Dr. P. Shiv Halasyamani

Education / Experience:

1988-1992	University of Chicago, B.Sc. (Honors) Chemistry
1992-1996	Northwestern University, Ph.D. Chemistry
	Advisor: Prof. Kenneth R. Poeppelmeier
1997-1998	Post-Doctoral Associate, University of Oxford
1998-1999	Junior Research Fellow, Christ Church, University of Oxford
	Advisor: Prof. Dermot O'Hare
1999-2005	Assistant Professor, Department of Chemistry, University of Houston
2005-2010	Associate Professor, Department of Chemistry, University of Houston
2010-2023	Professor, Department of Chemistry, University of Houston
2023-present	Hugh Roy and Lillie Cranz Cullen Distinguished Chair

Awards and Honors:

2001	NSF Career Award
2002	Beckman Young Investigator
2003	ExxonMobil Solid State Faculty Award
2004	Excellence in Research Award (UH) - Assistant Professor Level
2008	Adjunct Professor: Xinjiang Tech. Inst. of Physics and Chemistry, CAS
2009	Excellence in Research Award (UH) - Associate Professor Level
2010	Dow Lecturer – University of Minnesota
2011	Visiting Professor for International Scientists, CAS
2014	Roy-Somiya Award: International Solvothermal and Hydrothermal Assoc.
2015	High-End Foreign Experts Project Award - CAS People's Rep. China
2019	AAAS Fellow
2019	Future Science & Technology Lecturer - Tech. Inst. Phys. and Chem., CAS
2020	Distinguished Visiting Project Professor - Kyoto University
2023	Fellow of the Royal Society of Chemistry (FRSC)
2026	Karcher-Barton Medal – University of Oklahoma

Service:

2005-2008	Graduate Chairman, Department of Chemistry, University of Houston
2007-2010	Editorial Advisory Board: Inorganic Chemistry
2008-2013	Associate Editor: Materials Research Bulletin
2008-2020	Russian Science Foundation Reviewer
2008	Guest Editor: Inorganic Chemistry – Functional Inorganic Materials
2012	Guest Editor: Journal of Solid State Chemistry – Polar Inorganic Materials
2013-2017	Editorial Advisory Board: Chemistry of Materials
2013-2015	Peer Review Panel Member - Diamond Light Source UK
2013-present	Associate Editor: Inorganic Chemistry
2014-present	ORNL Neutron Sciences Review Committee

2016	Norwegian Centre of Excellence Reviewer
2016-2018	Beckman Young Investigator Reviewer and Panelist
2017	Irish Research Council Reviewer
2018-2022	Beckman Foundation Executive Committee Member
2018	Vice-Chair: Solid-State Chemistry Gordon Conference
2018-present	Irish Research Council Panelist
2020-present	Associate Editor: ACS Organic & Inorganic Au
2022-present	Graduate Chairman, Department of Chemistry, University of Houston
2022	Chair: Solid-State Chemistry Gordon Conference
2025-present	Beckman Foundation – Scientific Advisory Council

Funding: ($6.53 Million Raised):

Current: $894K

- **Air Force Research Laboratory:** "Inorganic Photoreactive and Ferroelectric Materials", 10/2/2024 - 10/1/2025, $40,000.
- **Welch Foundation:** "Crystal Growth of Functional Inorganic Materials", 6/1/24 - 5/31/27, $300,000.
- **Army Research Office:** "Collaborative Hierarchical and Agile Responsive Materials (CHARM)", 6/1/24 – 5/31/27, $554,959

Previous: $5.64M

- **National Science Foundation**	3/1/01 – 7/31/23	$1,881,769
- **Welch Foundation**	6/1/00 – 5/31/24	$1,350,000
- **DOE-BES** (Co-PI: Craig Fennie – Cornell)	9/1/10 – 8/31/14	$1,032,834
- **Defense Threat Reduction Agency**	3/15/21 – 5/31/24	$432,000
- **Army Research Office**	9/1/21 – 6/14/23	$250,000
- **Beckman Foundation**	9/1/02 – 8/31/05	$240,000
- **ACS-PRF (AC)**	1/1/08 – 8/31/10	$125,000
- **Air Force Research Laboratory**	9/1/18 – 9/30/20	$158,600
- **National Reconnaissance Office**	3/1/19 – 11/30/19	$90,000
- **Army Research Office**	8/1/11 – 4/1/12	$40,000
- **UH Internal**	8/1/08 – 7/31/09	$45,000

Patents:

