Pei-Chun Ho, Ph. D.

(updated on 7/2/2024)

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Education

◆ **Ph.D. in Physics** (Sept., 1991 - Sept., 1997)

Department of Physics, University of California, San Diego

Dissertation Title: The study of fundamental excitations in low density hcp ⁴He

Thesis Advisor: Dr. John M. Goodkind

◆ M.S. in Physics (Sept., 1991 - Sept., 1992)

Department of Physics, University of California, San Diego

♦ B.S. in Physics Major and Mathematics Minor (Sept., 1986 - Sept., 1990)

Department of Physics, National Tsing-Hua University, Hsin-Chu, Taiwan, R.O.C.

Academic Appointments and Experience

- **♦** Professor (August 20, 2018 – Present)
- (August 19, 2013 August 19, 2018) **♦** Associate Professor
- (August 20, 2007 August 18, 2013) **♦** Assistant Professor

Department of Physics, California State University, Fresno

Research in Strongly Correlated Electron Laboratory

Strongly correlated electron phenomena in rare earth related materials:

- (1) Superconductivity, magnetism, and Interplay between the two phenomena
- (2) Magnetism in rare earth elemental nanoclusters synthesized by the inverse micelle technique
- (3) Development of Low-Temperature Facility and Measurement Instrumentation in the Strongly Correlated Electron Laboratory

Courses:

PHYS 4A	Mechanics and Wave Motion (Spring, 2024 – present)
PHYS 4AL	Laboratory in Mechanics and Wave Motion (Fall, 2007 – Spring, 2012)
PHYS 2A	General Physics (Spring, 2024 – present)
PHYS 2AL	General Physics Laboratory (Fall, 2009 – Fall, 2010)
PHYS 102	Modern Physics (Fall, 2020 – present & Fall, 2010 – Fall, 2017)
PHYS 102*	Modern Physics + CURE/PBL (Fall, 2024 & Fall, 2018 – Fall, 2019)
PHYS 175T	Techniques for Strongly Correlated Electron Physics (Spring, 2013)
PHYS 175TS	Service Learning Course – Physics Outreach (Spring, 2011)
	(Later approved to be a curriculum course PHYS 168S)
PHYS 4C	Light and Modern Physics (Fall, 2007)
NSCI 1A	Integrated Science: Physics and Chemistry - Laboratory (Spring, 2008)
PHYS 190	Independent Study for Undergraduate: Research Participation in
	Strongly-Correlated-Electron-Physics Program (Spring, 2024 – present)
PHYS 290	Independent Study for MS-Program Student: Research Participation in the
	Strongly-Correlated-Electron-Physics Program (Spring, 2024 – present)

♦ Assistant Project Scientist, Step II (Jul. 01, 2006 – Jun. 30, 2007)

Institute for Pure and Applied Physical Sciences, University of California, San Diego Research group of M. Brian Maple

Research area: Strongly correlated electron phenomena in rare earth, actinide intermetallics, and other novel materials by electrical resistivity, specific heat, magnetic susceptibility and magnetization in high magnetic fields.

♦ Physics Course Instructor (Jul. 03 - Sept.09, 2006)

Department of Physics, University of California, San Diego

"Waves, Optics, and Modern Physics" for life science majors (Summer session I and II)

♦ Assistant Project Scientist, Step I (Jan. 01, 2005 - Jun. 30, 2006)

Institute for Pure and Applied Physical Sciences, University of California, San Diego Research group of M. B. Maple

♦ Teaching assistant (Mar. - Jun., 2006)

Department of Physics, University of California, San Diego

"Senior Advanced Undergraduate Laboratory: Condensed Matter Physics - Materials Science" for physics majors (Spring quarter)

♦ Physics Course Instructor (Jun. 25 - Aug. 02, 2005)

Department of Physics, University of California, San Diego

"Waves, Optics, and Modern Physics" for life science majors (Summer session I)

♦ Teaching assistant (Mar. - Jun., 2005)

Department of Physics, University of California, San Diego

"Senior Advanced Undergraduate Laboratory: Condensed Matter Physics - Materials Science" for physics majors (Spring, 2005)

♦ Postgraduate Researcher, Step III to VII (Jan., 2001 - Dec., 2004)

Institute for Pure and Applied Physical Sciences, University of California, San Diego Research group of M. Brian Maple

♦ Postdoctoral Research Associate (Sept., 1997 - Dec., 2000)

Low Temperature Laboratory, University of Massachusetts, Amherst.

Research group of Robert B. Hallock

Research project: "3He correlations in 3He-4He mixture films by specific heat measurements"

♦ Lecturer (Sept., 1997 - Aug., 1999)

Department of Physics and Astronomy, University of Massachusetts, Amherst

"Intro. Physics II" for life science major (Spring semester)

♦ **Research Assistant** (Jul., 1992 - Sept., 1997).

Department of Physics, University of California, San Diego

Research group of J. M. Goodkind

Research area: "fundamental excitations in low density hcp ⁴He crystals (supersolid)"

♦ Teaching Assistant (1991 - 1997)

Department of Physics, University of California, San Diego

"General Physics tutor - Self Paced" for biology and chemistry majors (Summer, 1997)

"General Physics lab instructor - Electricity & Magnetism & Optics" for biology and chemistry majors (Spring, 1995)

"Physics lab instructor - Mechanics & Electrostatics" for physical science and engineering majors (Spring, 1993)

"Physics grader - Electricity & Magnetism" for biology and chemistry majors (Spring, 1992)

"Physics grader - Mechanics" for biology and chemistry majors (Fall, 1991 and Winter, 1992)

♦ Research Assistant (Sept., 1990 - Jul., 1991)

The National Science Council of the Republic of China, Taiwan.

Research area: high T_c copper-oxide superconductors

◆ Teaching Assistant (1990 - 1991)

Department of Physics, National Tsing-Hua University, Hsin-Chu, Taiwan, R.O.C.

Committee and Service Experience

- ♦ College Research Committee, College of Science and Mathematics, California State University, Fresno (May 23, 2018 Present; September 1, 2012 August 31, 2015)
- ♦ College Research Infrastructure Ad Hoc Committee, College of Science and Mathematics, California State University, Fresno (May 5, 2022 Present)
- ♦ Physics Outreach Committee at Department of Physics, California State University, Fresno (April 20, 2008 present)
- ♦ University Research Inquiry Committee, California State University, Fresno (May 4 May 20, 2022)
- ♦ University Academic Senate, Representative of Department of Physics, California State University, Fresno (March 1, 2017 April 30, 2019)
- ♦ College Space-and-Budget Committee, College of Science and Mathematics, California State University, Fresno (September 20, 2016 September 19, 2019)
- ♦ Computational Physics Faculty Search Committee, Department of Physics, California State University, Fresno (Academic Year 2017-18)
- ♦ Undergraduate Advisor, Department of Physics, California State University, Fresno (December 1, 2011 Jan. 15, 2018)
- ♦ University General Education Committee, California State University, Fresno (November 23, 2011 November 22, 2014)
- ♦ Biomedical Physics Faculty Search Committee, Department of Physics, California State University, Fresno (Academic Year 2013-14)
- ♦ College Academic Policies Committee, College of Science and Mathematics, California State University, Fresno (August 25, 2009 August 31, 2012)
- ♦ QFS98 Local Committee at the University of Massachusetts, Amherst (June 9 14, 1998) QFS98 — International Symposium on Quantum Fluids and Solids, Amherst, Massachusetts, USA

Community Service

- ♦ "Hands-On Fun with Physics," Outreach Program at Downing Planetarium and Science Museum, Fresno, California (Fall, 2011 present)
- ♦ Student Club Faculty Advisor, Tzu Chi Collegiate Association of California State University, Fresno (TCCA) (August 18, 2016 present)
- ◆ Physics Outreach Road Shows for Local K-12 Schools at Fresno, California:

 Ahwahnee Middle School: 2/11/2011; Cesar Chavez High in Daleno: 3/11/2011; Kermit Koontz Education Complex: 4/15/2011 (Fresno-State-Vintage-Day Visit); Leavenworth Elementary: 3/18/2011; Lincoln Elementary School in Dinuba: 2/25/2011; Manchester Gate: 1/28/2011, 9/3/2010, 4/22/2010, 2/11/2010; Sierra Charter School: 4/1/2011; Tehipite Middle School: 4/8/2011; Wawona Middle School: 2/18/2-011; Wolters Elementary: 2/4/2011; Redwood High School: 5/18/2010; Red Bank Elementary: 5/26/2010; Clark Intermediate School: 2/18/2010.
- ♦ Judge for the 56th Annual Central California Regional Science, Engineering, and Mathematics Fair, Fresno, CA (March 23, 2009) the Senior Division in the Physics category

Awards and Grants

• National Science Foundation Material Research Award DMR-1905636, "Renewal of RUI: Investigation of Strongly Correlated Electron Behavior in Rare Earth Related Materials" (\$404,121, July 1, 2019 -June 30,

- 2022 with the 4th-year-no-cost extension from July 1, 2022 June 30, 2023 and the 5th-year-no-cost extension from July 1, 2023 June 30, 2024.)
- National Science Foundation Material Research Award DMR-1506677, "Renewal of RUI: Investigation of Strongly Correlated Electron Behavior in Rare Earth Related Materials" (\$307,198, September 1, 2015 -August 31, 2019)
- National Science Foundation Material Research Award DMR-1104544, "RUI: Investigation of Strongly Correlated Electron Behavior in Rare Earth Related Materials" (\$255,000, June 15, 2011-May 31, 2015)
- Research Corporation Cottrell College Science Award No. 7669, "The Effect of Neodymium Substitution on the Properties of PrOs₄Sb₁₂" (\$45,000, July 1, 2008 December 31, 2010)
- University (i.e., Provost) Award for Research, Scholarship, and Creative Activity 3 WTU, California State University, Fresno (Spring of AY 2013-14, Spring of AY 2012-13, Fall of AY 2010-11, Fall of AY 2009-10)
- College Award for Scholarly and Creative Activity Release Time California State University, Fresno (3 WTU-Equivalent Summer Stipend of AY 2013-14, 3 WTU in Fall of AY 2011-12, 2 WTU in Spring of AY 2010-11, 3 WTU in Spring of AY 2009-10, 3 WTU in Spring of AY 2008-09)
- Performance Award, California State University, Fresno (AY 2014-15, AY 2013-14, AY 2012-13, AY 2011-12, AY 2010-11, Spring/2010, AY 2008-09, AY 2007-08)
- California State University, Fresno, Service-Learning Curriculum Development Grant \$5,000, "PHYS 168S Service-Learning Course - Physics Outreach" (Spring, 2011)
- Regents tuition and fee scholarship, University of California at San Diego, (academic year 1991-1992, Spring 1993, Spring 1995)
- The Academic Achievement Award, National Tsing-Hua University (Feb. 1990)
- The Academic Achievement Award, National Tsing-Hua University (Sept. 1989)
- The Japan Dai-Ichi Kangyo Bank Scholarship (Sept. 1989)
- Mrs. Ju-Pao Li Hwang Scholarship for Physics Major, National Tsing-Hua University (Feb. 1989)
- Chinese Culture and Natural Science Scholarship (Sept. 1988).
- Mr. Shang-Keng Ma Memorial Scholarship for Physics Major, National Tsing-Hua University (Feb. 1988)
- Chinese Culture and Natural Science Scholarship (Sept. 1987).
- Mrs. Ju-Pao LiHwang Scholarship for Physics Majors, National Tsing-Hua University (Feb. 1987)
- Mr. Lin, Shyong Jeng Memorial Scholarship, National Tsing-Hua University (Feb. 1987 Jun. 1990)

Affiliation

- ♦ American Physical Society
- ♦ California Faculty Association
- ♦ Fresno Area Taiwanese Association (FATA)
- ♦ Tzu Chi Buddhism Foundation, Fresno, CA, USA

Publication List of Pei-Chun Ho

(In reverse chronological order, updated on 7/24/2024)

- 1. J. C. Jiao, K. W. Chen, O. O. Bernal, P.-C. Ho, and Lei Shu, "Type-I and type-II superconductivity in the noncentrosymmetric compound Ir₂Ga₉," accepted by *Physical Review B*, on July 17, 2024.
- 2. P.-C. Ho, D. E. MacLaughlin, M. B. Maple, L. Shu, A. D. Hillier, O. O. Bernal, T. Yanagisawa, P. K. Biswas, Jian Zhang, Cheng Tan, S. D. Hishida, T. McCullough-Hunter, "Muon spin rotation and relaxation in Pr_{1-x}Nd_xOs₄Sb₁₂: superconductivity and magnetism in Pr-rich alloys," *Physical Review B* **106**, 144508 (2022). [Publication with student coauthors from PCH Lab]
- 3. K. Götze, M. J. Pearce, M. J. Coak, P. A. Goddard, A. D. Grockowiak, W. A. Coniglio, S. W. Tozer, D. E. Graf, M. B. Maple, P.-C. Ho, M. C. Brown, and J. Singleton, "Pressure-induced shift of effective Ce valence, Fermi energy, and phase boundaries in CeOs₄Sb₁₂," *New Journal of Physics* 24, 043044 (2022). [Publication with student coauthor from PCH Lab] DOI: 10.1088/1367-2630/ac643c
- 4. Z. H. Zhu, J. Zhang, Z. F. Ding, C. Tan, C. S. Chen, Q. Wu, Y. X. Yang, O. O. Bernal, P.-C. Ho, G. D. Morris, A. Koda, A. D. Hillier, S. P. Cottrell, P. J. Baker, P. K. Biswas, J. Qian, X. Yao, D. E. MacLaughlin, and L. Shu, "Muon spin relaxation and fluctuating magnetism in the pseudogap phase of YBa₂Cu₃O_y," *Physical Review B* **103**, 134426 (2021). DOI: 10.1103/PhysRevB.103.134426
- 5. C. Tan, Z. F. Ding, J. Zhang, Z. H. Zhu, O. O. Bernal, P. C. Ho, A. D. Hillier, A. Koda, H. Luetkens, G. D. Morris, D. E. MacLaughlin, and L. Shu, "Slow magnetic fluctuations and critical slowing down in Sr₂Ir_{1-x}Rh_xO₄," *Physical Review B* **101**, 195108 (2020). DOI: 10.1103/PhysRevB.101.195108
- K. Götze, M. J. Pearce, P. A. Goddard, M. Jaime, M. B. Maple, K. Sasmal, T. Yanagisawa, A. McCollam, T. Khouri, P.-C. Ho, and J. Singleton, "Unusual phase boundary of the magnetic-field-tuned valence transition in CeOs₄Sb₁₂," *Physical Review B* 101, 075102 (2020). DOI: 10.1103/PhysRevB.101.075102
- A. Capa Salinas, J. Velasquez, P.-C. Ho, "Probe Design for Thermopower Measurements Using a Differential Thermocouple," *Proceedings of the National Conference of Undergraduate Research (NCUR) 2019*, Page 171-177.
 https://www.ncurproceedings.org/ojs/index.php/NCUR2019/article/view/2864
 https://www.ncurproceedings.org/ojs/index.php/NCUR2019/article/view/2864
 https://www.ncurproceedings.org/ojs/index.php/NCUR2019/article/view/2864
 https://www.ncurproceedings.org/ojs/index.php/NCUR2019/article/view/2864
- 8. Yeh-Chia Chang, Shoji Hishida, Jesus Velasquez, Taylor McCullough-Hunter, Pei-Chun Ho, M. Brian Maple, Tatsuya Yanagisawa, "Thermal Analysis of the Specific Heat of Pr_{1-x}Nd_xOs₄Sb₁₂," *Proceedings of the National Conference of Undergraduate Research (NCUR) 2019*, Page 219-226. http://www.ncurproceedings.org/ojs/index.php/NCUR2019/article/view/2830 [Student publication from PCH Lab]
- 9. O. O. Bernal, D. E. MacLaughlin, G. D. Morris, P. -C. Ho, Lei Shu, C. Tan, J. Zhang, Z. Ding, K. Huang, and V. V. Poltavets, "Charged-stripe order, antiferromagnetism, and spin dynamics in the cooperate along nickelate La₄Ni₃O₈," *Physical Review B* **100**, 125142 (2019).
- 10. Pei-Chun Ho, "Faculty Research: Dr. Pei-Chun Ho, Department of Physics," Elements, (Magazine of College of Science and Mathematics, Fresno State), Vol. Spring 2018, page 10 (2018).
- 11. C. Tan, T. P. Ying, Z. F. Ding, J. Zhang, D. E. MacLaughlin, O. O. Bernal, P.-C. Ho, K. Huang, I. Watanabe, S. Y. Li, and L. Shu, "Nodal superconductivity coexists with low-moment static magnetism in single-crystalline tetragonal FeS: A muon spin relaxation and rotation study," *Physical Review B* 97, 174524 (2018). DOI: 10.1103/PhysRevB.97.174524

