez-Monteagudo, S. I**. (2019). Coating spent coffee ground with whey protein: a valorization study. Abstract Number 78779. Submitted for the Annual Meeting American Dairy Science Association.

Enteshari, M., & **Martinez-Monteagudo, S. I.** (2019). Catalytic synthesis of lactose derivatives from whey permeate. Abstract Number 78462. Submitted for the Annual Meeting American Dairy Science Association.

Enteshari, M., & **Martinez-Monteagudo, S. I**. (2019). Subcritical hydrolysis: an approach to valorize ice-cream wastewater. Abstract Number 79323. Submitted for the Annual Meeting American Dairy Science Association.

Rathnakumar, K., Cheng, S., & **Martinez-Monteagudo, S. I**. (2019). Extraction of dairy phospholipids using switchable solvents: A feasibility study. Abstract Number 78453. Submitted for the Annual Meeting American Dairy Science Association.

Sim, J. Y., Bonnemann, H., & **Martinez-Monteagudo, S. I**. (2019). Hydrodynamic Cavitation: A Clean Label Approach for Manufacture of Ice Cream Mix. Abstract Number 778484. Submitted for the Annual Meeting American Dairy Science Association.

Sim, J. Y., **Martinez-Monteagudo SI**, & Anand, S. K. (2018) Development of a Continuous Cavitation-Assisted Thermal Treatment for Skim Milk Concentrate: Process Characterization and Microbial Efficiency ADSA Annual Conference, Knoxville, TN, United States.

Chaudhary, P., Anand, S. K., & **Martinez-Monteagudo, S. I.** (2018) Feasibility of hydrodynamic cavitation in-line with HTST pasteurization for inactivating sporeformers and spores in skim milk, ADSA Annual Conference, Knoxville, TN, United States.

Sim, J. Y., **Martinez-Monteagudo, S. I.**, & Anand, S. K. (2018) Hydrodynamic cavitation in dairy manufacturing: Characterization and microbial impact on skim milk concentrate, Gamma Sigma Delta, Honors Society of Agriculture, South Dakota State University, Brookings, SD, United States.

Enteshari, M., & **Martinez-Monteagudo, S. I.** (2018) Subcritical hydrolysis of ice-cream wastewater: modeling and functional properties of hydrolysate, ADSA Annual Conference, Knoxville, TN, United States.

Enteshari, M., & **Martinez-Monteagudo, S. I.** (2018) Subcritical hydrolysis of ice-cream wastewater: modeling and functional properties of hydrolysate, Gamma Sigma Delta, Honors Society of Agriculture, South Dakota State University, Brookings, SD, United States.

Enteshari, M., & **Martinez-Monteagudo, S. I.** (2018) Modeling the subcritical hydrolysis of ice-cream wastewater, Conference of Food Engineering 2018, Minneapolis, MN, United States.

Cheng, S., & **Martinez-Monteagudo, S. I.** (2018) Converting lactose to tagatose using integrated hydrolysis and isomerization method, Conference of Food Engineering 2018, Minneapolis, MN, United States.

Sim, J. Y., Anand, S. K., & **Martinez-Monteagudo, S. I.** (2018) Engineering Aspects of Hydrodynamic Cavitation for Applications in Dairy Manufacturing, Conference of Food Engineering 2018, Minneapolis, MN, United States.

**Martinez-Monteagudo, S. I.**, Enteshari, M., & Metzger, L.. (2017). Hydrogenation of Lactose for the Production of Nutritive Sweeteners. Annual Meeting American Dairy Society Association. Pittsburgh, PA.

Leal-Davila, M., Curtis, J. M., Saldaña, M. D. A., & **Martinez-Monteagudo, S. I.** (2017). Flavor profile of UHT conjugated linoleic acid-enriched milk based on HS-SPME/GC–MS. Annual Meeting American Dairy Society Association. Pittsburgh, PA.

Enteshari, M., Nayebzadeh, K., & **Martinez-Monteagudo, S. I.** (2017). Oxidative stability of Iranian ghee (butter oil) and soybean oil: a comparative study. Annual Meeting American Dairy Society Association. Pittsburgh, PA.

Lawrence, R., Anderson, J., **Martinez-Monteagudo, S. I.** & Metzger, L. (2017). Milk production and composition of dairy cows fed hydroponic barley sprouts. Annual Meeting American Dairy Society Association. Pittsburgh, PA.

Chourio, A., Salais-Fierro, F., Mehmood, Z., **Martinez-Monteagudo, S. I.** & Saldaña, M. D. A. (2017). Inactivation of peroxidase and polyphenoloxidase in coconut water using pressure-assisted thermal processing. Annual meeting IFT.

**Martinez-Monteagudo, S. I.** (2016). Kinetics studies of chemical reactions in conjugated linoleic acid (CLA) enriched milk treated with high-pressure sterilization. Annual Meeting American Dairy Society Association. Salt Lake City, UT.

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