
Alicia Manjón Sanz, Ph. D.Email: manjonsanzam@ornl.govORCID: <https://orcid.org/0000-0002-7091-3484>

EDUCATION

- 2015 **Ph.D.** in Chemistry with specialization in Synthesis, Structure and Properties of Bismuth Based Electroceramic Perovskites, **The University of Liverpool**, United Kingdom.
Supervisor: Matthew Rosseinsky.
- 2008 **Licenciatura** in Chemistry, **Universidad Autónoma de Madrid**, Spain.

PROFESSIONAL APPOINTMENTS / EMPLOYMENT

- 2020 – **Instrument Scientist**, Neutron Scattering Division, **Oak Ridge National Laboratory**, United States.
- 2018 – 2020 **Postdoctoral Research Associate**, Experiments Division, **CELLS**, ALBA Synchrotron Light Facility, Spain.
- 2015 – 2018 **Postdoctoral Scholar**, Department of Chemistry, **Oregon State University**, United States.
Advisor: Michelle Dolgos.
- 2012 – 2014 **Research Fellow**, Structural Materials Science Laboratory, **RIKEN**, SPring-8, Japan.
Supervisor: Masaki Takata.
- 2009 – 2010 **Industrial Researcher**, Institute of Catalysis and Petrochemistry, **Consejo Superior de Investigaciones Científicas (CSIC)**, Spain.
Supervisors: Manuel Sánchez-Sánchez and Enrique Sastre de Andrés.

AWARDS / FELLOWSHIPS

- 2024 – 2026 Oak Ridge National Laboratory Early Career Development Program (\$300K).
- 2023 Neutron Sciences Division Award, category: “Doing it Better 2023”.
- 2016 Gordon Research Conference Travel Award (\$500).
- 2012 – 2014 International Program Associate fellowship, RIKEN Project.
- 2011 – 2012 Marie Curie Early Stage Researcher fellowship, SOPRANO Project.
- 2009 – 2010 Funding from Destilerías Muñoz Gálvez S.A. (company).

FUNDING

“Materials for Energy and Sustainability: Structure, properties, and materials in action”, **Alicia Manjón Sanz** (P.I), Oak Ridge National Laboratory, (\$300K) 2024-2026.

“Structural characterization of piezoelectric materials using high pressure diffraction and total scattering techniques”, **Alicia Manjón Sanz** (P.I.), Catalin Popescu, François Fauth, ALBA, (15K€) 2019-2021.