- 12. K. Huang, C. Tan, J. Zhang, Z. Ding, D. E. MacLaughlin, O. O. Bernal, P.-C. Ho, C. Baines, L. S. Wu, M. C. Aronson, and L. Shu, "Anomalous quantum critical spin dynamics in YFe₂Al₁₀," *Physical Review B* **97**, 155110 (2018). DOI: 10.1103/PhysRevB.97.155110
- 13. Jian Zhang, Zhaofeng Ding, Cheng Tan, Kevin Huang, Oscar Bernal, Pei-Chun Ho, Gerard D. Morris, Adrian D. Hillier, Pabitra K. Biswas, Stephen P. Cottrell, Hui Xiang, Xin Yao, Douglas E. MacLaughlin, Lei Shu, "Discovery of slow magnetic fluctuations and critical slowing down in pseudogap phase YBa₂Cu₃O_y," *Science Advances* 4, eaao5235 (2018). DOI: 10.1126/sciadv.aao5235
- 14. Y Fang, C T Wolowiec, A J Breindel, D Yazici, P-C Ho, and M B Maple, "Upper critical magnetic field of *LnO*_{0.5}F_{0.5}BiS₂ (*Ln* = La, Nd) superconductors at ambient and high pressure," *Superconductor Science and Technology* **30**, 115004 (2017) DOI: 10.1088/1361-6668/aa8829
- 15. Pei-Chun Ho, John Singleton, Paul A. Goddard, Fedor F. Balakirev, Shalinee Chikara, Tatsuya Yanagiwawa, M. Brian Maple, David B. Shrekenhamer, Xia Lee, and Avraham T. Thomas, "Fermisurface topologies and low-temperature phases of the filled skutterudite compounds CeOs₄Sb₁₂ and NdOs₄Sb₁₂," *Physical Review B* **94**, 205140 (2016). DOI: 10.1103/PhysRevB.94.205140
- 16. J. Zhang, K. Huang, Z. F. Ding, D. E. MacLaughlin, O. O. Bernal, P.-C. Ho, C. Tan, X. Liu, D. Yazici, M. B. Maple, and L. Shu, "Superconducting gap structure in ambient-pressure-grown LaO_{0.5}F_{0.5}BiS₂," *Physical Review B* **94**, 244502 (2016). DOI: 10.1103/PhysRevB.94.224502
- 17. S. Mombetsu, T. Murazumi, H. Hidaka, T. Yanagisawa, H. Amitsuka, P.-C. Ho, and M. B. Maple, "Study of localized character of 4*f* electrons and ultrasonic dispersions in SmOs₄Sb₁₂ by high-pressure high-frequency ultrasonic measurements," *Physical Review B* **94**, 085142 (2016). DOI: 10.1103/PhysRevB.94.085142
- D. E. MacLaughlin, K. Kuga, L. Shu, O. O. Bernal, P.-C. Ho, S. Nakatsuji, K. Huang, Z. F. Ding, C. Tan, and J. Zhang, "Quantum criticality and inhomogeneous magnetic order in Fe-doped α-YbAlB4," *Physical Review B* 93, 214421 (2016). DOI: 10.1103/PhysRevB.93.214421
- 19. S. Mombetsu, T. Yanagisawa, H. Hidaka, H. Amitsuka, S. Yasin, S. Zherlitsyn, J. Wosnitza, P.-C. Ho, and M. B. Maple, "Crystalline Electric Field and Kondo Effect in SmOs₄Sb₁₂," *Journal of the Physical Society of Japan* **85**, 043704 (2016). DOI: 10.7566/JPSJ.85.043704
- 20. I. Jeon, K. Huang, D. Yazici, N. Kanchanavatee, B. D. White, P.-C. Ho, S. Jang, N. Pouse, and M. B. Maple, "Investigation of superconducting and normal-state properties of the filled-skutterudite systems PrPt₄Ge_{12-x}Sb_x," *Physical Review B* **93**, 104507 (2016). DOI: 10.1103/PhysRevB.93.104507
- 21. Benjamin White, Duygu Yazici, Pei-Chun Ho, Noravee Kanchanavatee, Naveen Pouse, Yuankan Fang, Alexander Breindel, Aaron Friedman, Brian Maple, "Weak hybridization and isolated localized magnetic moments in the compounds CeT2Cd20 (T = Ni, Pd)," *Journal of Physics: Condensed Matter* 27, 315602 (2015).
- 22. Maya M. Castro De La Torre, Ryan Fukuda, Faculty Advisor: Pei-Chun Ho, "Synthesis and characterization of neodymium nanoparticles," *Proceedings of National Conference on Undergraduate Research (NCUR) 2014*, 994 (2014). [Student Publication from PCH Lab]
- 23. L. Shu, D. E. MacLaughlin, C. M. Varma, O. O. Bernal, P.-C. Ho, R. H. Fukuda, X. P. Shen, and M. B. Maple, "Landau renormalizations of superfluid density in the heavy fermion superconductor CeCoIn₅," *Physical Review Letter* **113**, 166401(2014). [Publication with Undergraduate Student R. H. Fukuda]

- 24. D. Yazici, B. D. White, P.-C. Ho, N. Kanchanavatee, K. Huang, A. J. Friedman, A. S. Wong, V. W. Burnett, N. R. Dilley, and M. B. Maple, "Investigation of magnetic order in SmTr₂Zn₂₀ (Tr = Fe, Co, Ru) and Sm*Tr*₂Cd₂₀ (*Tr* = Ni, Pd)," *Physical Review B* **90**, 144406 (2014).
- 25. S. Jang, B. D. White, P.-C. Ho, N. Kanchanavatee, M. Janoschek, J. J. Hamlin, M. B. Maple, "Crossover between Fermi liquid and non-Fermi liquid behavior in the non-centrosymmetric compound Yb₂Ni₁₂P₇," *Journal of Physics: Condensed Matter* **26**, 425601 (2014).
- 26. P.-C. Ho, D. E. MacLaughlin, L. Shu, O. O. Bernal, S. Zhao, A. A. Dougraghi, T. Yanagisawa, M. B. Maple, and R. H. Fukuda, "Muon spin rotation and relaxation in Pr_{1-x}Nd_xOs₄Sb₁₂: paramagnetic states," *Physical Review B* **89**, 235111 (2014). [Publication with Undergraduate Student R. H. Fukuda]
- 27. D. E. MacLaughlin, P.-C. Ho, L. Shu, O. O. Bernal, S. Zhao, A. A. Dougraghi, T. Yanagisawa, M. B. Maple, and R. H. Fukuda, "Muon spin rotation and relaxation in Pr_{1-x}Nd_xOs₄Sb₁₂: magnetic and superconducting ground states," *Physical Review B* **89**, 144419 (2014). [Publication with Undergraduate Student R. H. Fukuda]
- 28. K. Huang, L. Shu, I. K. Lum, B. D. White, M. Janoschek, D. Yazici, J. J. Hamlin, D. A. Zocco, P.-C. Ho, R. E. Baumbach, and M. B. Maple, "Probing the Unconventional Superconductivity of PrPt4Ge₁₂ through Ce substitution," *Physical Review B* **89**, 035145 (2014).
- 29. Hank Anderson, Ulises Urbina, Faculty Advisor: Pei-Chun Ho, "Constructing a Relaxation Calorimeter," *Proceedings of National Conference on Undergraduate Research (NCUR) 2013*, Page 488-496 (Open Access) http://www.ncurproceedings.org/ojs/index.php/NCUR2013/article/view/616/438 [Student manuscript from PCH Lab]
- 30. Ryan H. Fukuda, Smitha Sunny, Faculty Advisor: Pei-Chun Ho, "Testing of an AC magnetic susceptometer," *Proceedings of National Conference on Undergraduate Research (NCUR) 2012*, Page 299-304 (Open Access) [Student Publication from PCH Lab]
- 31. R. E. Baumbach, J. J. Hamlin, P.-C. Ho, I. K. Lum, and M. B. Maple, "Superconducting and magnetic anisotropy of LnFePO (Ln = La, Pr, and Nd) single crystals," *Physical Review B* **85**, 104526 (2012).
- 32. Carmin Liang, Dulce Romero, Jussi Amaral, Faculty Advisor: Pei-Chun Ho, Acknowledgements: Saeed Attar, Dennis Margosan, "Synthesis and characterization of rare-earth gadolinium nanoparticles," *Proceedings of National Conference on Undergraduate Research (NCUR) 2011*, Page 334-340, Ithaca College, March 31 April 2, 2011. [Student Publication from PCH Lab]
- 33. L. Shu, R. E. Baumbach, M. Janoschek, E. Gonzales, K Huang, T. A. Sayles, J. Paglione, J. O'Brien, J. J. Hamlin, D. A. Zocco, P.-C. Ho, C. A. McElroy, and M. B. Maple, "Correlated electron state in Ce_{1-x}Yb_xCoIn₅ stabilized by cooperative valence fluctuations," *Physical Review Letters* **106**, 156403 (2011).
- 34. T. Yanagisawa, Y. Ikeda, H. Saito, H. Hidaka, H. Amistuka, K. Araki, M. Akatsu, Y. Nemoto, T. Goto, P.-C. Ho, R. E. Baumbach, and M. B. Maple, "Magnetic-field-independent ultrasonic dispersions due to rattling in magnetically robust heavy fermion system SmOs₄Sb₁₂," *Journal of the Physical Society of Japan* **80**, 043601 (2011).
- 35. P.-C. Ho, T. Yanagisawa, W. M. Yuhasz, A. A. Dooraghi, C. C. Robison, N. P. Butch, R. E. Baumback, and M. B. Maple, "Superconductivity, magnetic order, and quadrupolar order in the filled skutterudite system Pr_{1-x}Nd_xOs₄Sb₁₂," *Physical Review B* **83**, 024511 (2011). [Editors' Suggestion]

- 36. P.-C. Ho, J. Singleton, M. B. Maple, D. B. Shrekenhamer, X. Lee, A. Thale, and T. Yanagisawa, "Shubnikov-de Haas Effect Measurements on CeOs₄Sb₁₂ for Fields along [001]," National High Magnetic Field Laboratory 2010 Research Reports # 131 (2010).
- 37. P.-C. Ho, J. Singleton, M. B. Maple, P. Goddard, and T. Yanagisawa, Shubnikov-de Haas Effect Measurements on NdOs₄Sb₁₂ for Fields along [001] and [011]," National High Magnetic Field Laboratory 2010 Research Reports #116 (2010).
- 38. N. Kurita, H.-O. Lee, Y. Tokiwa, C. F. Miclea, E. D. Bauer, F. Ronning, J. D. Thompson, Z. Fisk, P.-C. Ho, M. B. Maple, P. Sengupta, I. Vekhter, and R. Movshovich, "Thermal and magnetic properties of the low-temperature antiferromagnet Ce₄Pt₁₂Sn₂₅," *Physical Review B* **82**, 174426 (2010).
- 39. T. A. Sayles, R. E. Baumbach, W. M. Yuhasz, M. B. Maple, Ł. Bochenek, R. Wawryk, T. Cichorek, A. Pietraszko, Z. Henkie, and P.-C. Ho, "Superconductivity and crystalline electric field effect in the Pr filled skutterudite compound PrRu₄As₁₂," *Physical Review B* **82**, 104513 (2010).
- 40. J. Thompson, U. Urbina, Faculty Advisor: P.-C. Ho, "Constructing a multiplexer (scanner)," *Proceedings on National Conference on Undergraduate Research* (NCUR) 2010, Page 513-519, University of Motanan-Missoula, April 15-17, 2010. [Student Publication from PCH Lab]
- 41. R. E. Baumbach, J. J. Hamlin, L. Shu, D. A. Zocco, J. O'Brien, P.-C. Ho, and M. Brian Maple, "Unconventional T-H phase diagram in the noncentrosymmetric compound Yb₂Fe₁₂P₇," *Physical Review Letters* **105**, 106403 (2010).
- 42. C. C. Beedle, J. J. Henderson, P.-C. Ho, T. Sayles, M. Nakano, J. R. O'Brien, K. J. Heroux, E. del Barco, M. B. Maple, and D. N. Hendriskson, "Ferromagnetic ordering and simultaneous fast magnetization tunneling in a Ni4 single-molecule magnet," *Inorganic Chemistry* 49, 5780 (2010).
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List of Presentation Abstracts of Pei-Chun Ho