- *"Ferroelectric fluoride compositions and methods of making and using same"* **US Patent No. 8,999,189**; Chang, H.Y. and Halasyamani, P.S., **April 7, 2015**.
- *"Method of producing a monolithic crystal by top-seeded solution growth from a liquid crystal flux comprising a mixture of solid precursors"* **US Patent No. 10,047,456**; Zhang, W., and Halasyamani, P.S., **August 14, 2018.**
- *"A Nonlinear Optical Material and Methods of Fabrication"* **US Patent Nos. 10,409,138, 10,113,148, and 10,281,796**; Yu, H. and Halasyamani, P.S., **September 10, 2019.**

Publications: 281 Peer-Reviewed Publications
ISI index: h = 67, over 17,000 citations
Google Scholar index: h = 74, over 19,000 citations

University of Houston (258)

1. Jones, C., Huang, S., Spano, T., Gabilondo, E., Al-Fahdi, M., Trim, K., Douglas, M., Jin, R., Miskowiec, A., Halasyamani, P.S., Hu, M., Ling, J., *Crystal Structures, Optical Behavior, and Magnetic Properties in New Hydrated Lanthanide Iron Sulfates*, Inorg. Chem., Submitted, **2025**.

2. Rich, D., Upreti, D., Gabilondo, E., Halasyamani, P.S., Hu, J., Wang, J., *Synthesis, Crystal Growth, Optical and Magnetic Properties of Julienite-Type Thiocyanates: $Na_2Mn(NCS)_4.8H_2O$, $Na_2Zn(NCS)_4.8H_2O$, and $(NH_4)_2Co(NCS)_4.3H_2O$*, Submitted, **2025**.

3. Gabilondo, E. and Halasyamani, P.S., *Selective crystal growth and optical properties of magnesium methanesulfonate hydrates, $Mg(SO_3CH_3)_2(H_2O)$ (n = 4 and 12)*, Cryst. Growth & Des., Submitted, **2025**.

4. Gong, S., Hassam, C., Gabilondo, E.A., Halasyamani, P.S., Houel, J., Wu, R., Gautier, R., *Broadband Emission in Low-Dimensional Hybrid Alkali Halide Perovskites*, J. Am. Chem. Soc., Submitted, **2025**.

5. Pirez, J., Jana, S., Gabilondo, E., McGuigan, S., Halasyamani, P.S., Maggard, P.*, Ternary Antimony Selenide Semiconductors: Synthesis, Crystal Structure, Electronic Structure, and Optical Properties*, Inorg. Chem., Submitted, **2025**.

6. Kashem, H.B., Panigrahi, G., Morrison, G., Gabilondo, E., Halasyamani, P.S., Wisesa, P., Besmann, T., zur Loye, H.-C., *Crystal Growth of Quaternary Rare Earth Selenosilicates by Using the Flux-Assisted Boron Chalcogen Mixture Method: Investigation of their Magnetic and Optical Properties*, Cryst. Growth & Des., 25, *3767-3775*, **2025**.

7. Gabilondo, E. and Halasyamani, P.S., *Synthesis and Optical Properties of Trivalent Metal Methanesulfonates Containing Y(III), Bi(III), In(III), and Sb(III)*, Inorg. Chem., 64, *19036-19043*, **2025**.

8. Conway, R., Orlandi, F., Manuel, P., Zhang, Y., Halasyamani, P.S., Hayward, M., *Cation exchange as a route to introduce magnetism to hybrid-improper polar phases*, Inorg. Chem., 64, *13438-13445*, **2025**.

9. Gabilondo, E., and Halasyamani, P.S., *Large crystal growth of an unusual methanesulfonic acid derived salt; $Rb(SO_3CH_3)(HSO_3CH_3)$*, Acta Cryst. C., 81, *430-431*, **2025.**

10. Pirez, J., Subhendu, J., Gabilondo, E., McGuigan, S., Halasyamani, P.S., Maggard, P., *Ternary Antimony Selenide Semiconductors: Synthesis, Crystal Structure, Electronic Structure, and Optical Properties*, Inorg. Chem., 64, *12918-12926*, **2025**.

11. Shanmugapriya, I.G., Dey, M., Liang, M., Borah, D., Singh, A.K., Halasyamani, P.S., Shanmugam, M., Natarajan, S., *The Dugganite Structure as a Host for New Colored Compounds and for Oxygen Evolution Studies*, Chem. Eur. J., In Press, **2025**.