PUBLICATIONS

* Denotes corresponding author

- (33) Pramanik, T.; Htet, C. S.; **Manjón-Sanz, A.***; Liu, J.; Ullah, S.; Kong, J.; Babori, C.; Brezard-Oudot A.; Daniel, L.; Misture, S.; Pramanick, A.*, “An atomistic structural description of the ferroelectric polar phase involving non-coplanar cation displacements” *Scripta Materialia*, 256 (2025) 116426.
- (32) Mullens, B. G.; Marlton, F. P.; Saura-Múzquiz, M.; Everett, M.; Li, C.; **Manjón-Sanz, A.**; Tucker, M. G.; Poineau, F.; Louis-Jean, J.; Mukherjee, S.; Mondal, S.; Vaitheeswaran, G.; Kennedy, B. J., “Toxic, radioactive, and disordered: a total scattering study of TiTcO_4 ” 26 (2024) *Physical Chemistry Chemical Physics*, 47, 29270-29282.
- (30) Roh, J.; Kim, H.; Lee, H.; Bu, H.; **Manjón-Sanz, A.**; Kim, H.; Hong, S. T., “Unraveling Polymorphic Crystal Structures of Li_4SiS_4 for All-Solid-State Batteries: Enhanced Ionic Conductivity via Aliovalent Sb Substitution” *Chemistry of Materials*, 36 (2024) 14, 6973-6984
- (29) Chieh Chiu, N.; Gładysiak, A.; Yadav, A. K.; Abreu-Jaureguí, C.; **Manjón-Sanz, A.**; Li, C.; Huang, H.; Silvestre-Albero, J.; Stylianou, K. C. “Gas Adsorption Snapshots in Metal–Organic Frameworks Unveil the Impact of Pore Geometry on Hydrogen Storage” *ACS Materials Letters*, 6 (2024) 9, 4098-4105.
- (28) Mandujano, C. H.; Saucedo Salas, G.; Li, T.; Zavalij, P. Y.; **Manjón-Sanz, A.**; Butch, N. P.; Rodriguez, E. E., “Itinerant -type antiferromagnetic order in $\text{Co}_{1/4}\text{TaSe}_2$ ” *Physical Review B*, 110 (2024) 14, 144420.
- (27) Moy, A. C.; **Manjón-Sanz, A.**; Caracciolo, T.; Maxim V. Lobanov, M. V.; Veith, G. V.; Sakamoto, J.; “Effects of Al Concentration on the Structure and Conductivity of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ ” *Journal of Materials Chemistry A*, 12 (2024) 41, 28193-28210.
- (26) Surta, T. W.; Keeney, L.; **Manjón-Sanz, A.**; Crawford, C.; Morscher, A.; Daniels, L. M.; Claridge, J. B.; Bell, A. J.; Alaria, J.; Rosseinsky, M. J., “Separation of K^+ and Bi^{3+} displacements in a Pb-free, monoclinic piezoelectric at the morphotropic phase boundary” *Acta Materialia*, 265 (2024) 15, 119594-1 – 119594-13.
- (25) Htet, C. S.; **Manjón-Sanz, A.**; Liu, J.; Babori, C.; Barati, M.; Marlton, F.; Daniel, L.; Jørgensen, M. R. V.; Pramanick, A., “Local structural mechanism for enhanced energy storage properties in heterovalent doped NaNbO_3 ceramics” *J. Eur. Ceram. Soc.*, 44, (2023) 3, 1597-1609.
- (24) Roh, J.; Do, N.; **Manjón-Sanz, A.**; Hong, S. T. “ Li_2GeS_3 : Lithium Ionic Conductor with Unprecedented Structural Type”, *Inorganic Chemistry*, 62 (2023) 39, 15856-15863.
- (23) Katragadda, N.; Mandal, P.; Yanda, P.; Sundaresan, A.; Kaushik, S. D.; Zhang, W.; Halasyamani, P. S., “Room temperature Polar and Weak-ferromagnetic Oxide with Low Dielectric Loss”, *Mater. Sci. Eng. B.*, 298, (2023) 116869-1 – 116869-7.
- (22) Brown, A. J.; Avdeev, M.; **Manjón-Sanz, A.**; Brand, H. E. A.; Ling, C. D., “Competing Magnetic Interactions and the Role of Unpaired 4f Electrons in Oxygen-Deficient Perovskites $\text{Ba}_3\text{RFe}_2\text{O}_{7.5}$ ($\text{R} = \text{Y}, \text{Dy}$)”, *Inorganic Chemistry*, 62, (2023) 17, 6786-6793.