(In reverse chronological order, updated on 7/24/2024)

Invited Talks

(Presenting author underlined)

- 1. <u>Pei-Chun Ho</u>, "Intriguing high-temperature high-magnetic-field phase boundary due to valence transition in CeOs₄Sb₁₂," 5th International Conference on Materials Science & Engineering, inperson oral presentation Day 3- 11:20 AM-11:40 AM, DoubleTree by Hilton San Francisco Airport, Burlingame, CA 94010, June 10-12, 2024.
- 2. <u>Pei-Chun Ho</u>, "Intriguing high-temperature high-magnetic-field phase boundary due to valence transition in CeOs₄Sb₁₂," in-person colloquium presentation at Department of Physics and Astronomy, California State University, Sacramento, California, May 11, 2023.
- 3. <u>Pei-Chun Ho</u>, "Intriguing high-temperature high-magnetic-field phase boundary due to valence transition in CeOs₄Sb₁₂," Zoom colloquium presentation at Department of Physics and Astronomy, California State University, Los Angeles, California, May 4, 2023.
- 4. <u>Pei-Chun Ho</u>, "Intriguing high-temperature high-magnetic-field phase boundary due to valence transition in CeOs₄Sb₁₂," in-person colloquium presentation at Department of Physics and Engineering, California State University, Bakersfield, California, March 28, 2023.
- 5. <u>Pei-Chun Ho</u>, John Singleton, Marcelo Jaime, M. Brian Maple, Kalyan Sasmal, and Tatsuya Yanagisawa, Kathrin Gotze, Paul Goddard, Matthew Pearce, "Intriguing High-Temperature High-Magnetic-Field Phase Boundary due to Valence Transition in CeOs₄Sb₁₂," oral presentation 3:40 pm at Emergent Phenomena in Strongly Correlated Electron Systems: A Symposium Recognizing Professor M. Brian Maple and his 50-year Career at UC San Diego, Natural Sciences Building, University of California San Diego, May 31, 2019.
- 6. <u>Pei-Chun Ho</u>, "Research in the Strongly Correlated Electron Laboratory," introduction-to-research presentation at Fresno State SACNAS Chapter (Society for the Advancement of Chicano and Native Americans in Science), Peters Business Room 101, California State University, Fresno, California, March 22, 2017.
- 7. <u>Pei-Chun Ho</u>, "Investigation of Unconventional Superconductivity via Neodymium Substitution on PrOs₄Sb₁₂," colloquium presentation at Department of Physics and Astronomy of California State University, Los Angeles, California, April 17, 2014.
- 8. <u>Pei-Chun Ho</u>, "Investigation of Unconventional Superconductivity via Neodymium Substitution on PrOs₄Sb₁₂," colloquium presentation at Department of Physics of California State University, Dominguez Hills, California, April 9, 2013.
- 9. <u>Pei-Chun Ho</u>, "Unconventional Superconductivity in the Filled Skutterudite Compound PrOs₄Sb₁₂ and the Related Doping Study in Pr_{1-x}Nd_xOs₄Sb₁₂ System," colloquium presentation at Department of Physics of California Polytechnic State University, San Luis Obispo, California, November 10, 2011.
- 10. <u>Pei-Chun Ho</u>, "Unconventional Superconductivity in the Filled Skutterudite Compound PrOs₄Sb₁₂ and the Related Doping Study in Pr_{1-x}Nd_xOs₄Sb₁₂ System," colloquium presentation at Department of Physics, California State Polytechnic University, Pomona, California, September 29, 2011.
- 11. <u>Pei-Chun Ho</u>, "Study of unconventional superconductivity in PrOs₄Sb₁₂ via substitution of Nd," colloquium presentation at Sonoma State University, Rohnert Park, California, Nov. 15, 2010.
- 12. <u>Pei-Chun Ho</u>, "Application of inverse micelle technique in synthesis of rare earth nanoclusters," colloquium presentation at Fresno City College, Fresno, California, November 13, 2009.

- 13. <u>Pei-Chun Ho</u>, T. Yanagisawa, M. B. Maple, W.M. Yuhasz, A. A. Dooraghi, C. C. Robinson, and N. P. Butch, "Effect of ferromagnetism on unconventional superconductivity in the Pr_{1-x}Nd_xOs₄Sb₁₂ system," **International Symposium for Young Scientists on Physics of Strongly Correlated Electrons**, Hokkaido University, Sapporo, Japan, Aug. 26, 2009.
- 14. <u>Pei-Chun Ho</u>, "Investigation of Strongly Correlated Electron behavior in rare earth materials," colloquium presentation at California State University, Fresno, California, March 6, 2009.
- 15. <u>Pei-Chun Ho</u>, "Study of unconventional superconductivity in PrOs₄Sb₁₂ via chemical substitution," colloquium presentation at California State University, Humboldt, California, Sept. 8, 2008.
- 16. <u>Pei-Chun Ho</u>, "Study of unconventional superconductivity in PrOs₄Sb₁₂ via chemical substitution," colloquium presentation at Fresno City College, Fresno, California, Apr. 4, 2008.
- 17. <u>Pei-Chun Ho</u>, W. M. Yuhasz, N. A. Frederick, T. Yanagisawa, N. P. Butch, T. A. Sayles, J. R. Jeffries, M. B. Maple, "Physical properties of NdOs₄Sb₁₂ and the effects of Nd substitution on the superconductivity of PrOs₄Sb₁₂," Joint workshop on evolution of new quantum phenomena realized in the filled skutterudite structure and new phases of matter under multiple extreme conditions (**Joint Workshop on NQP-skutterudites and New phases of Matter-MEC**), November 21-24, 2005, Tokyo University Metropolitan University, Hachioji, Tokyo.
- 18. <u>Pei-Chun Ho</u>, W. M. Yuhasz, N. A. Frederick, N. P. Butch, T. A. Sayles, J. R. Jeffries, M. B. Maple, J. B. Betts, and A. H. Lacerda, "Heavy fermion and ferromagnetic behavior in filled skutterudite compounds NdOs₄Sb₁₂ and SmOs₄Sb₁₂," **the 16th American Conference on Crystal Growth and Epitaxy (ACCGE-16)**, July 10-15, 2005, Big Sky, Montana, ACCGE-16 Abstract Book, page 161 (2005).
- 19. <u>Pei-Chun Ho</u>, "Strongly-correlated-electron behaviors in the filled skutterudite f-electron compounds," Special Condensed Matter Seminar, Florida State University, Tallahassee, April 6, 2004.

Contributed Talks and Posters

(Presenting author underlined)

- 1. <u>Pei-Chun Ho</u>, Leticia M. Ramos, Tatsuya Yanagisawa, John Singleton, and M. Brian Maple, "Investigation of carrier density in Ce_{1-x}Pr_xOs₄Sb₁₂ (x = 0.1, 0.2)," in-person poster presentation at **2024 APS March Meeting**, Mar. 3-8, Minneapolis, Minnesota, Abstract # V00.00080 (2024).
- 2. <u>Navya Sampathi</u>, Haozhen Felix Chen, Pei-Chun Ho, "Designing thermopower measurement probe," in-person poster presentation at **2024 APS March Meeting**, Mar. 3-8, Minneapolis, Minnesota, Abstract # J00.00220 (2024). [Student Presentation from PCH Lab]
- 3. <u>Navya Sampathi</u>, Haozhen Felix Chen, Pei-Chun Ho, "Designing thermopower measurement probe," **2023 Fall High Impact Practices (HIPs) Student Symposium,** in-person poster presentation #55751, Dec. 8 (2023), Henry Madden Library, California State University, Fresno. [Student Presentation from PCH Lab]
 - https://academics.fresnostate.edu/oie/assessment/hips/hips-face2face-fall2023.html
- 4. <u>Navya Sampathi</u>, Haozhen F. Chen, Pei-Chun Ho, "Designing thermopower measurement probe," in-person oral presentation at **2023 APS Far West Section Meeting**, Oct. 6-7, University of California, San Diego, Abstract # S03.0004 (2023). [Student Presentation from PCH Lab]
- 5. <u>Leticia M. Ramos</u>, John Singleton, Tatsuya Yanagisawa, M. Brian Maple, and Pei-Chun Ho, "Effect of Pr-doping in Ce_{1-x}Pr_xOs₄Sb₁₂ (x=0.1, 0.2) on valence transition and charge carrier

- density," **2023 Spring High Impact Practices (HIPs) Student Symposium**, in-person poster presentation #76308, May 12 (2023), Henry Madden Library, California State University, Fresno.. [Student Presentation from PCH Lab] https://academics.fresnostate.edu/oie/assessment/hips/fall22hips-f2f-list-1.html
- 6. <u>Leticia M. Ramos</u>, Pei-Chun Ho, Tatsuya Yanagisawa, John Singleton, and Brian Maple, "Effect of Pr substitution on valence transition in Ce_{1-x}Pr_xOs₄Sb₁₂," oral presentation at **2023 APS March Meeting**, Mar. 5-10, Minneapolis, Minnesota, Abstract # A30.00006 (2023). [Student Presentation from PCH Lab]
- 7. Zachary Carrender and Pei-Chun Ho, "Determining a system's heat capacity," **2022 Fall High Impact Practices (HIPs) Student Symposium**, in person poster presentation #24699, Session 12-1 pm, December 9 (2022), Henry Madden Library, California State University, Fresno. [Student Presentation from PCH Lab] https://academics.fresnostate.edu/oie/assessment/hips/fall22hips-f2f-list-archive.html
- 8. <u>Haozhen Chen</u> and Pei-Chun Ho, "Analysis of thermopower measurements," **2022 Fall High Impact Practices (HIPs) Student Symposium**, in person poster presentation #29688, Session 12-1 pm, December 9 (2022), Henry Madden Library, California State University, Fresno. [Student Presentation from PCH Lab] https://academics.fresnostate.edu/oie/assessment/hips/fall22hips-f2f-list-archive.html
- 9. <u>Zhi Gao, Jermey Guo</u> and Pei-Chun Ho, "Improvement of Leybold X-ray apparatus using single crystal NaCl," **2022 Fall High Impact Practices (HIPs) Student Symposium**, in person poster presentation #12970, Session 12-1 pm, December 9 (2022), Henry Madden Library, California State University, Fresno. [Student Presentation from PCH Lab] https://academics.fresnostate.edu/oie/assessment/hips/fall22hips-f2f-list-archive.html
- 10. <u>Zachary Carrender</u>, Pei-Chun Ho, "Resistivity Thermometry," **2022 Spring High Impact Practices (HIPs) Student Symposium**, in-person poster presentation #63580, Session 1-2 pm, May 13 (2022), Henry Madden Library, California State University, Fresno. [Student Presentation from PCH Lab] https://www.fresnostate.edu/academics/oie/assessment/hips/hips-f2f-list-sp22.html
- 11. <u>Leticia M. Ramos</u>, Zachary Carrender, Xingyu Zhao, Pei-Chun Ho, Tatsuya Yanagisawa, and Brian Maple, "Phase Diagram of Valence Transition below 14T and above 2K for Ce_{1-x}Pr_xOs₄Sb₁₂, x =0.1 and 0.2," livestream oral presentation at **43th Annual Central California Research Symposium**, Session A, 9:30 A.M.- 9:45 A.M., April 20 (2022). Proceedings CCRS 2022 Submission # 162, Page 132. [Student Presentation from PCH Lab] http://www.fresnostate.edu/academics/grants/students/ccrshome.html
- 12. <u>Xingyu Zhao</u>, Leticia M. Ramos, Zachary C. Carrender, Pei-Chun Ho, Tatsuya Yanagisawa, and M. Brian Maple, "Resistivity in doped filled skutterudite compounds: Ce1-xPrxOs4Sb12 (x = 0.1, 0.2)" poster presentation (in-person) at **2022 APS March Meeting**, Mar. 14-18, Chicago, Illinois. Abstract #G00.00020 (2022). [Student Presentation from PCH Lab] https://meetings.aps.org/Meeting/MAR22/Session/G00.20
- 13. <u>John Singleton</u>, Kathrin Goetze, Matthew J Pearce, Paul A. Goddard, M. Brian Maple, Pei-Chun Ho, and Matthew J Coak, "Strange metal physics at high fields in "clean" CeOs₄Sb₁₂," oral presentation (in-person) at **2022 APS March Meeting**, Mar. 14-18, Chicago, Illinois. Abstract #M63.00005 (2022). https://meetings.aps.org/Meeting/MAR22/Session/M63.5
- 14. <u>Pei-Chun Ho</u>, Doug E. MacLaughlin, Brian Maple, Lei Shu, Adrian D. Hillier, Oscar O. Bernal, Tatsuya Yanagisawa, Pabitra K. Biswas, Jian Zhang, Cheng Tan, "μSR study of evolution of time-reversal symmetry in the superconducting state of dilute Nd substitution in

