

CURRICULUM VITAE

Prof. Xun-Li WANG (王循理)

B.S. – Peking University

Ph.D. – Iowa State University



Chair Professor and Head

Department of Physics

City University of Hong Kong

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In August 2012, Professor Xun-Li Wang joined City University of Hong Kong as a Chair Professor and Head of the Department of Physics and Materials Science. In July 2017, the department split and Professor Wang assumed the headship of the new Department of Physics starting with 12 faculty members. He oversaw a rapid expansion of the new department, now with a 20+ strong faculty body and growing.

Prior to coming to Hong Kong, he had been working at Oak Ridge National Laboratory in the US, rising through the ranks to Distinguished Staff Member. He was responsible for the design, construction, and commissioning of VULCAN, a powerful engineering diffractometer at the Spallation Neutron Source, Oak Ridge National Laboratory. As a senior scientist in the Neutron Science Directorate, he led innovative research, using neutron scattering as a primary tool, to understand deformation and phase transformation behavior in complex materials.

Since joining City University of Hong Kong, Professor Wang has dedicated his efforts to establishing Hong Kong as an international hub for neutron scattering research. With the support from The Croucher Foundation, he started the biennial Croucher Summer Course on Neutron Scattering. He was also instrumental in launching the Gordon Research Conference series on Neutron Scattering, serving as the inaugural Chair in 2015. In addition, he and Professor Hesheng Chen of the Institute of High Energy Physics, Chinese Academy of Sciences, co-founded a joint laboratory on neutron scattering. The joint laboratory has received financial support from The Croucher Foundation, Hong Kong's Research Grants Council, and the Chinese Academy of Sciences. In 2020, Professor Wang helped establish the Guangdong-Hong Kong-Macau Joint Laboratory on Neutron Scattering, serving as the Executive Director in Hong Kong. In the meanwhile, Professor Wang has maintained an active research portfolio. His current research interests include structure and dynamics in metallic glass, deformation behaviors in high entropy alloys, and magneto-elastic coupling in magnetic shape memory alloys.

Professor Wang received his Ph.D. from Iowa State University and B.S. from Peking University, both in Physics. He is an elected Fellow of the American Physical Society (APS), American Association for the Advancement of Science (AAAS), Neutron Scattering Society of America (NSSA), and his early work on welding residual stresses was awarded an A. F. Davis Medal by the American Welding Society.

Research Interests / Areas		
Phase transformation, deformation, magnetism, residual stress determination	Neutron and synchrotron scattering	Metallic glasses, nanostructured materials, magnetic shape memory alloys

EDUCATION

- 1992 **Ph.D.** in Solid State Physics, **Iowa State University**, USA
1985 **B.S.** in Physics, **Peking University**, China

HONORS AND RECOGNITIONS

- 2021 **Croucher Senior Research Fellowship**, Croucher Foundation
2020 **Elected Fellow**, Neutron Scattering Society of America (NSSA)
2018 **Lee Hsun Lectureship**, Chinese Academy of Sciences
2017 **Elected Fellow**, American Association for the Advancement of Science (AAAS)
2015 **Chair** of the inaugural Gordon Research Conference on Neutron Scattering, Hong Kong
2010 **Elected Fellow**, American Physical Society (APS)
2009 **Chang Jiang Chair Professorship** (长江讲座教授), Chinese Ministry of Education
2008 **Outstanding Oversea Scholars** (中国科学院海外知名学者), Chinese Academy of Sciences
2006 **Outstanding Oversea Young Scientist Award** (基金委杰青B类), National Natural Science Foundation of China
2003 **Significant Event Award**, Oak Ridge National Laboratory, USA
1999 **A. F. Davis Silver Medal**, American Welding Society
1998 **Significant Event Award**, Oak Ridge National Laboratory, USA
1985 **CUSPEA** (China-U.S. Physics Examination and Application, 中美联合培养物理类研究生计划) **Scholar**, Chinese Ministry of Education

EMPLOYMENT HISTORY

City University of Hong Kong, Hong Kong (2012 – present)

- Since 2020 **Director**, City University of Hong Kong Dongguan Research Institute
Since 2017 **Chair Professor and Founding Head**, Department of Physics
2012-2017 **Chair Professor and Head**, Department of Physics & Materials Science