- (21) Kong, J.; **Manjón-Sanz, A.**; Liu, J.; Marlton, F.; Lo Wing, T.; Lei, D.; Jørgensen, M. R. V.; Pramanick, A., “Scaling behavior of order parameters for the Hybrid Improper Ferroelectric $(\text{Ca,Sr})_3\text{Ti}_2\text{O}_7$ ” *Physical Review B*, 107 (2023) 224103-1 – 224103-8.
- (20) Htet, C. S.; **Manjón-Sanz, A.**; Liu, J.; Kong, J.; Marlton, F.; Nayak, S.; Jørgensen, M. R. V.; Pramanick, A., “Effect of local structural distortions on antiferroelectric-ferroelectric phase transition in dilute solid-solutions of $\text{K}_x\text{Na}_{1-x}\text{NbO}_3$ ”, *Inorganic Chemistry*, 61, (2022) 50, 20277-20287.
- (19) Gurieva, G.; Rotaru, V.; Ernits, K.; Siminel, N.; **Manjón-Sanz, A.**; Kirkham, M.; Perez-Rodrigues, A; Guc, M.; Meissner, D.; Schorr, S., “...to grind or not to grind? Cu/Zn disorder in $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4$ monograins”, *Solar Energy Materials and Solar Cell*, 248, (2022) 1-10.
- (18) Pastoor, K. J.; Miskowiec, A. J.; Niedziela, J. L.; Christian, J. H.; Foley, B. J.; Isbill, S. B.; Shields, A. E.; **Manjón-Sanz, A.**; Nykwest, E. C.; Spano, T. L.; Wellons, M. S.; Shafer, J. C.; Jensen, M. P., “Structural Characterization of Uranium Tetrafluoride Hydrate ($\text{UF}_4 \cdot 2.5\text{H}_2\text{O}$)”, *The Journal of Physical Chemistry C*, 126, (2022) 31, 13256-13267.
- (17) Saura-Múzquiz, M.; Marlton, F.; Mullens, B.; **Manjón-Sanz, A.**; Neuefeind, J. C.; Everett, M.; Brand, H. E. A.; Mondal, S.; Vaitheeswaran, G.; Kennedy, B. J., “Understanding the re-entrant phase transition in a non-magnetic scheelite”, *Journal of the American Chemical Society*, 144 (2022) 34, 15612-15621.
- (16) Htet, C. S.; Nayak, S.; **Manjón-Sanz, A.**; Liu, J.; Kong, J.; Sørensen, D. R.; Marlton, F.; Jørgensen, M. R. V.; Pramanick, A., “Atomic structural mechanism for ferroelectric-antiferroelectric transformation in perovskite NaNbO_3 ”, *Physical Review B*, 105 (2022) 17, 174113-1 – 174113-13.
- (15) **Manjón-Sanz, A.**; Surta, T. W.; Mandal, P.; Corkett, A. J.; Niu, H.; Nishibori, E.; Takata, M.; S; Claridge, J. B.; Rosseinsky, M. J., “Complex Structural Disorder in a Polar Orthorhombic Perovskite Observed through the Maximum Entropy Method/Rietveld Technique”, *Chemistry of Materials*, 34 (2022) 1, 29-42.
- (14) Molina Esquinas, A.; **Manjón-Sanz, A.***; Sánchez-Sánchez, M., “On the contribution of Pair Distribution Function (PDF) to the characterization of nanocrystalline MOFs: The case of M-MOF-74”, *Microporous and Mesoporous Materials*, (2021) 319, 110973.
- (13) Culberston, C; **Manjón-Sanz, A.**; Dolgos, M. R., “Order-disorder behavior in lead-free piezoelectric $\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ - $x\text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ determined by neutron total scattering”, *Materials Research Bulletin*, (2021) 135, 111124 (1-7).
- (12) Sánchez-Ahijón, E.; Rainer Schmidt, R.; Marín-Gamero, R.; Molero-Sánchez, B.; Ávila-Brandé, D.; **Manjón-Sanz, A.**; Fernández-Díaz, M. T.; Morán, E.; Prado-Gonjal, J. “ $\text{BaFe}_{0.125}\text{Co}_{0.125}\text{Zr}_{0.75}\text{O}_{3-\delta}$: a highly promising mixed ionic-electronic conductor for intermediate temperature solid oxide fuel cells”, *Journal of Materials Chemistry A*, 8 (2020), 3413-3420.
- (11) **Manjón-Sanz, A.**; Culberston, C; Hou D.; Jones, J. L.; Dolgos M. R., “Total scattering and diffraction studies of lead-free piezoelectric $\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ - $x\text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ deconvolute intrinsic and extrinsic contributions to electromechanical strain”, *Acta Materialia*, 171 (2019), 79-91.
- (10) **Manjón-Sanz, A.**; Dolgos, M. R., “Applications of Piezoelectrics: old and new”, *Invited review article, Chemistry of Materials*, 30, (2018), 8718-8726.