- Pr1-xNdxOs4Sb₁₂," poster presentation (in-person) at **2022 APS March Meeting**, Mar. 14-18 Chicago, Illinois. Abstract #T00.00043 (2022). https://meetings.aps.org/Meeting/MAR22/Session/T00.43
- 15. Pei-Chun Ho, Kathrin Goetze, Matthew J Pearce, Matthew J Coak, Paul A. Goddard, Audrey D. Grockowiak, David E. Graf, Stanley W. Tozer, M. Brian Maple, and John Singleton, "Effect of pressure on the valence transition in CeOs₄Sb₁₂," poster presentation (in-person) at 2022 APS March Meeting, Mar. 14-18, Chicago, Illinois. Abstract #T00.00075 (2022). https://meetings.aps.org/Meeting/MAR22/Session/T00.75
- 16. <u>Leticia M. Ramos</u>, Xingyu Zhao, Zachary Carrender, Tatsuya Yanagisawa, M. Brian Maple, and Pei-Chun Ho, "Phase Diagram of Valence Transition below 14 T and above 2K for Ce_{1-x}Pr_xOs₄Sb₁₂, x = 0.1 and 0.2," virtual poster presentation at **2022 Conference for Undergraduate Women in Physics**, January 21-23, Abstract #A01.00023 (2022). [Student Presentation from PCH Lab] https://meetings.aps.org/Meeting/CUWIP22/Session/A01.23
- 17. <u>Leticia M. Ramos</u>, Xingyu Zhao, Zachary Carrender, Pei-Chun Ho, "Resistivity of Doped Filled Skutterudite Compounds: Ce_{1-x}Pr_xOs₄Sb₁₂," virtual oral presentation at **2021 APS Far West Section Meeting**, October 29-30 Abstract #E01.00001 (2021). [Student Presentation from PCH Lab] https://meetings.aps.org/Meeting/FWS21/Session/E01.1
- 18. <u>Matthew Charles Brown</u>, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, "Thermal Characterization of Pr_{1-x}Nd_xOs₄Sb₁₂ in Normal State," at **2021 APS March Meeting**, Mar. 15-19, Virtual. Abstract #A37.00004 (2021). [Student Presentation from PCH Lab] http://meetings.aps.org/Meeting/MAR21/Session/A37.4
- 19. <u>Kathrin Goetze</u>, Matthew Pearce, Matthew J Coak, Paul Goddard, William A Coniglio, Audrey Grockowiak Stanley W Tozer, David E. Graf, M. Brian Maple, Mathew Brown, Pei-Chun Ho, and John Singleton, "Phase diagram and Fermi surface of CeOs₄Sb₁₂ under pressure," oral presentation at **2021 APS March Meeting**, Mar. 15-19, Virtual. Abstract #V43.00004 (2021). http://meetings.aps.org/Meeting/MAR21/Session/V43.4
- 20. <u>Matthew Brown</u>, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, "Troubleshooting Thermodynamic Measurements," (Video # 26) & Poster at **Fall 2020 HIPS Online Student Symposium**, Dec. 10-11, California State University, Fresno (2020). [Student Presentation from PCH Lab] https://www.youtube.com/watch?v=9Z9l29lB0MO
- 21. <u>Michelle A. Berrios</u>, Andrea Capa Salinas, Jesus Velasquez, and Pei-Chun Ho, "Thermopower," (Video # 64) & Poster 55145 at **Fall 2020 HIPS Online Student Symposium**, Dec. 10-11, California State University, Fresno (2020). [Student Presentation from PCH Lab] https://www.fresnostate.edu/academics/oie/assessment/hips/fall2020hips.html
- 22. <u>Matthew Charles Brown</u>, Yeh-Chia Chang, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, "Utilization of Relaxation Calorimetry to Examine the Thermal Properties of Pr_{1-x}Nd_xOs₄Sb₁₂," oral presentation at **2020 Annual Meeting of the APS Far West Section**, October 9-10, Virtual, Abstract # D01.00005 (2020). [Student Presentation from PCH Lab]
 - https://meetings.aps.org/Meeting/FWS20/Session/D01.5
- 23. <u>Adriana Hernandez</u>, Eric Munoz, Pei-Chun Ho, and Mihai Gherase, "Synthesis of Gadolinium Particles Via Reverse Micelle Process Using DMSO as the Polar Solvent," poster presentation at **2020 CSM Virtual Research Showcase**, May 8-15, California State University, Fresno, Session

- 1 Poster # 12 (2020). [Student Presentation from PCH Lab] https://csmfresno.com/college-of-science-and-mathematics-virtual-research-showcase/
- 24. <u>Matthew Charles Brown</u>, Yeh-Chia Chang, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, , "Thermal analysis of Pr_{1-x}Nd_xOs₄Sb₁₂ in normal state," poster presentation at **2020 CSM Virtual Research Showcase**, May 8-15, California State University, Fresno, Session 1 Poster # 5 (2020). [Student Presentation from PCH Lab] https://csmfresno.com/college-of-science-and-mathematics-virtual-research-showcase/
- 25. <u>Matthew Charles Brown</u>, Yeh-Chia Chang, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, "Thermal analysis of Pr_{1-x}Nd_xOs₄Sb₁₂ in normal state," poster presentation "uploaded" to the website of **2020 APS March Meeting**, Mar. 2-6, Denver, Colorado, Abstract # C71.00043 (2020). (Physical meeting canceled due to COVID-19 pandemic) [Student Presentation from PCH Lab] http://meetings.aps.org/Meeting/MAR20/Session/C71.43
- 26. Pei-Chun Ho, Douglas E. MacLaughlin, M. Brian Maple, Lei Shu, Adrian Hillier, Oscar O. Bernal, Tatsuya Yanagisawa, P. K. Biswas, Jian Zhang, Cheng Tan, Shoji D. Hishida, Taylor McCullough-Hunter, "Muon spin rotation and relaxation in Pr_{1-x}Nd_xOs₄Sb₁₂: superconductivity and magnetism in Pr-rich alloys," poster presentation "uploaded" to the website of 2020 APS March Meeting, Mar. 2-6, Denver, Colorado, Abstract # H71.00062 (2020). (Physical meeting canceled due to COVID-19 pandemic) http://meetings.aps.org/Meeting/MAR20/Session/H71.62
- 27. Pei-Chun Ho, John Singleton, Marcelo Jaime, Kathrin Götze, Mathew Pearce, Paul Goddard, Kalyan Sasmal, M. Brian Maple, Tatsuya Yanagisawa, "Valence transition in CeOs₄Sb₁₂ and its *T-H* phase diagram," poster presentation "uploaded" to the website of **2020 APS March Meeting**, Mar. 2-6, Denver, Colorado, Abstract # H71.00130 (2020). (Physical meeting canceled due to COVID-19 pandemic) http://meetings.aps.org/Meeting/MAR20/Session/H71.130
- 28. <u>John Singleton</u>, Kathrin Goetze, Mathew Pearce, Zahirul Islam, Ulrich Welp, Paul Goddard, Roger Johnson, Pascal Manuel, M. Brian Maple, Pei-Chun Ho, "X-ray and neutron-diffraction studies of the CeOs₄Sb₁₂ valence transition at low temperatures and high magnetic fields," PPTx presentation "uploaded" to the website of **2020 APS March Meeting**, Mar. 2-6, Denver, Colorado. Abstract #R56.00015 (2020). (Physical Meeting canceled due to COVID-19 pandemic) http://meetings.aps.org/Meeting/MAR20/Session/R56.15
- 29. <u>A. Capa Salinas</u>, J. Velasquez, P.-C. Ho, "Probe Design for Thermopower Measurements Using a Differential Thermocouple," contributed talk at **National Conference on Undergraduate Research 2019**, Kennesaw State University, Kennesaw, Georgia, April 10-13 (2019). [Student Presentation from PCH Lab]
- 30. <u>Yeh-Chia Chang</u>, Shoji Hishida, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, and Tatsuya Yanagisawa, "Thermal analysis of the specific heat of Pr_{1-x}Nd_xOs₄Sb₁₂," contributed talk at **National Conference on Undergraduate Research 2019**, Kennesaw State University, Kennesaw, Georgia, April. 10-13 (2019). [Student Presentation from PCH Lab]
- 31. <u>Pei-Chun Ho</u>, Doug E. MacLaughlin, M. Brian Maple, Lei Shu, Arian Hillier, Oscar Bernal, Tatsuya Yanagisawa, P. K. Biswas, Jian Zhang, Cheng Tan, Shoji D. Hishida, Taylor McCulough-Hunter, "Investigation of broken time reversal symmetry in the Pr-rich side of Pr_{1-x}Nd_xOs₄Sb₁₂," oral presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # C07.00014 (2019).
- 32. <u>Andrea Capa Salinas</u>, Jesus Velasquez, Pei-Chun Ho, "Seebeck Coefficient Measurement Probe by Using a Differential Thermocouple," oral presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # E67.00015 (2019). [Student Presentation from PCH Lab]

- 33. Yeh-Chia Chang, Shoji Hishida, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, and Tatsuya Yanagisawa, "Specific Heat of Pr_{1-x}Nd_xOs₄Sb₁₂," oral presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # L06.00015 (2019). [Student Presentation from PCH Lab]
- 34. <u>Patrick Talbot</u> and Pei-Chun Ho, "Method for the growth and stabilization of rare earth nanoparticles," poster presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # L70.00385 (2019). [Student Presentation from PCH Lab]
- 35. <u>Jian Zhang</u>, Doug E. MacLaughlin, Zhaofeng Ding, Cheng Tan, Oscar Bernal, Pei-Chun Ho, Gerald D. Morris, Akihiro Koda, Adrian Hillier, Stephen P. Cottrell, Peter J. Baker, P. K. Biswas, Yanxing Yang, Zihao Zhu, Jun Qian, Yan Wan, Xin Yao, Lei Shu, "Slow magnetic fluctuations in the pseudogap phase YBa₂Cu₃O₇," oral presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # B06.00010 (2019).
- 36. <u>Kathrin Goetze</u>, Mathew J. Pearce, Paul Goddard, Alix McCollan, Thomas Khouri, Marcelo Jaime, M. Brian Maple, Kalyan Sasmal, Tatsuya Yanagisawa, John Singleton, and Pei-Chun Ho, "Unusual phase boundary and altered Fermi surface in CeOs₄Sb₁₂ at high magnetic fields," oral presentation at **2019 APS March Meeting**, Mar. 4-8, Boston, Massachusetts, Abstract # P07.00011 (2019).
- 37. <u>P.-C. Ho</u>, J. Singleton, M. Jaime, M. B. Maple, K. Sasmal, and T. Yanagisawa, "Exploring the valence transition in CeOs₄Sb₁₂ in high magnetic fields," poster presentation at **21**st **International Conference on Magnetism (ICM 2018)**, July 15-20, San Francisco, California, Abstract # Q10-07 (2018).
- 38. <u>P.-C. Ho</u>, D. E. MacLaughlin, M. B. Maple, L. Shu, A. Hillier, O. Bernal, T. Yanagisawa, P. Biswas, J. Zhang, C. Tan, S. Hishida, and T. McCulough-Hunter, "Investigation of Broken Time Reversal Symmetry in the Pr-rich Side of Pr_{1-x}Nd_xOs₄Sb₁₂," poster presentation at **21**st International Conference on Magnetism (ICM **2018**), July 15-20, San Francisco, California, Abstract # H13-09 (2018).
- 39. S. Hishida, J. Velasquez, T. McCullough-Hunter, <u>P.-C. Ho</u>, M. B. Maple, and T. Yanagisawa, "Thermal Analysis of the Specific Heat of Pr_{1-x}Nd_xOs₄Sb₁₂," poster presentation at **21**st **International Conference on Magnetism (ICM 2018)**, July 15-20, San Francisco, California, Abstract # H13-08 (2018). [Student Presentation from PCH Lab]
- 40. <u>P.-C. Ho</u>, M. Jaime, J. Singleton, M. B. Maple, and T. Yanagisawa, "Magnetostriction measurements to clarify high-temperature phase boundary in CeOs₄Sb₁₂," poster presentation at **2018 APS March Meeting**, Mar. 5-9, Los Angeles, California, Abstract # T60.00150 (2018).
- 41. <u>Shoji Hishida</u>, Jesus Velasquez, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, and Tatsuya Yanagisawa, "Analysis of the molar specific heat of Pr_{1-x}Nd_xOs₄Sb₁₂," oral presentation at **2018 APS March Meeting**, Mar. 5-9, Los Angeles, California, Abstract # B06.00015 (2018). [Student Presentation from PCH Lab]
- 42. <u>Jesus Velasquez</u>, Pei-Chun Ho, "Device for Measuring the Seebeck Coefficient," poster presentation at **2018 APS March Meeting**, Mar. 5-9, Los Angeles, California, Abstract # G60.00067 (2018). [Student Presentation from PCH Lab]
- 43. <u>Patrick Talbot</u>, Patrick Kelly, and Pei-Chun Ho, "Method for the growth and stabilization of rare earth nano-particles," poster presentation at **2018 APS March Meeting**, Mar. 5-9, Los Angeles, California, Abstract # L60.00331 (2018). [Student Presentation from PCH Lab]
- 44. <u>Pei-Chun Ho</u>, Daqing Zhang, Raymond Hall, Gerardo Munoz, Mihai Gherase, Karl Runde, "Implantation and Assessment of High Impact Practices In Calculus-based Introductory Physics,"

- poster presentation at **2018 AAPT Winter Meeting**, Jan. 6-9, San Diego, California, Abstract # PST1D09 (2018).
- 45. <u>Shoji Hishida</u>, Jesus Velasquez, Taylor McCullough-Hunter, Pei-Chun Ho, Tatsuya Yanagisawa, Brian Maple, "Analysis of thermal properties of Nd-doped PrOs₄Sb₁₂ via measurements of specific heat," oral presentation at **38th Annual Central California Research Symposium**, Session E, 10:30 a.m.- 10:45 p.m., April 18, California State University, Fresno (2017). [Student Presentation from PCH Lab]
- 46. <u>P.-C. Ho</u>, J. Singleton, P. A. Goddard, F. F. Balakirev, Shalinee Chikara, M. B. Maple, and T. Yanagisawa, "Unusual phase boundary and altered Fermi surface in CeOs₄Sb₁₂ at high magnetic fields," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # C20.00010 (2017).
- 47. <u>P.-C. Ho</u>, D. E. MacLaughlin, M. B. Maple, L. Shu, O.O. Bernal, A. D. Hillier, T. Yanagisawa, "Investigation of broken time reversal symmetry in Pr-concentrated side of Pr_{1-x}Nd_xOs₄Sb₁₂," poster presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # T1.00077 (2017).
- 48. Shoji Hishida, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, and Tatsuya Yanagisawa, "Analysis of thermal properties of Pr_{1-x}Nd_xOs₄Sb₁₂ in the range 10 300 K," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # B12.00006 (2017). [Student Presentation from PCH Lab; Shoji won "SPS Outstanding Presentation Award," sponsored by Society of Physics Students (SPS)]
- 49. <u>Patrick Talbot</u> and Pei-Chun Ho, "Method for the growth and stabilization of rare earth nanoparticles," poster presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # M1.00369 (2017). [Student Presentation from PCH Lab]
- 50. <u>I. Jeon</u>, A. J. Breindel, B. Luong, M. B. Maple, P.-C. Ho, R. B. Adhikari, C. C. Almasan, "Crossover and coexistence of superconductivity and antiferromagnetism in the filled-skutterudite system Pr_{I-x}Eu_xPt₄Ge₁₂," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # H39.00013 (2017).
- 51. <u>Lei Shu</u>, J. Zhang, Z. F. Ding, C. Tan, K. Huang, D. E. MacLaughlin, C. M.. Varma, A. D. Hillier, P. Biswas, O. O. Bernal, P.-C. Ho, H. Xiang, and X. sYao, "Discovery of slowly fluctuating magnetic fields by muSR in cuprates," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # K39.00007 (2017).
- 52. Kevin Huang, Cheng Tan, Jian Zhang, Douglas MacLaughlin, Oscar Bernal, Pei-Chun Ho, L. Wu, Meigan Aronson, <u>Lei Shu</u>, "Quantum criticality and 2-D dissipative quantum XY ferromagnetism in single crystalline YFe₂Al₁₀ from muSR investigations," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # P37b.00002 (2017).
- 53. <u>Yuankan Fang</u>, C. T. Wolowiec, A. J. Breindel, D. Yazici, M. B. Maple, P.-C. Ho, "Upper critical field of LnO_{0.5}F_{0.5}BiS₂ (Ln = La, Nd) superconductors at extreme conditions," oral presentation at **2017 APS March Meeting**, Mar. 13-17, New Orleans, Louisianan, Abstract # V38.00010 (2017).
- 54. Shoji Hishida, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, and Tatsuya Yanagisawa, "Analysis of thermal properties of Pr_{1-x}Nd_xOs₄Sb₁₂ in the range 10 300 K," poster presentation at **2016 Quadrennial Physics Congress,** Poster Session I, November 14, abstract # SI-113, Hyatt Regency-San Francisco Airport, Hosted by Sigma Pi Sigma, the Physics Honor Society, (2016). [Student Presentation from PCH Lab; Shoji won "the OSA Poster Award for General Physics," sponsored by Optical Society of America (OSA)]