Oak Ridge National Laboratory, USA (1992 – 2012)

- 2009-2012 **Distinguished Research Staff**
2006-2011 **Group Leader**, Powder Diffraction Group, Neutron Scattering Science Division
2004-2006 **Senior Research Staff**, Experimental Facilities Division, Spallation Neutron Source Project
1999-2011 **Instrument Scientist and Project Manager for VULCAN**, Spallation Neutron Source
1994-1999 **Research Staff Member**, Metals and Ceramics Division
1992-1994 **Postdoctoral Fellow**, Metals and Ceramics Division

OTHER APPOINTMENTS

- 2019-2021 **President**, Physical Society of Hong Kong
Since 2020 **Executive Director** (Hong Kong), Guangdong–Hong Kong–Macao (GHM) Joint Laboratory on Neutron Scattering
Since 2015 **Co-Director**, CAS-Croucher Foundation Joint Laboratory on Neutron Scattering
sSince 2015 **Guest Professor**, Institute of High Energy Physics, Chinese Academy of Sciences
2011 **Guest Scientist**, National Institute for Materials Science (NIMS), Japan

RESEARCH GRANTS (~\$39 Million HKD in 8 years since joining CityU)

2021 (\$2.0 million HKD in total)

\$2.0 million HKD Croucher Senior Research Fellowship, The Croucher Foundation

2020 (\$1.8 million HKD in total)

¥1.5 million RMB Guangdong-HongKong-Macau Joint Laboratory on Neutron Scattering, Guangdong Province, China

2019 (\$13.4 million HKD in total)

\$8.6 million HKD Collaborative Research Fund, Research Grants Council, Hong Kong

\$1.8 million HKD Croucher Summer Course on Neutron Scattering, The Croucher Foundation

\$3.0 million HKD Joint Laboratory Funding Scheme, Research Grants Council, Hong Kong

2018 (\$1.2 million HKD in total)

\$1.2 million HKD CAS-Croucher Joint Laboratory on Neutron Scattering, The Croucher Foundation,

2017 (\$3.92 million HKD in total)

¥3 million RMB Key Research Grant, Shenzhen Municipal Government, China

\$0.58 million HKD General Research Fund, Research Grants Council, Hong Kong

2016 (\$9.42 million HKD in total)

¥7.7 million RMB Ministry of Science and Technology of China

\$0.84 million HKD General Research Fund, Research Grants Council, Hong Kong

2015 (\$1.94 million HKD in total)

¥0.96 million RMB General Research Project, National Science Foundation of China

\$0.87 million HKD General Research Fund, Research Grants Council, Hong Kong

2014 (\$1.81 million HKD in total)

\$1.25 million HKD CAS-Croucher Joint Laboratory on Neutron Scattering Science and Technology, The Croucher Foundation

¥0.5 million RMB Basic Research Grant, Shenzhen Municipal Government, China

2013 (\$3.27 million HKD in total)

\$1.8 million HKD Croucher Summer Course on Neutron Scattering, The Croucher Foundation

\$0.65 million HKD General Research Fund, Research Grants Council, Hong Kong

\$0.82 million HKD Contract Research, Oak Ridge National Laboratory, USA

SELECTED PUBLICATIONS (over 200 in total)

To view the full list of publications, please click [HERE](#).

- [1] S. Lan et al., and X.-L. Wang, "A chiral medium-range structure motif linking amorphous and crystalline states," *Nature Materials* (accepted).
- [2] H.Y. He, M. Naeem, F. Zhang, Y.L. Zhao, S. Harjo, T. Kawasaki, B. Wang, X.L. Wu, S. Lan, Z.D. Wu, W. Yin, Y. Wu, Z.P. Lu, J.J. Kai, C.T. Liu, **X.-L. Wang**, "Stacking Fault Driven Phase Transformation in CrCoNi Medium Entropy Alloy", *Nano Letters*, 21, 3, 1419–1426 (2021)