12. Jana, S., Gabilondo, E., Mongkhonratanachai, M., Halasyamani, P.S., Maggard, P.A., *Eu(II) Quaternary Chalcogenides with Noncentrosymmetric Structures Stabilized by Site Disorder of d^{10} Metal Cations,* Z. Anorg. Allg. Chemie, 651, (9), **2025**.

13. O'Donnell, S., Leahy, I., Jana, S., Gabilondo, E., Halasyamani, P.S., Maggard, P., Smaha, R., *Magnetic Properties and Large SHG Response of a Chiral Ternary Chalcogenide: Eu_2SiSe_4*, Chem. Mater., 37, *5036-5042*, **2025**.

14. Gabilondo, E. and Halasyamani, P.S. *Synthesis and Large Crystal Growth of a family of Mixed-Anionic Methanesulfonate salts by anionic site-substitution: $Na_5(SO_3CH_3)_4(X)$ (X = BF_4^-, ClO_4^-, PF_6^-, I^-)*, Dalton Trans., 54, *5301-5310*, **2025**.

15. Katragadda, N., Kumar, S., Tulasirao, P., Zhang, W., Halasyamani, P.S., Nanda, J., Pradhan, G.K., Manjon-Sanz, A.M., Mandal, P., *Improved Piezoelectric Properties at the Morphotropic Phase Boundary in $BiFeO_3$ – $Bi_{0.5}K_{0.5}TiO_3$ – $BaTiO_3$ Perovskite Oxides*, Mater. Today Commun., 47, 113030, **2025**.

16. Jana, S., Gabilondo, E., Mongkhonratanachai, M., Zhang, Y., Halasyamani, P.S., Maggard, P., *Large Mid-Infrared SHG Activities in Eu(II)-Based Quaternary Chalcogenides*, Chem. Mater., 36, *9750-9761*, **2024**.

17. Pfund, J., Jiang, S., Zhang, W., Halasyamani, P.S., Susner, M.A., Ortalan, V., Jain, M., *In-plane and out-of-plane magnetic properties of iron borate crystal*, https://doi.org/10.1103/p15y-jtgs,, **2025**.

18. Gabilondo, E. and Halasyamani, P.S., *Synthesis and Large Crystal Growth of a Noncentrosymmetric Sodium Methylsulfanetriol Borate Lewis-adduct: $Na(S(OH)_3(CH_3)(BO_3)$*, Inorg. Chem., 63, *17208-17214*, **2024**.

19. Wang, S., Zhang, Y., Halasyamani, P.S., Mitzi, D., *Chirality and Solvent Co-assist Structural Evolution of Hybrid Manganese Chlorides with Second Harmonic Generation Response*, Inorg. Chem., 63, *16121-16127*, **2024**.

20. Gabilondo, E., O'Donnell, S., Subhendu, J., Broughton, R., Koldemir, A., Liang, M., Reichling, J., Campbell, C., Halasyamani, P.S., Poettgen, R., Jones, J., Maggard, P., *Unveiling Stability Factors in Sn(II)-Containing Oxides: Discovery of a Polar Tin Titanate and Photocatalytic Activity for Overall Water Splitting*, Chem. Mater., 36, *5753-5763*, **2024**.

21. Liu, L., Wang, J., Xiao, B., Li, X., Chu, Y., Halasyamani, P.S., *$Pb_2Ga_3F_6(SeO_3)_2X_3.2H_2O$ (X = Cl, Br): Two New HTO-Type Members Exhibiting Large NLO Effect Mediated by Ionic Mixing and Substitution Strategy*, J. Mater. Chem. C., 12, *4986-4994*, **2024**.

22. Liang, M., Zhang, Y., Izvarin, E., Waters, M.J., Rondinelli, J.M., Halasyamani, P.S., *Metal Methanesulfonates with Mixed Anionic Groups with Large Bandgaps and Enhanced Birefringence*, Chem. Mater., 36, *2113-2123*, **2024**.

23. Wang, J., Zhu, M., Chu, Y., Tian, J., Liu, L., Zhang, B., Halasyamani, P.S., *Rational Design of the Alkali Metal Sn-Based Mixed Halides with Large Birefringence and Short Ultraviolet Cutoff Edge,* Small, 20, *2308884*, **2024**.

24. Gao, D., Chen, F.Q., Wu, H.P., Hu, Z.G., Wang, J.Y., Wu, Y.C., Yu, H.W., Halasyamani, P.S., *AGe_2O_4Q (A = Ba, Sr; Q = S, Se): A series of heteroanionic oxychalcogenides with large birefringence*, Solid State Sci., 147, *107361*, **2024**.