- (9) McQuade, R.; Rowe, T.; **Manjón-Sanz, A.**; de la Puente, L.; Dolgos, M. R., “An investigation into group 13 (Al, Ga, In) substituted $(\text{Na}_{0.5}\text{Bi}_{0.5})\text{TiO}_3\text{-BaTiO}_3$ (NBT-BT) lead-free piezoelectrics”, *Journal of Alloys and Compounds*, 762, (2018), 378-388.
- (8) Surta, T. W.; **Manjón-Sanz, A.**; Qian, E. K.; Dolgos, M. R., “Low Temperature Synthesis Route and Structural Characterization of $(\text{Bi}_{0.5}\text{A}_{0.5})(\text{Sc}_{0.5}\text{Nb}_{0.5})\text{O}_3$ ($\text{A} = \text{K}^+$ and Na^+) Perovskites”, *Inorganic Chemistry Frontiers*, 5, (2018), 1033-104.
- (7) Surta, T. W.; **Manjón-Sanz, A.**; Qian, E. K.; Mansergh, R. H.; Tran, T. T.; Fullmer, L. B.; Dolgos, M. R., “Dielectric and Ferroelectric Properties in Highly Substituted Aurivillius Phases- $\text{Bi}_2\text{Sr}(\text{A})\text{TiNb}_2\text{O}_{12}$ ($\text{A} = \text{Ca}^{2+}, \text{Sr}^{2+}, \text{Ba}^{2+}$)”, *Chemistry of Materials*, 29, (2017), 7774-7784.
- (6) **Manjón-Sanz, A.**; Berger, C.; Dolgos, M. R., “Understanding the Structure-property Relationships of the Ferroelectric to Relaxor Transition of the $x\text{BiInO}_3\text{-(1-x)BaTiO}_3$ Lead-free Piezoelectric System”, *Journal of Materials Science*, 52, (2017), 5309-5323.
- (5) Mandal, P.; **Manjón-Sanz, A.**; Corkett, A. J.; Comyn, T. P.; Dawson, K.; Stevenson, T. P.; Bennett, L. F.; Henrichs, A.; Bell, A. J.; Nishibori, E.; Takata, M.; Marco Z.; Dolgos, M. R.; Adem, U.; Wan, X.; Pitcher, M. J.; Romani, S.; Tran, T. T.; Halasyamani, P. S.; Claridge, J. B.; Rosseinsky, M. J., “Morphotropic Phase Boundary in the Pb-free $(1-x)\text{BiTi}_{3/8}\text{Fe}_{2/8}\text{Mg}_{3/8}\text{O}_3\text{-xCaTiO}_3$ System: Tetragonal Polarization and Enhanced Electromechanical Properties”, *Advanced Materials*, 27, (2015), 2883-2889.
- (4) Sánchez-Sánchez, M.; **Manjón-Sanz, A.**; Díaz, I.; Mayoral, A.; Sastre, E., “Micron-Sized Single-Crystal-like CoAPO-5/Carbon Composites Leading to Hierarchical CoAPO-5 with Both Inter-and Intracrystalline Mesoporosity”, *Crystal Growth and Design*, 13, (2013), 2476-2485.
- (3) Dolgos, M. R.; Adem, U.; **Manjón-Sanz, A.**; Wan, X. M.; Comyn, T. P.; Stevenson, T.; Bennett, J.; Bell, A. J.; Tran, T. T.; Halasyamani, P. S.; Claridge, J. B.; Rosseinsky, M. J., “Perovskite B-site Compositional Control of $[110]_p$ Polar Displacement Coupling in an Ambient Pressure-Stable Bismuth-based Ferroelectric”, *Angewandte Chemie-International Edition*, 41, (2012), 10770-10775.
- (2) **Manjón-Sanz, A.**; Sánchez-Sánchez, M.; Sastre, E., “Towards the Control of Intercrystalline Mesoporosity in Inorganic Microporous Materials: The Case of CoAPO-5”, *Catalysis Today*, 179, (2012), 102-114.
- (1) **Manjón-Sanz, A.**; Sánchez-Sánchez, M.; Muñoz-Gómez, P.; García, R.; Sastre, E., “Non-template Intercrystalline Mesoporosity in Heteroatom-doped AlPO-5 using N-methyldicyclohexylamine as Structure-Directing Agent”, *Microporous and Mesoporous Materials*, 131, (2010), 331-341.

CONFERENCE PAPERS

- (3) **Manjón-Sanz, A.**; Culberston, C.; Dolgos, M. R., “Understanding the structure of $(1-x)\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3\text{-(x)Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ based lead-free piezoelectric materials”, *International Union of Crystallography*, 77, (2021) A120.
- (2) **Manjón-Sanz, A.**; Berger, C.; Culberston, C.; Dolgos, M. R., “Understanding the structure-property relationships of lead-free piezoelectric systems”, *Acta Crystallographica Section A*, 77, (2021), C1156.
- (1) **Manjón-Sanz, A.**; Surta, T. W.; McQuade, R.; Dolgos, M. R., “Piezoelectrics: Putting the squeeze on new materials”, *Abstracts of Papers of the American Chemical Society*, 251, (2016), 1319.