- 55. Shoji Hishida, Pei-Chun Ho, "Apparatus for the measurement of thermoelectric power," oral presentation at 37th Annual Central California Research Symposium, Session D, 10:30 a.m.-10:45 p.m., April 22, California State University, Fresno (2016). [Student Presentation from PCH Lab; Shoji won the award of "Outstanding Oral Undergraduate Presentation," sponsored by University of California, San Francisco-Fresno]
- 56. <u>Taylor McCullough-Hunter</u>, Shoji Hishida, Pei-Chun Ho, Tatsuya Yanagisawa, and Brian Maple, "Thermal properties extract from specific heat of Nd-doped PrOs₄Sb₁₂," oral presentation at **37**th **Annual Central California Research Symposium**, Session D, 11:30 a.m.- 10:45 p.m., April 22, California State University, Fresno (2016). [Student Presentation from PCH Lab]
- 57. Adan Prado, Alexandre Ly, and Partrick Talbot, "Synthesis of gadolinium nanoparticles using the inverse micelle method," Poster Session III: 1:00 p.m.-2:30 p.m., Poster Space 16, April 20, California State University, Fresno (2016). [Student Presentation from PCH Lab]
- 58. <u>Shoji Hishida</u>, Pei-Chun Ho, "Aparatus for the measurement of thermoelectric power," poster presentation at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # G1.00120 (2016). [Student Presentation from PCH Lab]
- 59. <u>Taylor McCullough-Hunter</u>, Shoji Hishida, Pei-Chun Ho, Brian Maple, Tatsuya Yanagisawa, "Thermal properties of Nd-doped PrOs₄Sb₁₂ extract from measurement of specific heat," contributed talk at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # A7.00003 (2016). [Student Presentation from PCH Lab]
- 60. <u>P.-C. Ho</u>, J. Singleton, F. F. Balakirev, M. B. Maple, and T. Yanagisawa, "Shubnikov-de Haas Oscillations of filled skutterudite compounds CeOs₄Sb₁₂ and NdOs₄Sb₁₂," poster presentation at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # T1.00185 (2016).
- 61. <u>L. Shu</u>, Z. F. Ding, J. Zhang, C. Tan, K. Huang, L. Liu, S. Cheung, Y. J. Uemura, D. E. MacLaughlin, O. O. Bernal, P.-C. Ho, D. Hu, P. C. Dai, "Quantum fluctuations in iron-pnictide superconductor BaFe₂(As_{1-x}P_x)₂," contributed talk at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # K11.00007 (2016).
- 62. <u>Kevin Huang</u>, Cheng Tan, Jia Zhang, Zhaofeng Ding, Douglous MacLaughlin, Oscar Bernal, Pei-Chun Ho, Liusuo Wu, Meigan Aronson, Lei Shu, "Quantum criticality in single crystalline YFe2Al10 determined from zero-field and longitudinal-field muon spin relaxation," contributed talk at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # F19.00013 (2016).
- 63. <u>Inho Jeon</u>, Kevin Huang, Duygu Yazici, Noravee Kanchanavatee, Benjamin D. White, Sooyoung Jang, Naveen Pouse, M. Brian Maple, Pei-Chun Ho, "Investigation of the superconducting and normal state properties of the filled skutterudite system PrPt₄Ge₁₂ via chemical substitution," contributed talk at **2016 APS March Meeting**, Mar. 14-18, Baltimore, Maryland, Abstract # C22.00009 (2016).
- 64. <u>Shoji Hishida</u>, Pei-Chun Ho, "Apparatus for the measurement of thermoelectric power," poster presentation at **2016 SPS Zone 18 Meeting**, Mar. 11-13, California State University, Fresno (2016). [Student Presentation from PCH Lab]
- 65. <u>Taylor McCullough-Hunter</u>, Shoji Hishida, Pei-Chun Ho, Brian Maple, Tatsuya Yanagisawa, "Investigation into doped filled skutterudite Pr_{1-x}Nd_xOs₄Sb₁₂ using finite heat-pulse relaxation calorimetry," oral presentation at **36**th **Annual Central California Research Symposium**, Session I, 2:15 p.m.- 2:30 p.m., April 22, California State University, Fresno (2015). [Student Presentation from PCH Lab]
- 66. <u>E. I. Paredes Aulestia</u>, R. H. Fukuda, M. M. Castro De La Torre, P.-C. Ho, S. Attar, M. Golden, D. Margosan, "Synthesis and Characterization of rare earth nanoparticles in a non-aqueous

- environment," oral presentation at **36**th **Annual Central California Research Symposium**, Session I, 1:45 p.m.- 2:00 p.m., April 22, California State University, Fresno (2015). [Student Presentation from PCH Lab]
- 67. <u>Shoji Hishida</u>, Taylor McCullough-Hunter, Pei-Chun Ho, Brian Maple, Tatsuya Yanagisawa, "Specific heat measurements of the filled skutterudite Pr_{1-x}Nd_xOs₄Sb₁₂ using relaxation calorimetry," poster presentation at **36th Annual Central California Research Symposium**, Poster Session III: 1:00 p.m.-2:30 p.m., Poster Space 15, April 22, California State University, Fresno (2015). [Student Presentation from PCH Lab]
- 68. <u>Arnold Muradyan</u>, Taylor McCullough-Hunter, Pei-Chun Ho, "Development of a thermopower probe," poster presentation at **36th Annual Central California Research Symposium**, Poster Session I: 9:00 a.m.-10:30 a.m., Poster Space 18, April 22, California State University, Fresno (2015). [Student Presentation from PCH Lab]
- 69. <u>Benjamin White</u>, Duygu Yazici, Pei-Chun Ho, Noravee Kanchanavatee, Naveen Pouse, Aaron Friedman, and M. Brian Maple, "Weak hybridization and isolated localized magnetic moments in the compounds CeT₂Cd₂₀ (T = Ni, Pd)," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # S29.00008 (2015).
- 70. <u>Duygu Yazici</u>, B. D. White, P.-C. Ho, N. Kanchanavatee, K. Huang, N. R. Dilley, and M. B. Maple, "Investigation of magnetic order in Sm*Tr*₂Zn₂₀ (*Tr* = Fe, Co, Ru) and Sm*Tr*₂Cd₂₀ (*Tr* = Ni, Pd)," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # Q29.00001 (2015).
- 71. <u>P.-C. Ho</u>, J. Singleton, F. F. Balakirev, M. B. Maple, and T. Yanagisawa, "Shubnikov-de Haas Oscillations of filled skutterudite compounds CeOs₄Sb₁₂ and NdOs₄Sb₁₂," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # Q22.00010 (2015).
- 72. <u>Lei Shu</u>, D.E. MacLaughlin, C.M. Varma, O.O. Bernal, P.-C. Ho, R.H. Fukuda, X.P. Shen, M.B. Maple, "Landau renormalization of superfluid density in the heavy-fermion superconductor CeCoIn5," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # M22.00002(2015). [Undergraduate student Ryan Fukuda from PCH Lab coauthored this presentation]
- 73. <u>Taylor McCullough-Hunter</u>, Shoji Hishida, Pei-Chun Ho, Brian Maple, Tatsuya Yanagisawa, "Measurement of specific heat of Pr_{1-x}Nd_xOs₄Sb₁₂ from 11K-300K," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # D4.00014 (2015). [Student Presentation from PCH Lab]
- 74. <u>E. I. Paredes Aulestia</u>, R. H. Fukuda, M. M. Castro De La Torre, P.-C. Ho, S. Attar, M. Golden, D. Margosan, "Synthesis and Characterization of rare earth nanoparticles in a non-aqueous environment," contributed talk at **2015 APS March Meeting**, Mar. 2-6, San Antonio, Texas, Abstract # D4.00008 (2015). [Student Presentation from PCH Lab]
- 75. <u>A. F. Vargas</u>, R. Fukuda, N. Soliz, and P.-C. Ho, "Thermopower Puck for Measurements of Thermodynamic Properties," poster presentation at **Graduate Research & Creative Activities Symposium**, Session I, 1:15 p.m., May 1, California State University, Fresno (2014). [Student Presentation from PCH Lab]
- 76. <u>A. F. Vargas</u>, R. Fukuda, N. Soliz, and P.-C. Ho, "Thermopower Puck for Measurements of Thermodynamic Properties," poster presentation at **35**th **Annual Central California Research Symposium**, Session II, 11:00 a.m., April 24, California State University, Fresno (2014). [Student Presentation from PCH Lab]
- 77. M. Castro De La Torre, R. Fukuda, and P.-C. Ho, "Synthesis and Characterization of Neodymium Nanoparticles," contributed talk at 35th Annual Central California Research

- **Symposium**, Session C, 9:30 a.m., April 24, California State University, Fresno (2014). [Student Presentation from PCH Lab]
- 78. R. H. Fukuda, M. Castro, P.-C. Ho, S. Attar, M. Golden, and D. Margosan, "Nonaqueous Synthesis of Gadolinium and Neodymium Nanoparticles," poster presentation at **35th Annual Central California Research Symposium**, Poster Session II, Poster (9), April 24, California State University, Fresno (2014). [Student Presentation from PCH Lab]
- 79. <u>T. McCullough-Hunter</u>, P.-C. Ho, M. B. Maple, T. Yanagisawa, "Specific Heat of Pr_{I-x}Nd_xOs₄Sb₁₂ from 10 K to ~300 K", poster presentation at **35**th **Annual Central California Research Symposium**, Poster Session 2, 11:00 am-12:30 pm, April 24, California State University, Fresno (2014). [Student Presentation from PCH Lab]
- 80. M. Castro De La Torre, R. Fukuda, and Advisor P.-C. Ho, "Synthesis and Characterization of Neodymium Nanoparticles," contributed talk at **National Conferences on Undergraduate Research 2014**, University of Kentucky, Lexington, Kentucky, April 3-5 (2014). [Student Presentation from PCH Lab] https://ncurdb.cur.org/ncur2014/search/display_ncur.aspx?id=83681
- 81. <u>K. Huang</u>, L. Shu, I. Lum, B. b. White, M. Janoschek, D. Yazici, J. J. Hamlin, D. A. Zocco, P.-C. Ho, R. E. Baumbach, and M. B. Maple, "Probing the unconventional superconductivity of PrPt4Ge12 through Ce substitution," contributed talk at **2014 APS March Meeting**, March 3-7, Denver, Colorado, Abstract# Q48.00013 (2014).
- 82. R. Fukuda, M. Castro De La Torre, P.-C. Ho, S. Attar, M. Golden, and D. Margosan, "Nonaqueous synthesis of gadolinium and neodymium," poster presentation at **2014 APS March Meeting**, March 3-7, Denver, Colorado, Abstract# H1.00037 (2014). [Student Presentation from PCH Lab]
- 83. <u>A. Vargas</u>, R. Fukuda, N. Soliz, and P.-C. Ho, "Thermopower puck for measurement of thermodynamic properties", poster presentation at **2014 APS March Meeting**, March 3-7, Denver, Colorado, Abstract# H1.00031 (2014). [Student Presentation from PCH Lab]
- 84. <u>T. McCullough-Hunter</u>, T. Nichols, H. Anderson, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Specific Heat of Pr_{1-x}Nd_xOs₄Sb₁₂ near 300K," poster presentation at **2014 APS March Meeting**, March 3-7, Denver, Colorado, Abstract# H1.00030 (2014). [Student Presentation from PCH Lab]
- 85. <u>P.-C. Ho</u>, J. Singleton, F. F. Balakirev, M. B. Maple, and T. Yanagisawa, "Angle dependence of Shubnikov-de Haas effect of CeOs₄Sb₁₂ and NdOs₄Sb₁₂," poster presentation at **2014 APS**March Meeting, March 3-7, Denver, Colorado, Abstract# C1.00078 (2014).
- 86. Maya Castro De La Torre, Ryan Fukuda, Pei-Chun Ho, Saeed Attar, Melissa Golden, and Dennis Margosan, "Synthesis and characterization of Gadolinium nanoparticles," poster presentation at the College of Science and Mathematics Celebration of Student Research and Achievement, Student Poster Session, May 7, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 87. <u>Taylor McCullough-Hunter</u>, Andres Felipe Vargas Quintana, and Pei-Chun Ho, "Design of a torque magnetometer," poster presentation at **the College of Science and Mathematics** Celebration of Student Research and Achievement, Student Poster Session, May 7, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 88. <u>Hank Anderson</u>, Ulises I. Urbina, Pei-Chun Ho, M. Brian Maple, Tatsuya Yanagisawa, "Relaxation calorimetry to measure heat capacities of Pr_{1-x}Nd_xOs₄Sb₁₂ samples," oral presentation at 5th Annual Central California Graduate Research Symposium, Oral