25. Gurusamy, G., Banerjee, S., Sundaresan, A., Liang, M., Halasyamani, P.S., Natarajan, S., *Synthesis, Optical, Dielectric, SHG, Magnetic and Visible Light Driven Catalytic Studies on Compounds Belonging to the Swedenborgite Structure*, Chemistry – an Asian Journal, 19(6), *e202301113*, **2024**.

26. Katragadda, N., Mandal, P., Yanda, P., Sundaresan, A., Kaushik, S.D., Zhang, W., Halasyamani, P.S., Manjon-Sanz, A.M., *Room temperature polar and weak-ferromagnetic oxide with low dielectric loss*, Mat. Sci. Eng. B – Adv. Functional Solid-State Mater., 298, *116869*, **2023**.

27. Mallick, S., Orlandi, F., Manuel, P., Zhang, W., Halasyamani, P.S., Hayward, M., *$MaCaTa_2O_7$ – Magnetically Ordered Polar Phase Prepared via Cation Exchange*, Chem. Mater., 35, *7839-7846*, **2023**.

28. King, A., Breton, L., Morrison, G., Smith, M., Liang, M., Halasyamani, P.S., zur Loye, H.-C., *Crystal Structures and Property Measurements of Novel Rare Earth Magnesium Thiosilicates Synthesized via Flux Crystal Growth Utilizing the Boron Chalcogenide Mixture Method*, Submitted, Inorg. Chem., 62, *7446-7452*, **2023**.

29. Jiao, Z.X., Mireles, O.M., Ensz, K., Wang, F., Liang, M.L., Halasyamani, P.S., Zhang, B.B., Rillema, D.P., Wang, J., *Heteroanionic $LaBiVIO_4$ (VI = Mo, W): Excellence in Both Nonlinear Optical Properties and Photoluminescent Properties*, Chem. Mater., 35, *6998-7010*, **2023**.

30. Wang, Y.R., Nisbet, M.L., Kamp, K.R., Hiralal, E., Gautier, R., Halasyamani, P.S., Poeppelmeier, K.R., *Beyond p-p Stacking: Understanding Inversion Symmetry Breaking in Crystalline Racemates*, J. Am. Chem. Soc., 145, *16879-16888*, **2023**.

31. Liu, H., Wu, H., Hu, Z., Wang, J., Wu, Y., Halasyamani, P.S., Yu, H., *$Rb_3B_{11}P_2O_{23}$: Materials Design of a New Chemically Benign Deep-Ultraviolet Nonlinear Optical Material*, ACS Materials Letters, 5, *155-161*, **2023**.

32. Menezes, L.T., Gage, E., Assoud A., Liang, M., Halasyamani, P.S., Kleinke, H., *Sr_6Ge_3OSe: A Rationally Designed Noncentrosymmetric Oxyselenide with Polar [$GeOSe_3$] Building Blocks*, Chem. Mater., 35, *3033-3040*, **2023**.

33. Hu, Z.W., Liu, L.L., Zhang, R.X., Jing, Q., Wang, H., Tian, J.D., Xu, J.Y., Halasyamani, P.S., *An Effective Pathway to Design and Synthesize UV Birefringent Crystals via Rational Assemble of π-Conjugated $[CO_3]^{2-}$ and $[NO_3]^-$ Triangles*, J. Mater. Chem. C, 11, *3325-3333*, **2023**.

34. Ding, F., Griffith, K., Zhang, W., Cai, S., Zhang, C., Wang, Y., Kamp, K., Yu, H., Halasyamani, P.S., Yang, Z., Pan, S., Poeppelmeier, K.R., *$NaRb_6(B_4O_5)(OH)_4(BO_2)$ Featuring Noncentrosymmetry, Chirality, and the Linear Anionic Group BO_2*, J. Am. Chem. Soc., 145, *4928-4933*, **2023**.

35. Liang, M., Lacroix, M., Tao, C., Waters, M.J., Rondinelli, J.M., and Halasyamani, P.S., *Noncentrosymmetric gamma-$Cs_2I_4O_{11}$ Obtained from IO_4 Polyhedral Rearrangements in the Centrosymmetric beta-Phase*, Inorg. Chem., 62, *2942-2950*, **2023**.

36. Cassingham, M., Goh, Y., McClure, E., Hodgkins, T., Zhang, W., Liang, M., Dawlaty, J., Djurovich, P., Haiges, R., Halasyamani, P.S. Savory, C., Thompson, M., Melot, B., *Polarizable Anionic Sublattices Can Screen Molecular Dipoles in Non-centrosymmetric Inorganic-Organic Hybrids,* ACS Appl. Mater. and Interfaces., 15, *18006-18011*, **2023**.