PRESENTATIONS

- Dec. 2025 “Designing Sustainable Materials for Energy Applications” (Poster) Oak Ridge National Laboratory, Oak Ridge, United States.
- June 2024 “Examining the structure-property relationships of sustainable advanced functional materials” (Poster) American Conference on Neutron Scattering, Knoxville, United States.
- May 2024 “POWGEN instrument at the Spallation Neutron Source and research on Structure-property Relationships of Sustainable Functional Materials” (**Invited Seminar**) MLF, J-PARC, Tokai, Japan.
- Apr. 2024 “Examining the structure-property relationships of sustainable functional using powder diffraction” (**Invited Talk**) The 9th International Conference on Superconductivity and Magnetism 2024, Fethiye, Turkey.
- Jan. 2024 “Materials for Energy and Sustainability: Structure, properties, and materials in action” (**Invited Talk**) Neutron Advisory Board, Oak Ridge National Laboratory, Oak Ridge, United States.
- Dec. 2023 “Examining the structure-property relationships of environmentally friendly functional ceramics using powder diffraction” (**Invited Talk**) Materials Research by Advanced analysis: Synchrotron radiation and Neutron methods, Grand Meeting MRM&ICA2023, Kyoto, Japan.
- Aug. 2023 “Investigating the structure-property relationships of lead-free functional ceramics” (**Invited Talk**) North American Solid State Chemistry Conference, Calgary, Canada.
- July 2023 “Investigating the structure-property relationships of lead-free functional ceramics” (**Young Scholar Invited Talk**) IEEE International Symposium on Applications of Ferroelectrics, Cleveland, Ohio, United States.
- Jan. 2023 “Investigating the structure-property relationships of lead-free functional ceramics” (Talk) *Electronic Materials and Applications*, Florida, Orlando, United States.
- July 2022 “Room Temperature Polar and weak Ferromagnetic with low Dielectric loss $\text{BiFeO}_3\text{-Bi}_{2/3}\text{TiO}_3\text{-CaTiO}_3$ solid solutions”, (Poster), *American Crystallographic Association Meeting*, Portland, Oregon, United States.
- June 2022 “Room Temperature Polar and weak Ferromagnetic with low Dielectric loss $\text{BiFeO}_3\text{-Bi}_{2/3}\text{TiO}_3\text{-CaTiO}_3$ solid solutions”, (Poster), *American Conference on Neutron Scattering*, Boulder, Colorado, United States.
- Jan. 2022 “Structure-property relationships of lead-free piezoelectric systems”, (Poster), *Electronic Materials and Applications*, Virtual conference, United States.
- Jan. 2021 “Understanding the structure of $(1-x)\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3\text{-}x(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ based lead-free piezoelectric materials”, (Poster), *Electronic Materials and Applications*, Virtual conference, United States.

- July 2020 “Understanding the Structure-property Relationships of the Ferroelectric to Relaxor Transition of the $(1-x)\text{BaTiO}_3$ - $(x)\text{BiInO}_3$ Lead-free Piezoelectric System”, (Talk) *2020 American Conference on Neutron Scattering*, Virtual Conference, United States.
- May 2020 “Structure-property Relationships of Advanced Functional Materials and the POWGEN instrument”, (**Invited Virtual Seminar**) Jacob Jones Research group from the North Carolina State University, Raleigh, United States.
- Nov. 2019 “Structure-property Relationships of Advanced Functional Materials”, (**Invited Seminar**) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, Japan.
- Oct. 2019 “Understanding nanoscaled Metal Organic Framework (M-MOF-74) materials via Pair Distribution Function analysis”, (Poster), *IX AUSE (the Spanish Synchrotron User Association) Conference and 4th ALBA User’s meeting*, CELLS, ALBA Synchrotron Light Facility, Cerdanyola Del Valles,
- May 2019 “La técnica de Pair Distribution Function y sus aplicaciones”, (**Invited Seminar**) *ECS Student Chapter*, Chemistry Department, Universidad Complutense de Madrid, Madrid, Spain.
- Apr. 2019 “La fuente de luz sincrotrón ALBA y sus aplicaciones”, (**Invited Talk**) *III Workshop Química Sostenible*, Instituto de Tecnología Química, Universitat Politècnica de Valencia, Valencia, Spain.
- March 2019 “Deconvolved intrinsic and extrinsic contributions to electrostrain in high performance $(1-x)\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3$ - $x(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ piezoceramics”, (Poster) *School and Conference on Analysis of Diffraction Data in Real Space*, Institut Laue-Langevin and The European Synchrotron, Grenoble, France.
- Apr. 2018 “Understanding the Structure-property Relationships in Advanced Functional Materials”, (**Invited Seminar**) *Institute of Catalysis and Petrochemistry*, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain.
- Feb. 2018 “Synthesis and Structure-property Relationships in Lead-free Piezoelectric Ceramics”, (**Invited Seminar**) *Materials Science Department*, Oregon State University, Corvallis, Oregon, United States.
- Jan. 2018 “Study of Domain Wall Motion and Local Structure Under Application of Electric Fields of $\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ - $x\text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ ”, (Talk) *Electronic Materials and Applications*, Florida, Orlando, United States.
- Nov. 2017 “Importance of Piezoelectric Materials”, (Talk) *Oregon State University / University of Oregon PostDoc Research Symposium*, University of Oregon, Eugene, Oregon, United States.
- Aug. 2017 “Structure-property Relationships in Novel Ferroelectric and Piezoelectric Perovskites”, (Poster) *North American Solid State Chemistry Conference*, University of California Santa Barbara, Santa Barbara, California, United States.