- Presentation Session I, 2:00 2:15 p.m., May 2, Henry Madden Library Room 2206, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 89. Ryan Fukuda, Maya Castro De La Torre, Pei-Chun Ho, Melissa Golden, Saeed Attar, and Dennis Margosan, "Gadolinium nanoparticle synthesis using AOT-Methanol-Haxane Reverse Micelles," oral presentation at 5th Annual Central California Graduate Research & Creative Activities Symposium, Oral Presentation Session I, 1:30 1:45 p.m., May 2, Henry Madden Library Room 2206, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 90. A. Felipe Vargas Quintana, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Redesigning an AC magnetic susceptometer for the measurements of smaller samples," oral presentation at 5th Annual Central California Graduate Research Symposium, Oral Presentation Session I, 1:15 1:30 p.m., May 2, Henry Madden Library Room 2206, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 91. <u>Taylor McCullough-Hunter</u>, Andres Felipe Vargas Quintana, and Pei-Chun Ho, "Design of a torque magnetometer," poster presentation at **5**th **Annual Central California Graduate Research Symposium**, Poster Presentation Session I, 1:15 2:15 p.m., May 2, Henry Madden Library 2nd Floor, California State University, Fresno (2013). [Student Presentation from PCH Labl
- 92. <u>Maya Castro De La Torre</u>, Ryan Fukuda, Pei-Chun Ho, Saeed Attar, Melissa Golden, and Dennis Margosan, "Synthesis and characterization of Gadolinium nanoparticles," poster presentation at **5**th **Annual Central California Graduate Research Symposium**, Poster Presentation Session I, 1:15 2:15 p.m., May 2, Henry Madden Library 2nd Floor, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 93. <u>Ryan Fukuda</u>, Maya Castro, Pei-Chun Ho, Melissa Golden, Saeed Attar, and Dennis Margosan, "Gadolinium nanoparticle synthesis using AOT-Methanol-Haxane Reverse Micelles," contributed talk at **34th Annual Central California Research Symposium**, Session A, 12:00 p.m., April 25, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 94. <u>A. Felipe Vargas Quintana</u>, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Redesigning an AC magnetic susceptometer for the measurements of smaller samples," contributed talk at **34**th **Annual Central California Research Symposium**, Session B, 12:00 p.m., April 25, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 95. <u>Hank Anderson</u>, Ulises I. Urbina, Pei-Chun Ho, M. Brian Maple, Tatsuya Yanagisawa, "Relaxation calorimetry to measure heat capacities of Pr_{1-x}Nd_xOs4Sb₁₂ samples," contributed talk at **34th Annual Central California Research Symposium**, Session B, 12:00 p.m., April 25, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 96. <u>Taylor McCullough-Hunter</u>, Andres Felipe Vargas Quintana, and Pei-Chun Ho, "Design of a torque magnetometer," poster presentation at **34**th **Annual Central California Research Symposium**, Poster Session II 12:30 p.m. 2:30 p.m., poster # (21), April 25, California State University, Fresno (2013). [Student Presentation from PCH Lab]
- 97. <u>Maya Castro De La Torre</u>, Ryan Fukuda, Pei-Chun Ho, Saeed Attar, Melissa Golden, and Dennis Margosan, "Synthesis and characterization of Gadolinium nanoparticles," poster presentation at **34**th **Annual Central California Research Symposium**, Poster Session II 12:30 p.m. 2:30 p.m., poster # (22), April 25, California State University, Fresno (2013). [Student Presentation from PCH Lab; Maya Castro won Outstanding Science Presentation Award from American Chemical Society]
- 98. <u>Hank Anderson</u>, B. Somsanuk, Ulises I. Urbina, Advisor Pei-Chun Ho, "Constructing a Relaxation Calorimeter," contributed talk at **National Conference on Undergraduate Research 2013**, University of Wisconsin, La Crosse, Wisconsin, April 11-13 (2013). [Student Presentation

- from PCH Lab] https://ncurdb.cur.org/ncur2014/archive/Display NCUR.aspx?id=72982
- 99. R. H. Fukuda, M. M. Castro, P.-C. Ho, S. Attar, M. Golden, and D. Margosan, "Reverse Micelle Synthesis of Gadolinium Nanoparticles," contributed talk at **2013 APS March Meeting**, Mar. 18-22, Baltimore, Maryland, Abstract # G46.00001 (2013). [Student Presentation from PCH Lab; Ryan Fukuda won an award in recognition of an outstanding presentation of undergraduate research]
- 100. <u>A. F. Vargas</u>, R. Fukuda, S. Sunny, and P.-C. Ho, "Redesign of an AC Magnetic Susceptometer for Measurements in Smaller Samples," contributed talk at **2013 APS March Meeting**, Mar. 18-22, Baltimore, Maryland, Abstract # B46.00001 (2013). [Student Presentation from PCH Lab]
- 101. <u>P.-C. Ho</u>, D. E. MacLaughlin, M. B. Maple, L. Shu, O.O. Bernal, T. Yanagisawa, "Effect of Nd substitution on PrOs₄Sb₁₂ investigated by μSR Experiments," contributed talk at **2013 APS March Meeting**, Mar. 18-22, Baltimore, Maryland, Abstract # J19.00014 (2013).
- 102. Ryan Fukuda, Maya Castro De La Torre, Pei-Chun Ho, Melissa Golden, Saeed Attar, and Dennis Margosan, "Synthesis of Gadolinium and Neodymium Nanoparticles through the Reverse Micelle Method," oral presentation at 2012 Annual Meeting of the California-Nevada Section of the American Physics Society, November 2-3, 2012, California Polytechnic State University, San Luis Obispo, California (2012). [Student Presentation from PCH Lab]
- 103. <u>Felipe Vargas</u>, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Redesign of an AC Magnetic Susceptometer for Smaller Samples," oral presentation at **2012 Annual Meeting of the California-Nevada Section of the American Physics Society**, November 2-3, 2012, California Polytechnic State University, San Luis Obispo, California (2012). [Student Presentation from PCH Lab]
- 104. <u>Banchong Somsanuk</u>, Hank Anderson, Pei-Chun Ho, M. Brian Maple, and Tatsuya Yanagisawa, "Specific Heat of Pr_{1-x}Nd_xOs₄Sb₁₂," oral presentation at **2012 Annual Meeting of the California-Nevada Section of the American Physics Society**, November 2-3, 2012, California Polytechnic State University, San Luis Obispo, California (2012). [Student Presentation from PCH Lab]
- 105. <u>B. Somsanuk</u>, U. I. Urbina, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Finite pulse relaxation calorimetry and specific heat of NdOs₄Sb₁₂," poster presentation at **CSM Celebration of Research Poster Exhibition**, May 9, hosted by the College of Science and Mathematics, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 106. <u>A. Felipe Vargas</u>, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Construction and testing of an AC Magnetic Susceptometer," poster presentation at **CSM Celebration of Research Poster Exhibition**, May 9, hosted by the College of Science and Mathematics, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 107. <u>B. Somsanuk</u>, U. I. Urbina, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Finite pulse relaxation calorimetry and specific heat of NdOs₄Sb₁₂," poster presentation at **Graduate Research and Creative Activities Symposium**, May 3, Henry Madden Library, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 108. <u>B. Somsanuk</u>, U. I. Urbina, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Finite pulse relaxation calorimetry and specific heat of NdOs₄Sb₁₂," poster presentation at **2012 SPS** (Society of Physics Students) **Zone 18 Meeting**, California State University, Fresno, Apr. 27 28 (2012). [Student Presentation from PCH Lab; Banchong won the 1st prize in the poster session]
- 109. <u>A. Felipe Vargas</u>, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Construction and testing of an AC Magnetic Susceptometer," poster presentation at **2012 SPS** (Society of Physics Students)

- **Zone 18 Meeting**, California State University, Fresno, Apr. 27 28 (2012). [Student Presentation from PCH Lab; Felipe won the 2nd prize in the poster session]
- 110. Ryan Fukuda, A. Felipe Vargas, Smitha Sunny, and Pei-Chun Ho, "Construction of an AC magnetic susceptometer," contributed talk at 33rd Annual Central California Research Symposium, Session C, 9:45 a.m., April 13, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 111. <u>Felipe Vargas</u>, Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Construction of an AC Magnetic Susceptometer," poster presentation at **33rd Annual Central California Research Symposium**, Poster Session II, poster(9), Apr. 13, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 112. <u>B. Somsanuk</u>, U. I. Urbina, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Finite pulse relaxation calorimetry and specific heat of NdOs₄Sb₁₂," poster presentation at the **33rd Annual Central California Research Symposium**, Poster Session II, poster (10), Apr. 13, California State University, Fresno (2012). [Student Presentation from PCH Lab]
- 113. Nicholas Soliz, and Ulises Urbina, faculty advisor Pei-Chun Ho, "Experimental Probe for Measurement of Thermodynamic Properties," contributed talk at National Conference on Undergraduate Research 2012, Weber State University, Ogden, Utah, March 29-31 (2012). [Student Presentation from PCH Lab] https://ncur.weber.edu/ncur/search/Display_NCUR.aspx?id=62570
- 114. Ryan Fukuda, Smitha Sunny, and faculty advisor Pei-Chun Ho, "Testing of a First Order AC Magnetic Susceptometer," contributed talk at **National Conference on Undergraduate Research 2012,** Weber State University, Ogden, Utah, March 29-31 (2012). [Student Presentation from PCH Lab] https://ncur.weber.edu/ncur/search/Display NCUR.aspx?id=62035
- 115. <u>P.-C. Ho</u>, R. B. Baumbach, L. Shu, M. B. Maple, S. Zhao, D. E. MacLaughlin, and T. Yanagisawa, "Evolution of the phase diagrams in the pseudoternary system Pr_{1-x}Nd_xOs₄Sb₁₂," contributed talk at **2012 APS March Meeting**, Feb. 27-Mar. 2, Boston, Massachusetts, Abstract # P54.00003 (2012).
- 116. <u>B. Somsanuk</u>, U. I. Urbina, P.-C. Ho, M. B. Maple, and T. Yanagisawa, "Finite pulse relaxation calorimetry and specific heat of NdOs₄Sb₁₂," poster presentation at **2012 APS March Meeting**, Feb. 27-Mar. 2, Boston, Massachusetts, Abstract # S1.00303 (2012). [Student Presentation from PCH Lab]
- 117. Ryan Fukuda, Smitha Sunny, and Pei-Chun Ho, "Testing of a First Order AC Magnetic Susceptometer," contributed talk at **2011 Annual Meeting of the California-Nevada Section of the APS**, November 11-12, SLAC National Accelerator Laboratory, Menlo Park, California, Abstract # B3.00009 (2011). [Student Presentation from PCH Lab]
- 118. Nicholas Soliz, Ulises Urbina, and Pei-Chun Ho, "Experimental Probe for Measurement of Thermodynamic Properties," contributed talk at **2011 Annual Meeting of the California-Nevada Section of the APS**, November 11-12, SLAC National Accelerator Laboratory, Menlo Park, California, Abstract # F3.00007 (2011). [Student Presentation from PCH Lab]
- 119. Max Bright, Michael Duncan, William Dunn, Brian Emerson, Jeraldo Matinez, Jussi Amaral, Simon Gonzalez, Academic Advisors: Dr. Pei-Chun Ho, Dr. Doug Singleton, Mr. Don Williams, "Fresno State Physics Outreach," poster presentation at **2011 SPS** (Society of Physics Students) **Zone 18 Meeting**, May 6-7, California State Polytechnic University, Pomona, California (2011). [Student Presentation]

- 120. <u>Jose Amaral</u>, Dulce Romero, Pei-Chun Ho, Saeed Attar, Melissa Golden, and Dennis Margosan, "Synthesis and analysis of rare-earth gadolinium nanoparticles," oral presentation at **the 3rd Annual Graduate Research and Creative Activities Symposium**, May 5, Henry Madden Library, California State University, Fresno, California (2011). [Student Presentation from PCH Lab]
- 121. <u>Jose Amaral</u>, Dulce Romero, Pei-Chun Ho, Saeed Attar, Melissa Golden, and Dennis Margosan, "Synthesis and analysis of rare-earth gadolinium nanoparticles," contributed talk at **the 32**th **Annual Central California Research Symposium**, Session J, April 6, California State University, Fresno (2011). [Student Presentation from PCH Lab; Jose Amaral won "Best Science Presentation" award, sponsored by the San Joaquin Valley Section of the American Chemical Society, for the graduate student oral presentation.]
- 122. <u>Carmin Liang</u>, Dulce Romero, Jussi Amaral, Faculty Advisor: Pei-Chun Ho, "Synthesis and characterization of rare-earth gadolinium nanoparticles," **the 25th National Conference on Undergraduate Research**, Oral Session, Ithaca College, Ithaca, New York, March 31 April 2, 2011. [Student Presentation from PCH Lab]
- 123. <u>P.-C. Ho</u>, R. E. Baumbach, A. A. Dooraghi, M. B. Maple, and T. Yanagisawa, "Shubnikov-de Haas effect measured on single crystals of CeOs₄Sb₁₂ and NdOs₄Sb₁₂ along the high symmetry directions," poster presentation at **2011 APS March Meeting**, March 21-25, Dallas, Texas, Abstract #H22.00004 (2011).
- 124. <u>P.-C. Ho</u>, R. E. Baumbach, A. A. Dooraghi, M. B. Maple, and T. Yanagisawa, "Evolution of Power-Law Behavior of Temperature Dependence of Electrical Resistivity in Pr_{1-x}Nd_xOs₄Sb₁₂," poster presentation at at **2011 APS March Meeting**, March 21-25, Dallas, Texas, Abstract #K1.00288 (2011).
- 125. Jose Amaral, Carmin Liang, Ducle Romero, P.-C. Ho, Saeed Attar, Dennis Margosan, "Synthesis and Analysis of Rare-Earth Nanoparticles Gd and Nd," poster presentation at 2011 APS March Meeting, March 21-25, Dallas, Texas, Abstract #K1.00183 (2011). [Student Presentation from PCH Lab] http://www.spsnational.org/meetings/reports/2011/aps march amaral.htm
- 126. R. E. Baumbach, L. Shu, M. Janoschek, E. Gonzales, K Huang, T. A. Sayles, J. J. Hamlin, D. A. Zocco, C. A. McElroy, M. B. Maple, J. Paglione, P.-C. Ho, and J. R. O'Brien, "Cooperative intermediate valence and anomalous stability of the Kondo lattice in Ce_{1-x}Yb_xCoIn₅," poster presentation at **2011 APS March Meeting**, March 21-25, Dallas, Texas, Abstract #B22.00010 (2011).
- 127. <u>Jose Amaral</u>, Ducle Romero, Carmin Liang, P.-C. Ho, Saeed Attar, Dennis Margosan, "Synthesis and Analysis of Rare-Earth Nanoparticles Gd and Nd," contributed talk at **2010 Annual Meeting of the California-Nevada Section of the APS**, October 29-30, California Institute of Technology, Pasadena, CA, Abstract # H1.00012 (2010). [Student Presentation from PCH Lab; Jose Amaral won "Margaret Burbidge Award 2nd Place" for Experimental Research by a Graduate Student]
- 128. <u>P.-C. Ho</u>, M. B. Maple, R. E. Baumbach, and T. Yanagisawa, "Non Fermi liquid behavior in the Pr_{1-x}Nd_xOs₄Sb₁₂ system" changed to "Evolution of Power-Law Behavior of Temperature Dependence of Electrical Resistivity in Pr_{1-x}Nd_xOs₄Sb₁₂," poster presentation at **SCES 2010 International Conference on Strongly Correlated Electron Systems**, June 27 July 2, Santa Fe, New Mexico; Abstract # Th012 (2010).
- 129. <u>R. E. Baumbach</u>, J. J. Hamlin, L. Shu, D. A. Zocco, M. B. Maple, J. M. O'Brien, and P.-C Ho, "Unconventional magnetic field tuned quantum ground states in the noncentrosymmetric compound Yb₂Fe₁₂P₇," poster presentation at SCES 2010 International Conference on