37. Scott, E.A., Mitoudi Vagourdi, E.M., Johnsson, M., Cascos, V.A., John, F., Pickup, D.M., Chadwick, A.V., Djani, H., Bousquet, E., Zhang, W., Halasyamani, P.S., da Silva, I., McCabe, E.E., *$Bi_2CoO_2F_4$ – a polar, ferrimagnetic Aurivillius oxide-fluoride*, Chem. Mater., 34, *9775*, **2022**.

38. Datta, A., Toufanian, R., Zhang, W., Halasyamani, P., Motakef, S., *Low-Cost Radiation-Hard Gallium Oxide Scintillators for High Count Rate Applications*, Optical Materials, 134, *113115*, **2022**.

39. Usman, M., Christian, M.S., Morrison, G., Smith, M.D., Zhang, W., Besmann, T.M., Halasyamani, P.S., zur Loye, H.-C., *Flux crystal growth of rubidium-iron silicates and germanates and their ion-exchange using alkali nitrate salts*, Solid State Sci., 132, *106995*, **2022**.

40. Fuller, C A., Gutmann, M.J., Ling, C.D., Wang, C.H., Zhang, W., Halasyamani, P.S., Evans, I.R., Evans, J.S.O, *Defects and disorder in apatite-type silicate oxide ion conductors: implications for conductivity*, J. Mater. Chem. A., 10, *14576-14584*, **2022**.

41. Novikov, S.A., Lu, Y.M., Zhang, W., Halasyamani, P.S., Hariyani, S., Brgoch, J., Klepov, V.V., zur Loye, H.-C., Mozharivsky, Y, *Phosphorescence in Mn^{4+} Doped R^{+}/R^{2+} Germanates ($R^{+} = Na^{+}$ or K^{+}, $R^{2+} = Sr^{2+}$)*, Inorg. Chem., 61, *9364-9374*, **2022**

42. Breton, L, Morrison, G., Lacroix, M., Halasyamani, P. S,; Zur Loye, H.-C., *Lanthanide Thioborates, an Emerging Class of Nonlinear Optical Materials, Efficiently Synthesized Using the Boron-Chalcogen Mixture Method*, Chem. Commun., 58, *7992-7995*, **2022**.

43. Fuller, C, Murrell, J., Blom, D., Vogt, T., Zhang, W., Halasyamani, P.S., Evans, I., Evans, J., *Oxide ion conductivity, proton conductivity and phase transitions in perovskite-derived $Ba_{3-x}Sr_xYGa_2O_{7.5}$ $0 \le x \le 3$ materials*, Chem. Mater., 34. *3185-3196*, **2022**.

44. Barton, A.T., Liang, M.L., Craig, A.J., Zhang, W., Stoyko, S.S., Radzanowski, A.N., Fingerlow, D., Halasyamani, P.S., MacNeil, J.H., Aitken, J.A., *$Li_2Mg_2Si_2S_6$ and $Li_2Mg_2Ge_2S_6$: Two nonlinear optical sulfides featuring a unique, polar trigonal structure incorporating ethane-like anions*, Z. Anorg. Allg. Chem., **2022.**

45. Mallick, S., Zhang, W., Batuk, M., Gibbs, A.S., Hadermann, J., Halasyamani, P.S., Hayward, M.A., *The crystal and defect structures of polar $KBiNb_2O_7$*, Dalton Trans. 51, *1866-1873*, **2022**.

46. Mallick, S., Khalsa, G., Kaaret, J.Z., Zhang, W., Batuk, M., Gibbs, A.S., Hadermann, J., Halasyamani, P.S., Benedek, N.A., Hayward, M.A., *The influence of the $6s^2$ configuration on Bi^{3+} on the structures of $A'BiNb_2O_7$ (A' = Rb, Na, Li) layered perovskite oxides*, Dalton Trans., 50, *15359-15369*, **2021**.

47. Ding, F., Charles, N., Harada, J., Malliakas, C., Zhang, C., dos Reis, R., Griffith, K., Nisbet, M., Zhang, W., Halasyamani, P. S., Dravid, V., Rondinelli, J., Poeppelmeier, K., *Perovskite-like K3TiOF5 Exhibits (3+1)-Dimensional Commensurate Structure Induced by Octahedrally Coordinated Potassium Ions*, J. Am. Chem. Soc., 143, *18907-18916,* **2021**.