- June 2017 “Study of the Structure-property Relationship of the Piezoelectric System $x\text{BiInO}_3-(1-x)\text{BaTiO}_3$ ”, (Talk) 72nd Northwest Regional Meeting, Oregon State University, Corvallis, Oregon, United States.
- May 2017 “Temperature Dependence of Local Structure of Lead-free Piezoelectric: $\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3-x\text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3[\text{BZT}-x\text{BCT}]$ ”, (Poster) US School on Total Scattering Analysis, Oak Ridge National Labs, Tennessee, United States.
- Jan. 2017 “Understanding the Structure-property Relationship of the Piezoelectric System $x\text{BiInO}_3-(1-x)\text{BaTiO}_3$ ”, (Poster) Electronic Materials and Applications, Florida, Orlando, United States.
- July 2016 “Structure-property Relationship of a Lead-free Piezoelectric Material Synthesized at Ambient Pressure”, (Poster) Gordon Research Conference on Solid State Chemistry, New London, United States.
- July 2016 “Settling a Scientific Debate by Investigating the Structure-Property Relationships of Disordered Aurivillius Phases”, (Poster) American Conference on Neutron Scattering, Long Beach, California, United States.
- Oct. 2015 “New Lead-free A-site Based Piezoelectric Materials Synthesized at Ambient Pressure with Potential as Actuators”, (Poster) Oregon State Postdoctoral Association Annual Research Poster Session, Oregon State University, Corvallis, Oregon, United States.
- Apr. 2012 “A lead-free A-site Based Perovskite Synthesized at Ambient Pressure”, (Poster) SOPRANO-Marie Curie FP7 meeting, Max Planck Institute for Solid State Research, Stuttgart, Germany.
- Oct. 2011 “Structural Studies on Functional Lone Pair oxides”, (Talk) SOPRANO-Marie Curie FP7 meeting, The University of Liverpool, Liverpool, United Kingdom.
- Apr. 2011 “Structural Studies on Functional Lone Pair oxides”, (Talk) SOPRANO-Marie Curie FP7 meeting, Timisoara, Romania.
- July 2010 “Commercial Carbon Templating Mesoporosity in CoAPO-5 ”, (Poster) 16th International Zeolite Conference, Sorrento, Italy.

CAREER AND SKILLS DEVELOPMENT

- Jan – Dec 2024 Early Career Development Program, Oak Ridge National Laboratory, Oak Ridge, United States.
- March 2024 Women’s leadership workshop, Oak Ridge National Laboratory, Oak Ridge, United States.
- March 2021 Women’s leadership workshop, Oak Ridge National Laboratory, Oak Ridge, United States.
- March 2021 How to build an instrument, Oak Ridge National Laboratory, Oak Ridge, United States.
- March 2019 School and Conference on Analysis of Diffraction Data in Real Space, Institut Laue-Langevin and The European Synchrotron, Grenoble, France.
- June 2018 Python Introduction Course, CELLS, ALBA Synchrotron Light Facility, Cerdanyola Del Valles, Spain.