- **Strongly Correlated Electron Systems**, June 27 July 2, Santa Fe, New Mexico; Abstract # Th037 (2010).
- 130. <u>R. Movshovich</u>, N. Kurita, H.-O. Lee, P.-C. Ho, M. B. Maple, Y. Tokiwa, C. F. Miclea, E. D. Bauer, F. Ronnin, P. Sengupta, I. Vekhter, Z. Fisk, and J. D. Thompson, "Thermal and magnetic properties of low-temperature antiferromagnet Ce₄Pt₁₂Sn₂₅," poster presentation at **SCES 2010 International Conference on Strongly Correlated Electron Systems**, June 27 July 2, Santa Fe, New Mexico; Abstract # TU066 (2010).
- 131. <u>D. Romero</u>, C. Liang, P.-C. Ho, S. Attar, and D. Margosan, "Preparation and Analysis of Rare-Earth Nanoparticles (Gd and Nd)," poster presentation at **the 3rd Annual CSM Student Poster Symposium**, May 7, hosted by the College of Science and Mathematics, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 132. <u>U. I. Urbina</u> and P.-C. Ho, "Instrumentation for measuring specific heat of rare-earth materials," poster presentation at **the 3rd Annual CSM Student Poster Symposium**, May 7, hosted by the College of Science and Mathematics, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 133. <u>J. J. Thompson</u> and P.-C. Ho, "Constructing a multiplexer (scanner)," poster presentation at **the 3rd Annual CSM Student Poster Symposium**, May 7, hosted by the College of Science and Mathematics, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 134. <u>Dulce Romero</u>, Pei-Chun Ho, Saeed Attar, and Dennis Margosan, "Preparation of Gd and Nd Nanoparticles using Inverse Micelle Technique," oral presentation at **Graduate Research and Creative Activities Symposium**, May 6, Henry Madden Library, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 135. <u>U. I. Urbina</u> and P.-C. Ho, "Instrumentation for measuring specific heat of rare-earth materials," poster presentation at **Graduate Research and Creative Activities Symposium**, May 6, Henry Madden Library, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 136. <u>Johnathon J. Thompson</u> and Pei-Chun Ho, "Constructing a multiplexer (scanner)," **the 24th Annual California State University Student Research Competition**, April 30 -May 1,
 California State University, San Jose (2010). [Student Presentation from PCH Lab]
- 137. <u>U. I. Urbina</u> and P.-C. Ho, "Instrumentation for measuring specific heat of rare-earth materials," poster presentation at **the 24th Annual California State University Student Research Competition**, April 30 -May 1, California State University, San Jose (2010). [Student Presentation from PCH Lab]
- 138. <u>Dulce Romero</u>, Pei-Chun Ho, Saeed Attar, and Dennis Margosan, "Synthesis and characterization of Gd and Nd nanoparticles," contributed talk at **the 31th Annual Central California Research Symposium**, Session E, April 23, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 139. <u>Johnathon J. Thompson</u> and Pei-Chun Ho, "Constructing a multiplexer (scanner)," contributed talk at **the 31**th **Annual Central California Research Symposium**, Session C, April 23, California State University, Fresno (2010). [Student Presentation from PCH Lab]
- 140. <u>Ulises Urbina</u> and Pei-Chun Ho, "Instrumentation for measuring specific heat of strongly correlated electron materials," contributed talk at **the 31**th **Annual Central California Research Symposium**, Session C, April 23, California State University, Fresno (2010). [Student Presentation from PCH Lab, Ulises Urbina won "Honorable Mention" recognition for an Outstanding Oral Presentation]

- 141. <u>Johnathon J. Thompson</u>, Ulises Urbina, Advisor: Pei-Chun Ho, "Constructing a multiplexer (scanner)," **the 24th National Conference on Undergraduate Research**, Oral Session 7, Missoula, Montana, 4/15-4/17 (2010). [Student Presentation from PCH Lab]
- 142. <u>D. G. Romero</u>, P.-C. Ho, S. Attar, and D. Margosan, "Progress toward synthesis and characterization of rare-earth nanoparticles," contributed talk at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract # Z37.00001 (2010). [Student Presentation from PCH Lab]
- 143. <u>U. I. Urbina</u>, J. Thompson, and Pei-Chun Ho, "Instrumentation for measuring thermodynamic properties of rare-earth compounds," poster presentation at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract #K1.00059 (2010). [Student Presentation from PCH Lab]
- 144. <u>L. Shu</u>, E. Gonzales, K. Huang, T. A. Sayles, R. E. Baumbach, J. J. Hamlin, D. A. Zocco, C. A. McElroy, M. B. Maple, J. Paglione, J. O'Brien, and P.-C. Ho, "Superconducitivity and non-Fermi-liquid behavior in Ce_{1-x}Yb_xCoIn₅," contributed talk at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract # J38.00003 (2010).
- 145. R. Movshovich, N. Kurita, H.-O. Lee, Y. Tokiwa, C. F. Miclea, E. D. Bauer, F. Ronning, J. D. Thompson, P.-C. Ho, M. B. Maple, P. Sengupta, I. Vekhter, and Z. Fisk, "Thermal and magnetic properties of a low-temperature antiferromagnetic Ce₄Pt₁₂Sn₂₅," contributed talk at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract # J34.00010 (2010).
- 146. <u>R. E. Baumbach</u>, J. J. Hamlin, L. Shu, D. A. Zocco, M. B. Maple, J. O'Brien, and P.-C. Ho, "Unconventional magnetic field tuned quantum ground states in the noncentrosymmetric compound Yb₂Fe₁₂P₇," contributed talk at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract # J34.00001 (2010).
- 147. <u>P.-C. Ho</u>, D. E. MacLaughlin, L. Shu, S. Zhao, J. M. Mackie, M. B. Maple, T. Yanagisawa, "Anomalous magnetic moment suppression in the superconducting and ferromagnetic coexistence region in Pr_{1-x}Nd_xOs₄Sb₁₂," contributed talk at **2010 APS March Meeting**, March 15-19, Portland, Oregon; Abstract # A38.00005 (2010).
- 148. <u>Ulises Urbina</u> and Pei-Chun Ho, "Instrumentation for measuring heat capacity of strongly correlated materials," invited colloquium presentation at Fresno City College, Fresno, CA, February 19 (2010). [Student Presentation from PCH Lab]
- 149. <u>Ulises Urbina</u> and Pei-Chun Ho, "Instrumentation for calorimetric measurements of strongly correlated electron materials," contributed talk, at **2009 Annual Meeting of the California Section of the APS**, Nov. 13-14, Naval Postgraduate School, Monterey, CA (2009). [Student Presentation from PCH Lab] http://meetings.aps.org/Meeting/CAL09/Event/114664
- 150. <u>T. Yanagisawa</u>, H. Saito, T. Mayama, Y. Ikeda, H. Hidaka, H. Amitsuka, Y. Nemoto, T. Goto, N. Takeda, P.-C. Ho, M. B. Maple, "Physical Acoustics of Magnetism and Superconductivity in Filled-Skutterudites Which Possesses Rattling," **International Symposium for Young Scientists on Physics of Strongly Correlated Electrons**, Hokkaido University, Sapporo, Japan, Aug. 26 (2009).
- 151. <u>J. Thompson</u> and P.-C. Ho, "Multiple Specimen Property Measurement Apparatus: 5-Channel Multiplexer," poster presentation, **Symposium** "Celebration of Research Excellence," May 8, hosted by the College of Science and Mathematics, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 152. <u>U. I. Urbina</u> and P.-C. Ho, "Instrumentation for Measuring Thermal and Electronic Properties of Strongly Correlated Electron Materials," poster presentation, **Symposium** "Celebration of

- **Research Excellence,"** May 8, hosted by the College of Science and Mathematics, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 153. <u>D. G. Romero, A. Tretyakov</u>, P.-C. Ho, S. Attar, D. Margosan, "Synthesis and Characterization of Gd and Nd nanoparticles," poster presentation, **Symposium "Celebration of Research Excellence,"** May 8, hosted by the College of Science and Mathematics, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 154. <u>U. I. Urbina</u> and P.-C. Ho, "Instrumentation for Measuring Thermal and Electronic Properties of Strongly Correlated Electron Materials," poster presentation, **Graduate Research and Creative Activities Symposium**, May 7, Henry Madden Library, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 155. <u>D. G. Romero</u>, A. Tretyakov, P.-C. Ho, S. Attar, D. Margosan, "Synthesis and Characterization of Gd and Nd nanoparticles," poster presentations, **Graduate Research and Creative Activities Symposium**, May 7, Henry Madden Library, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 156. <u>D. Romero</u>, P.-C. Ho, S. Attar, "Synthesis and Characterization of Gd and Nd nanoparticles," contributed talk at **the 30th Annual Central California Research Symposium**, April 23, California State University, Fresno (2009). [Student Presentation from PCH Lab]
- 157. <u>A. Tretyakov</u>, D. Romero, P.-C. Ho, "Rare earth metal nanoparticles grown by inverse micelle method," poster presentation at **the 30th Annual Central California Research Symposium**," April 23, California State University, Fresno (2009). [Student Presentation from PCH Lab; Dulce Romerno won "Best Presentation for an Outstanding Poster"]
- 158. <u>P.-C. Ho</u>, M. B. Maple, T. Yanagisawa, W. M. Yuhasz, N. P. Butch, A. A. Dooraghi, C. C. Robinson, "Effect of ferromagnetism on unconventional superconductivity in the Pr_{1-x}Nd_xOs₄Sb₁₂ system," contributed talk at **2009 APS March Meeting**, March 16-20, Pittsburgh, Pennsylvania; Abstract # A41.00005 (2009).
- 159. <u>D. Coffey</u>, M. DeMarco, P.-C. Ho, T. Sayles, M. B. Maple, J. W. Lynn, and Q. Huang, "Collapse of the hyperfine magnetic field at the Ru site in GdRu₂ and HoRu₂," contributed talk at **2009 APS March Meeting**, March 16-20, Pittsburgh, Pennsylvania; Abstract # B32.00007 (2009).
- 160. <u>Ducle G. Romero</u>, Pei-Chun Ho, Saeed Attar, "Synthesis and characterization of Gd and Nd nanoparticles," poster presentation at **2009 APS March Meeting**, March 16-20, Pittsburgh, Pennsylvania; Abstract # K1.00066 (2009). [Student Presentation from PCH Lab]
- 161. <u>Ulises Urbina</u>, Pei-Chun Ho, Daqing Zhang, "I-V curve of Randomly Oriented ZnO Nanowires," contributed talk, at **2008 Annual Meeting of the California Section of the APS**, October 17-18, California State University, Dominguez Hills, Carson, CA (2008). [Student Presentation from PCH Lab] http://aps-ca.lbl.gov/abstracts-2008.html
- 162. <u>Dulce G. Romero</u>, Pei-Chun Ho, Saeed Attar "Synthesis and Characterization of Gd Nanoparticles," contributed talk at **2008 Annual Meeting of the California Section of the APS**, October 17-18, California State University, Dominguez Hills, Carson, CA (2008). [Student Presentation from PCH Lab]

 http://aps-ca.lbl.gov/abstracts-2008.html D. G. Romero and P.-C. Ho, "Progress towards Growth and Characterization of Rare-Earth Nanoparticles using the Inverse Micelle Method," contributed talk at **the 2008 SPS Zone 18 Meeting**, May 3, University of California, Santa Cruz (2008). [Student Presentation from PCH Lab]