48. Ayer, G., Smith, M.D., Jacobsohn, L.G., Morrison, G., Tisdale, H.B., Breton, L., Zhang, W., Halasyamani, P.S., zur Loye, H.-C., *Synthesis of Hydrated Ternary Lanthanide-Containing Chlorides Exhibiting X-ray Scintillation and Luminescence*, Inorg. Chem., 60, *15371-15382*, **2021**.

49. Liu, H., Wu, Q., Liu, L., Lin, Z., Halasyamani, P.S., Chen, X., Qin, J., *AgBi(SO4)(IO3)2: Aliovalent Substitution Induces Dimensional Upgrade and Second Harmonic Generation Response Enhancement*, Chem. Commun., 57, *3712-3715*, **2021**.

50. Mallick, S., Fortes, A.D., Zhang, W., Halasyamani, P.S., Hayward, M.A., *Switching between Proper and Hybrid-Improper Polar Structures via Cation Substitution in A2La(TaTi)O7 (A = Li, Na)*, Chem. Mater., 33, *2666-2672*, **2021**.

51. Zhu, T., Orlandi, F., Manuel, P., Gibbs, A.S., Zhang, W., Halasyamani, P.S., Hayward, M.A., *Directed Synthesis of a Hybrid Improper Magnetoelectric Multiferroic Material*, Nat. Commun., 12, 4945, **2021**.

52. Liu, L., Zhang, B., Zhang, W., Halasyamani, P.S., *Pb2TiFO(SeO3)2Br: New Polar Compound with the Strongest Second Harmonic Generation in the Selenite Bromide Family*, J. Mater. C., 9, *6491-6497,* **2021**.

53. Sandineni, P., Asl, Y.A., Zhang, W., Halasyamani, P.S., Ghosh, K., Choudhury, A., *Interplay between Oxo and Fluoro in Vanadium Oxyfluorides for Centrosymmetric and Non- Centrosymmetric Structure Formation*, Molecules, 26, 603(1) – 603(11), **2021**.

54. Cascos, V., Roberts-Watts, J., Skingle, C., Levin, I., Zhang, W., Halasyamani, P.S., Stennett, M., Hyatt, M., Bousquet, E., McCabe, E., *Tuning between proper and hybrid-improper mechanisms for polar behaviour in CsLn2Ti2NbO10 Dion-Jacobson phases*, Chem. Mater., 32, *8700-8712*, **2020**.

55. Mallick, S., Other, A.N., Gibbs, A.S., Zhang, W., Halasyamani, P.S., Benedek, N.A., Hayward, M.A., *The Polar Structures of KNdNb2O7 and KNdTa2O7*, Chem. Mater., 32, *7965-7972*, **2020**.

56. Menezes, L.T., Assoud, A., Zhang, W., Halasyamani, P.S., Kleinke, H., *Effect of Pb Substitution in Sr2-xPbxGeSe4 on Crystal Structures and Non-Linear Optical Properties Predicted by DFT Calculations*, Inorg. Chem., 59, 15028-15035, **2020**.

57. Trujillo-Hernandez, K., Rodriguez-Lopez, G., Espinosa-Roa, A., Gonzalez-Roque, J., Gomora-Figueroa, A.P., Zhang, W., Halasyamani, P.S., Jancik, V., Gembicky, M., Pirruccio, G., Solis-Ibarra, D., *Chirality Control in White-Light Emitting 2D Perovskites*, J. Mater. C, 8, *9602-9607*, **2020**.

58. Shankar, R.P.N., Orlandi, F., Manuel, P., Zhang, W., Halasyamani, P.S., Sundaresan, A., *A- Site and B-Site Cation Ordering Induces Polar and Multiferroic Behavior in the Perovskite NaLnNiWO6 (Ln = Y, Dy, Ho, and Yb)*, Chem. Mater., 32, *5641-5649*, **2020**.

59. Parsons, T.G., Hadermann, J., Halasyamani, P.S., Hayward, M.A., *Preparation of noncentrosymmetric ferrimagnatic phase La0.9Ba0.1Mn0.96O2.43 by topochemical reduction*, J. Solid State Chem., 287, *121356*, **2020**.

60. Wu, H., Zhang, B., Yu, H., Zhanggui, H., Wang, J., Wu, Y., Halasyamani, P.S., *Designing Silicates as Deep-UV Nonlinear Optical Materials using Edge-sharing Tetrahedra*, Angew. Chemie, 59, *8922-8926*, **2020**.

61. Djani, H., McCabe, E.E., Zhang, W., Halasyamani, P.S., Feteira, A., Bieder, J., Bousquet, E., Ghosez, Ph., *Bi2W2O9: a potentially antiferroelectric Aurivillius phase*, Phys. Rev. B., 101,*134113*, **2020**.