Jan. 2018	<i>Tuesday Teaching Talks</i> , The 90 Minute Certificated Series, Oregon State University, Corvallis, Oregon, United States.
June 2017	<i>Grant Writing Workshop</i> , Oregon State University, Corvallis, Oregon, United States.
Aug. 2016	<i>Postdoc Research Writing Workshop</i> , Oregon State University, Corvallis, Oregon, United States.
July 2016	<i>Pacific Northwest Women in Science Retreat</i> , Oregon, United States.
Apr. 2012	<i>XII School about the Rietveld method</i> , Universidad Jaume I, Castellón, Spain.
March 2012	<i>Single Crystal X-Ray Structure Analysis</i> , University of Liverpool, Liverpool, United Kingdom.
June 2010	<i>Introduction to the Characterization of Adsorbents and Catalysts</i> , CSIC, Cáceres, Spain.
Nov. 2009	<i>Techniques for the Study of Solid Materials</i> (second edition), CSIC, Madrid, Spain.
June 2009	<i>Techniques for the Study of Solid Materials</i> (first edition), CSIC, Madrid, Spain.

PEER REVIEWING AND PROFESSIONAL ACTIVITIES

2015 – 2016	Mentor of two International Exchange Undergraduate Students, <i>International Student Peer Mentoring Program</i> , Oregon State University, Corvallis, Oregon, United States.
2017	Co-Instructor : “Workshop on The Analysis of Total Scattering Data Using the Pair Distribution Function“, 72 nd Northwest Regional Meeting, Oregon State University, Corvallis, Oregon, United States.
2019	Volunteer at the ALBA OPEN DAY, ALBA, Cerdanyola Del Valles, Spain.
2021	Co-chair of Women in Neutron Sciences, Oak Ridge National Laboratory, United States.
2021 –	Co-instructor : “The Rietveld analysis on TOF neutron data using GSAS-II on the attendees for “National School on Neutron and X-ray Scattering”, Oak Ridge National Laboratory, United States.
2021	Co-organizer of the “Workshop 5: Materials Synthesis Science and Opportunities Aided by in-situ Scattering Tools”, Joint Nanoscience and Neutron Scattering User Meeting, Oak Ridge National Laboratory, United States.
2021, 2022	Judge for the “CrystEngCommPoster Prize” at the American Crystallographic Association.
2022	Neutron Special Interest Group Chair 2022 for the American Crystallographic Association.
2022	Chair of Women in Neutron Sciences, Oak Ridge National Laboratory, United States.
2022	Co-chair of the session “Materials For Our Future: Structural Insights Into Energy Materials And Sustainable Materials” at the <i>American Crystallographic Association Meeting</i> , Portland, Oregon, United States.
2023	Chair of the session “Characterization of Structure Property Relationships in Functional Ceramics” at the <i>Electronic and Advanced Materials</i> , Florida, Orlando, United States.
2023	Strategic Events Project Lead of Women in Neutron Sciences, Oak Ridge National Laboratory, United States.

2023	Dissertation committee of the thesis submitted by Ms. María Asunción Molina Esquinas on “Inmovilización de enzimas en MOFs: diseño y aplicaciones”.
2023	Chair of the session “Structure-property relationships of energy materials/Energy density, sustainability” at the <i>American Crystallographic Association Meeting</i> , Baltimore, Maryland, United States.
2023	Co-instructor of the “Introduction to Diffraction” workshop, Calgary, Canada.
2023	Co-instructor of the “POWGEN workshop”, Oak Ridge National Laboratory, United States.
2024	Co-chair of the session “AI in Modern Crystallography” at the <i>American Crystallographic Association Meeting</i> , Denver, Colorado, United States.
2024	Co-instructor of the “TOPAS workshop”, Oak Ridge National Laboratory, United States.
2024, 2025	Member-at-large of Women in Neutron Sciences, Oak Ridge National Laboratory, United States.

Reviewer of *Chemistry of Materials*, *Physical Review B*, *Journal of Materials Science*, *International Journal of Molecular Sciences*, *Inorganic Chemistry*, *Physical Review Materials*, *Materials*, *Applied Sciences*, and *Symmetry*.

Memberships: *The International Centre for Diffraction Data*, *The American Ceramic Society*, *Neutron Scattering Society of America*, *American Crystallographic Association* and *Materials Research Society*.