 http://sirius.ucsc.edu/sps/?page_id=111

- 163. <u>D. G. Romero</u> and P.-C. Ho, "Progress towards growth and characterization of rare-earth nanoparticles using the inverse micelle method," Poster presentation at **2008 APS March Meeting**, March 10-14, New Orleans, Louisiana; Abstract # K1.00092 (2008). [Student Presentation from PCH Lab]
- 164. M. M. Qazilbash, G. O. Andreev, D. N. Basov, P.-C. Ho, M. B. Maple, M. Brehm, F. Keilmann, A. V. Balatsky, B.-G. Chae, B. J. Kim, S. J. Yun, and H.-T. Kim, "Mott transition in vanadium dioxide (VO₂) observed by infrared spectroscopy and nano-imaging," contributed talk at 2008 APS March Meeting, March 10-14, New Orleans, Louisiana; Abstract # V12.00004 (2008).
- 165. N. Kurita, H.-O. Lee, Y. Tokiwa, E. D. Bauer, J. Thompson, Z. Fisk, P.-C. Ho, M. B. Maple, and R. Movshovich, "Low-temperature thermal and transport properties of single-crystalline Ce₄Pt₁₂Sn₂₅," contributed talk at **2008 APS March Meeting**, March 10-14, New Orleans, Louisiana; Abstract # P12.00007 (2008).
- 166. <u>R. Baumbach</u>, P.-C. Ho, T. Sayles, M. B. Maple, R. Wawryk, T. Circhorek, A. Pietraszko, and Z. Heinkie, "Non-Fermi liquid behavior in the filled skutterudite compound CeRu₄As₁₂," contributed talk at **2008 APS March Meeting**, March 10-14, New Orleans, Louisiana; Abstract # P12.00006 (2008).
- 167. <u>P.-C. Ho</u>, J. Singleton, M. B. Maple, P. Goddard, and T. Yanagisawa "High-field de Haas-van Alphen investigation of the filled skutterudite compound NdOs₄Sb₁₂," contributed talk at **2008 APS March Meeting**, March 10-14, New Orleans, Louisiana; Abstract # P12.00005 (2008).
- 168. <u>J. Singleton</u>, P.-C. Ho, W. M. Yuhasz, T. Yanagisawa, T. A. Sayles, N. P. Butch, M. B. Maple, P. Goddard, A. Pietraszko, R. Wawryk, Z. Henkie, and H. Harima, "Fermi-surface topology and field-dependent effective masses in the filled skutterudite PrOs₄As₁₂," invited talk at **SCES'07** (the International Conference on Strongly Correlated Electron Systems), May 13-18, Houston, Texas; Program and Abstracts, p. 139, Heavy fermion II-3 (2007).
- 169. <u>T. Yanagisawa</u>, W. M. Yuhasz, P.-C. Ho, M. B. Maple, H. Watanabe, Y. Yasumoto, Y. Nemoto, T. Goto, Z. Henkie, and A. Pietraszko, "Ultrasound study of the filled skutterudite compound NdOs₄Sb₁₂," invited talk at **SCES'07** (the International Conference on Strongly Correlated Electron Systems), May 13-18, Houston, Texas; Program and Abstracts, p. 138, Heavy fermion II-1 (2007).
- 170. <u>P.-C. Ho</u>, T. Yanagisawa, N. P. Butch, W. M. Yuhasz, C. C. Robinson, A. A. Dooraghi, and M. B. Maple, "A comparison of the normal and superconducting state properties of Pr(Os_{1-x}Ru_x)₄Sb₁₂ and Pr_{1-x}Nd_xOs₄Sb₁₂," poster at **SCES'07** (the International Conference on Strongly Correlated Electron Systems), May 13-18, Houston, Texas; Program and Abstracts, p. 39, Poster Session I-76-Superconductivity-Unconventional non-High T_c (2007).
- 171. N. P. Butch, J. R. Jeffries, B. T. Yukich, T. A. Sayles, J. P. Paglione, P.-C. Ho, and M. B. Maple, "The search for quantum criticality in the URu_{2-x}Re_xSi₂ phase diagram," contributed talk at **2007 APS March Meeting**, March 5-9, Denver, Colorado; Abstract # P10.00007 (2007).
- 172. <u>J. Paglione</u>, T. A. Sayles, P.-C. Ho, and M. B. Maple, "Incoherent non-Fermi liquid scattering in a Kondo lattice," contributed talk at **2007 APS March Meeting**, March 5-9, Denver, Colorado; Abstract # L10.00001 (2007).
- 173. <u>P.-C. Ho</u>, J. Singleton, W. Yuhasz, T. Yanagisawa, T. Sayles, M. B. Maple, P. Goddard, A. Pietraszko, Z. Henkie, and H. Harima, "Fermi-surface topology and field-dependent effective masses in the skutterudite PrOs₄As₁₂," poster at **2007 APS March Meeting**, March 5-9, Denver, Colorado; Abstract # R1.00185 (2007).
- 174. P.-C. Ho, T. Yanagisawa, N. P. Butch, W. M. Yuhasz, N. A. Frederick, and M. B. Maple, "A comparison of the normal and superconducting state properties of Pr(Os_{1-x}Ru_x)₄Sb₁₂ and Pr₁-

- xNdxOs4Sb₁₂,"contributed talk at **2007 APS March Meeting**, March 5-9, Denver, Colorado; Abstract # P10.00009 (2007).
- 175. <u>D. Coffey</u>, M. DeMarco, R. Heary, P.-C. Ho, T. A. Sayles, M. B. Maple, and S. Toorongian, "Investigation of the competition between structural and ferromagnetic transition in GdRu2 using the Mossbauer effect," contributed talk at **2006 APS March Meeting**, March 13-17, Baltimore, Maryland; Abstract # G45.00007 (2006).
- 176. W. M. Yuhasz, P.-C. Ho, T. A. Sayles, T. Yanagisawa, N. A. Frederick, M. B. Maple, "Superconductivity in PrRu₄As₁₂ single crystals," contributed talk at **2006 APS March Meeting**, March 13-17, Baltimore, Maryland; Abstract # B39.00015 (2006).
- 177. <u>P.-C. Ho</u>, W. M. Yuhasz, T. Yanagisawa, N. A. Frederick, N. P. Butch, T. A. Sayles, J. Jeffries, M. B. Maple, Y. Nemoto, and T. Goto, "Normal and superconducting state properties of (Pr_{1-x}Nd_x)Os₄Sb₁₂," contributed talk at **2006 APS March Meeting**, March 13-17, Baltimore, Maryland; Abstract # P45.00005 (2006).
- 178. <u>J. Paglion</u>, T. A. Sayles, P.-C. Ho, and M. B. Maple, "Rare earth substitution effect in Ce_{1-x}R_xCoIn₅," poster at **2006 Gordon Research Conference/Superconductivity**, January 22-27, Buellton, California, U.S.A.
- 179. N. P. Butch, J. R. Jeffries, P.-C. Ho, M. B. Maple, S. D. Wilson, Pengcheng Dai, D. T. Adroja, S.-H. Lee, J.-H. Chung, J. W. Lynn, "Quantum criticality and non Fermi liquid behavior in Sc_{1-x}U_xPd₃," poster at **3rd Conference on Concepts in Electron Correlation**, September 30 October 5, Hvar, Croatia, Program & Abstracts booklet 1295 (2005).
- 180. N. A. Frederick, S. K. Kim, T. A. Sayles, P.-C. Ho, N. P. Butch, and M. B. Maple "Low temperature normal and superconducting state properties of lightly doped PrOs₄Sb₁₂," contributed talk at **2005 APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 1295 (2005).
- 181. W. M. Yuhasz, N. A. Frederick, P.-C. Ho, N. P. Butch, B. J. Taylor, T. A. Sayles, M. B. Maple, J. B. Betts, A. H. Lacerda, and P. Rogl, "Heavy fermion behavior, crystalline electric field effects, and weak ferromagnetism in SmOs₄Sb₁₂," contributed talk at **2005 APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 1295 (2005).
- 182. <u>P.-C. Ho</u>, N. P. Butch, T. Yanagisawa, W. M. Yuhasz, N. A. Frederick, T. A. Sayles, D. P. Arovas, M. B. Maple, J. B. Betts, and A. H. Lacerda, "The effect of Nd substitution on superconductivity of PrOs4Sb12," contributed talk at **2005 APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 1295 (2005).
- 183. N. P. Butch, W. M. Yuhasz, P.-C. Ho, J. R. Jeffries, N. A. Frederick, T. A. Sayles, X. G. Zheng, M. B. Maple, J. B. Betts, A. H. Lacerda, F. M. Woodward, J. W. Lynn, P. Rogl, and G. Giester, "Ordered magnetic state in PrFe₄Sb₁₂ single crystals," contributed talk at **2005 APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 909 (2005).
- 184. <u>T. A. Sayles</u>, W. M. Yuhasz, N. A. Frederick, P.-C. Ho, M. B. Maple, and Z. Henkie, "Magnetic susceptibility, electric resistivity, and specific heat measurements of the filled skutterudite PrOs4As12," contributed talk at **2005APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 909 (2005).
- 185. M. De Marco, R. Heary, D. Coffey, P.-C. Ho, T. Sayles, B. Maple, S. Toorongian, and M. Haka, "Search for the coexistence of magnetism and superoconductivity in Ce_{1-x}Gd_xRu₂ using the Mossbauer effect," contributed talk at **2005 APS March Meeting**, March 21-25, Los Angeles, California; *Bulletin of the American Physical Society* **50**, 908 (2005).

- 186. <u>P.-C. Ho</u>, N. A. Frederick, W. M. Yuhasz, N. P. Butch, M. B. Maple, E. D. Bauer, and A. H. Lacerda, V. S. Zapf, "Unconventional superconductivity and quadrupolar ordering in the heavy fermion compound Pr(Os_{1-x}Ru_x)₄Sb₁₂," poster at **2004 Stewardship Science Academic Alliances (SSAA) Program Symposium,** March 29-31, Albuquerque, New Mexico, U. S. A. (2004).
- 187. P.-C. Ho, N. A. Frederick, N. P. Butch, V. S. Zapf, M. B. Maple, J. B. Betts, and A. H. Lacerda, "Normal and superconducting states of Ru substituted compounds Pr(Os_{1-x}Ru_x)₄Sb₁₂," contributed talk at **2004 APS March Meeting**, March 22-26, Montreal, Quebec, Canada; *Bulletin of the American Physical Society* **49**, 391 (2004).
- 188. <u>V.-S. Zapf</u>, N. A. Frederick, P.-C. Ho, E. J. Freeman, E. D. Bauer, J. Petricka, M. B. Maple, "Investigation of the quantum critical point in CeRh_{1-x}Co_xIn₅," contributed talk at **2003 APS**March Meeting, March 3-7, Austin, Taxes, U.S.A.; *Bulletin of the American Physical Society*48, 1028 (2003).
- 189. <u>P.-C. Ho</u>, N. A. Frederick, E. D. Bauer, V. S. Zapf, M. B. Maple, A. D. Christianson, and A.H. Lacerda, "Electrical resistivity and magnetization measurements on the heavy fermion superconductor PrOs₄Sb₁₂ in high magnetic fields," contributed talk at **2003 APS March Meeting**, March 3-7, Austin, Taxes, U.S.A.; *Bulletin of the American Physical Society* **48**, 907 (2003).
- 190. N. A. Frederick, T. D. Do, E. D. Bauer, V. S. Zapf, P.-C. Ho, M. B. Maple, "Superconductivity in Pr(Os_{1-x}Rux)₄Sb₁₂,"poster at **2003 Gordon Research Conference/Superconductivity**, January 12-17, Ventura, California, U.S.A. http://www.grc.uri.edu/programs/2003/supercon.htm
- 191. <u>F. M. Woodward</u>, J. W. Lynn, N. A. Frederick, W. Yuhasz, E. D. Bauer, P.-C. Ho, V. S. Zapf, M. B. Maple, "Crystal structure and CEF energy level scheme of a Pr based heavy fermion superconductor by neutron scattering," contributed talk at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 1057 (2002).
- 192. <u>A. Slebarski</u>, M.B. Maple, P.-C. Ho, V.S. Zapf, E. Granado, Q. Huang, J.W. Lynn, "Evidence for non-Fermi liquid behavior in CeRhSn," poster at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 869 (2002).
- 193. <u>P.-C. Ho</u>, S. Moehlecke and M.B. Maple, "Magnetic relaxation in the peak effect region of CeRu₂," contributed talk at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 782 (2002).
- 194. <u>V. S. Zapf</u>, N. A. Frederick, K. L. Rogers, P.-C. Ho, K.-D. Hof, M. B. Maple, "Magnetic phase diagram of Ce_{1-x}Y_xRhIn₅," contributed talk at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 425 (2002).
- 195. <u>E. D. Bauer</u>, V. S. Zapf, N. A. Frederick, P.-C. Ho, M. B. Maple, T. Schauerte, D. L. Cox, F. B. Anders, "Evidence for Nonmagnetic quadrupolar ground state in the heavy fermion superconductor PrOs₄Sb₁₂," contributed talk at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 163 (2002).
- 196. <u>H. Akimoto</u>, P.C. Ho, R. B. Hallock, "Specific heat of two-dimensional ³He on superfluid ⁴He films," contributed talk at **2002 APS March Meeting**, March 18-22, Indianapolis, IN, U.S.A.; *Bulletin of the American Physical Society* **47**, 1016 (2002).
- 197. <u>H. Akimoto</u>, P.-C. Ho, and R. B. Hallock, "Specific heat measurements of ³He in ³He ⁴He mixture films," poster at **QFS 2001 International Symposium on Quantum Fluids and Solids**, July 22 27, Konstanz, Germany; program booklet, abstract no. **P.24-19**, page 44 (2001).

- 198. <u>Pei-Chun Ho</u>, and R. B. Hallock, "Heat capacity measurements for ³He in ³He-⁴He mixture films," contributed talk at **2001 APS March Meeting**, March 12-16, Seattle, WA, U.S.A.; *Bulletin of the American Physical Society* **46**, 1016 (2001).
- 199. P.-C. Ho and R. B. Hallock, "A Compact Design of an Indium Heat Switch," poster at QFS 2000 International Symposium on Quantum Fluids and Solids, June 6-11, Minneapolis, Minnesota, U.S.A. program booklet abstract no. P10-34 (2000).
- 200. <u>P.-C. Ho</u> and R. B. Hallock, "Specific heat measurement of ³He in ³He-⁴He mixture films," poster at **QFS 2000 International Symposium on Quantum Fluids and Solids**, June 6-11, Minneapolis, MN, U.S.A.; program booklet, abstract no. **P7-26** (2000).
- 201. <u>P.-C. Ho</u>, and R. B. Hallock, "Specific heat of ³He in ³He-⁴He mixture films," contributed talk at **1999 APS March Meeting**, March 20-26, Atlanta, GA, U.S.A.; *Bulletin of the American Physical Society* **44**, 519 (1999).
- 202. J. M. Goodkind and Pei-Chun Ho, "Coherent propagation of elementary excitations in solid ⁴He," contributed talk at **1998 APS March Meeting**, March 16-20, Los Angeles, CA, U.S.A.; *Bulletin of the American Physical Society* **43**, 755 (1998).
- 203. <u>P.-C. Ho</u> and J. M. Goodkind, "A new phase transition in solid ⁴He," contributed talk at **1997 APS March Meeting**, March 17-21, Kansas City, KS, U.S.A.; *Bulletin of the American Physical Society* **42**, 769 (1997).
- 204. P. C. Ho, C. N. Chen, C. C. Lai, and H. C. Ku, "Correlation between superconductivity and Cu-O bond length in Cu-O plane for the thallium system," poster at 1991 Annual meeting of the Physical Society of Republic of China, Taipei, Taiwan, R.O.C.; program booklet abstract no. B39, Vol. 13, page 61 (1991).