62. Usman, M., Kocevski, V., Smith, M., Morrison, G., Zhang, W., Besmann, T., Halasyamani, P. S., zur Loye, H.-C. *Polymorphism and Molten Nitrate Salt-assisted Single Crystal to Single Crystal Ion Exchange in Zeolitic Cesium Ferrogermanate: CsFeGeO4*, Inorg. Chem., 59, *9699-9709*, **2020.**

63. Flynn, S., Sanghvi, S., Nisbet, M., Griffith, K., Zhang, W., Halasyamani, P.S., Haile, S.M., Poeppelmeier, K.R., *LiIn2SbO6: A Rutile-Related Structure-type with Ion Transport Pathways*, Chem. Mater., 11, *4785-4794*, **2020**.

64. Hancock, J., Nisbet, M., Zhang, W., Halasyamani, P.S., Poeppelmeier, K.R., *Periodic Tendril Perversion and Helices in the AMoO2F3 (A = K, Rb, NH4, Tl) Family*, J. Am. Chem. Soc., 142, *6375-6380*, **2020**.

65. Shang, M. and Halasyamani, P.S., *Mixed-valent Selenium Compounds: Noncentrosymmetric Cd3(SeO3)2(SeO4) and Hg3(SeO3)2(SeO4) and Centrosymmetric Pb2(SeO3)(SeO4)*, J. Solid State Chem., 286, *121292*, **2020**.

66. Zhou, J., Wu, H., Yu, H., Jiang, S., Hu, S., Wang, J., Wu, Y., Halasyamani, P.S., *BaF2TeF2(OH)2: A UV Nonlinear Optical Fluorotellurite Material Designed by Band-gap Engineering*, J. Am. Chem. Soc., 142, *4616-4620*, **2020**.

67. Mitoudi-Vagourdi, E., Zhang, W., Denisova, K., Lemmens, P., Halasyamani, P.S., Johnsson, M., *Synthesis and Characterization of two new SHG active iodates: K3Sc(IO3)6 and KSc(IO3)3Cl*, Submitted, ACS Omega, 5, *5235-5240*, **2020**.

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Invited Presentations:

Universities

United States:

Indiana University	Duquesne University	Clemson University
Auburn University	Georgia Inst. Tech.	University of South Carolina
North Carolina State Univ.	Ohio State University	Notre Dame

University of Michigan	Michigan State Univ.	University of New Orleans
Northwestern University	Purdue University	Cornell University
Columbia University	UC – Santa Barbara	University of Minnesota
Haverford College	Oak Ridge National Lab.	University of Iowa
University of Oregon	California Inst. Tech.	New York University
University of Delaware	Baylor University	Colorado School of Mines
Colorado State Univ.	Johns Hopkins University	University of Florida
Florida State Univ.	SUNY - Stony Brook	Wayne State University
Univ. Tennessee	Louisiana St. Univ.	

International:

University of Sofia	University of Barcelona	University of Nantes
University of Bordeaux	Augsburg University	Indian Institute of Science
University of Chile, Santiago	University of Edinburgh	University of St. Andrews
University of Tubingen	MPI – Stuttgart	University of Stuttgart
Ho Chi Minh University	Stockholm University	Peking University
USTC	Xinjiang Technical Institute of Physics and Chemistry	
Nanjing University	Fujian Institute of Research on the Structure of Matter	
Wuhan University	Shandong University	University of Buenos Aires
Aalto University	ETH Zurich	University of Berne
IST Austria	CSIR - Hyderabad	TFIR - Hyderabad
Tongji University	Fuzhou University	Fujian Normal University
Jiangnan University	Tianjin University	Nankai University
Univ. Science and Tech. Beijing	Technical Institute of Physics and Chemistry, Beijing	
Kyoto University		

Symposium Organizer:

International Union of Crystallography (Florence, Italy, 2005)
Southwest Regional ACS Meeting (Houston, 2006)
National Materials Research Society Meeting (Boston, 2010)
International Materials Research Congress (Cancun, 2012)
International Materials Research Congress (Cancun, 2013)
Solid State Gordon Conference
- Vice-Chair (Colby-Sawyer, NH, 2018)
- Chair (Colby-Sawyer, NH, 2022)

Students and Post-doctoral Associates:

Post-doctoral Associates and Visiting Scholars (Current):
Dr. Eric Gabilondo
Dr. Kumar Saurbah

Dr. Yungsung Kuk

Post-doctoral Associates (Previous) – Current position:
Dr. N.S.P. Bhuvanesh (9/99 – 8/01) – *Research Instrument Specialist, Texas A&M*
Dr. Zhong-le Huang (4/01 – 4/02) – *Research Scientist, Institut für Anorganische Chemie Christian-Albrechts-Universität zu Kiel*
Dr. Joanna Goodey (9/01 – 7/02) - *Senior Lecturer and Associate Graduate Advisor, Texas A&M*
Dr. Lei Zhang (6/02 – 5/04) – *Research Scientist, State Key Laboratory of Rare Earth Materials Chemistry and Applications, Peking University, Beijing*
Dr. Oya Gokcen (1/03 – 1/04) – *Research Scientist, Space Vacuum Epitaxy Center, Univ. Houston*
Dr. Ranbo Yu (2/03 – 2/04) – *Associate Professor, University of Science and Technology, Beijing*
Dr. Eunok Chi (4/03 – 3/06) - *DC Chemical Company, Seoul, Korea*
Dr. Kang Min Ok (1/04 – 3/06) - *Professor Sogang University, Korea*
Dr. T. Sivakumar (8/04 – 3/07) – *Post-doctoral Associate, Tokyo Institute of Technology*
Dr. Jun Ho Kim (6/06 – 6/08) – *DC Chemical Company, Seoul, Korea*
Dr. Sang-Hwan Kim (4/08 – 6/11) – *Research Scientist DuPont Company*
Dr. Elise Pachoud (1/12 - 6/13) – *Institut NEEL - CNRS*
Dr. Hongwei Yu (9/14 - 2/16) - *Professor, Tianjin University of Technology*
Dr. Hongping Wu (1/15 - 1/16) - *Professor, Tianjin University of Technology*
Dr. Lili Lu (3/18 - 9/19) – *Professor Shanghai Institute of Technology*
Dr. Weiguo Zhang (8/09 – 8/21) – *Senior Scientist CTS*
Dr. Michael LaCrioux (5/21 – 5/23)
Dr. Ce Tao (9/21 – 9/23)
Dr. Mingli Liang (9/21 – 9/23)

Graduate Students (Previous) – Current position:
Kang Min Ok (Ph.D. Dec. '03 - *Professor Sogang University, Korea*)
Yetta Porter (Ph.D. Dec. '03 - *Research Scientist, Lawrence Berkeley National Laboratory*)
Hong-Young Chang (Ph.D. Aug., '09 - *Post-doctoral Assoc. UT-Austin*)
Jaewook Baek (M.S. Aug., '09 - *Chief Chemist ExperTox Inc., Houston, TX*)
Jeongho Yeon (Ph.D. Aug., '11 - *Research Scientist - Crystal Growth Group, Coherent Lasers*)
Sau Doan Nguyen (Ph.D. Dec., '12 – *Post-doctoral Assoc., Univ. Northern Colorado*)
HaNa Lee (M.S. May '13 - *LG Chemicals, Korea*)
Sun Woo Kim (Ph.D. August '14 - *Assistant Professor, Chosun University, Korea)*
Thanh Thao Tran (Ph.D. June '15 - *Assistant Professor, Clemson University*)
Meng Shang (Ph.D. June '20 - *Post-doctoral Assoc., Univ. Houston*)

Undergraduate Students: 24 Total
Lisa Ramadghie (6/00 – 8/00)
Axel Mueller (1/01 – 4/01)
Claudia Wagner (4/01 – 7/01),

Cinttya Chavez (5/01 – 7/01)
Francisco Escobedo (5/02 – 7/02)
Jake Broussard (9/01 – 5/02)
Alex Gittens (5/02 – 12/02)
Hyun-Seup Ra (1/03 – 4/03)
Jolea Bryant (5/03 – 7/03)
Joseph Orzechowski (6/03 – 7/03)
Maria Guardiola (5/04 – 7/04)
Alexandra Fursina (2/05 – 8/05)
Pascaline Lauriol (1/06 – 7/06)
Angelica Torres (5/06 – 8/06)
Mary Elhardt (5/06 – 8/06)
Brian Berger (5/06 – 8/06)
Casey Hood (1/08 – 1/09)
Antonio Pontifes (5/09 – 12/09)
Stephan Tam (5/10 – 12/11)
Thong Tran (1/12 – 6/12)
Valeria Stevens (1/20 – 8/20)
Mikas Dunn (1/22 – 12/23)
Michael Vargas (1/24 – 5/25)
Seaver Chester (1/24 – 5/25)