- [3] X. Y. Li, H. P. Zhang, S. Lan, D. L. Abernathy, T. Otomo, F. W. Wang, Y. Ren, M. Z. Li, and **X.-L. Wang**, “Observation of High-Frequency Transverse Phonons in Metallic Glasses”, *Physical Review Letters*, 124, 225902 (2020).
- [4] M. Naeem, H. Y. He, F. Zhang, H. L. Huang, S. Harjo, T. Kawasaki, B. Wang, S. Lan, Z. D. Wu, F. Wang, Y. Wu, Z. P. Lu, Z. W. Zhang, C. T. Liu, and **X.-L. Wang***, “Cooperative deformation in high-entropy alloys at ultralow temperatures,” *Science Advances*, 6, eaax4002 (2020).
This paper is featured in several news outlet, including
[Phys.org, “Multi-stage deformation process in high-entropy alloys at ultra-low temperatures revealed”](#)
[Eureka! “Multi-stage deformation process in high-entropy alloys at ultra-low temperatures revealed”](#)
[Japan Proton Accelerator Complex Press Release \(in Japanese\)](#)
[極低温で現れる先進的合金の特異な変形メカニズムを解明](#)
- [5] X. Y. Li, P.-F. Liu, E. Y. Zhao, Z. G. Zhang, T. Guidi, M. Le, M. Avdeev, K. Ikeda, T. Otomo, M. Kofu, K. Nakajima, J. Chen, L. H. He, Y. Ren, **X.-L. Wang**, B. T. Wang, Z. F. Ren, H. Z. Zhao, and F. W. Wang, “Ultralow Thermal Conductivity from Transverse Acoustic Phonon Suppression in Distorted Crystalline α -MgAgSb,” *Nature Communications*, 11, 1-9 (2020).
- [6] C. C. Yuan, F. Yang, X. K. Xi, C. L. Shi, D. Holland-Moritz, M. Z. Li, F. Hu, B. L. Shen, **X.-L. Wang**, A. Meyer, and W. H. Wang, “Impact of hybridization on metallic-glass formation and design,” *Materials Today*, 32, 26-34 (2020).
- [7] S. Lan, C. Y. Guo, W. Z. Zhou, Y. Ren, J. Almer, C. Q. Pei, H. Hahn, C. T. Liu, T. Feng*, **X.-L. Wang***, and H. Gleiter, “Engineering medium-range order and polyamorphism in a nanostructured amorphous alloy,” *Communication Physics*, 2, 1-9 (2019).
- [8] B. Wang, H. Y. He, M. Naeem, S. Lan, S. Harjo, T. Kawasaki, Y. X. Nie, H.W. Kui, T. Ungár, D. Ma, A. D. Stoica, Q. Li, Y. Ke, C. T. Liu, and **X.-L. Wang***, “Deformation of CoCrFeNi high entropy alloy at large strain,” *Scripta Materialia*, 155, 54-57 (2018).
- [9] S. Lan, Y. Ren, X. Y. Wei, B. Wang, E. P. Gilbert, T. Shibayama, S. Watanabe, M. Ohnuma, and **X.-L. Wang***, “Hidden Amorphous Phase and Reentrant Supercooled Liquid in Pd-Ni-P Metallic Glasses,” *Nature Communications* **8**, 14679 (2017); doi:10.1038/ncomms14679
(This work solved a 40-year old scientific mystery. The story was covered widely in news media in English, Japanese, and Chinese. Examples:
[ScienceDaily, “Atomic 're-packing' behind metallic glass mystery”](#)
[Phys.org, “Insights may lead to design and development of superior metallic alloys.”](#)
[Hokkaido University, “40年間謎とされてきたアモルファス合金の示差走査熱量測定における異常発熱の理由を中、米、豪、日の4カ国共同で初めて解明”](#)
[NSFC, 我国青年学者发现非晶合金在晶化温度以下的多形性相变](#),
Also featured in [Nature Communications’ collection series, Metallurgy](#))
- [10] H. S. Chen, and **X.-L. Wang***, “China's first pulsed neutron source,” *Nature Materials*, **15**, 689 – 691 (2016).
- [11] A. Pramanick, M. R. V. Jørgensen, S. O. Diallo, A. D. Christianson, J. A. Fernandez-Baca, C. Hoffmann, X. Wang, S. Lan, and **X.-L. Wang**, “Nanoscale Atomic Displacements Ordering for Enhanced Piezoelectric Properties in Lead-free ABO₃ Ferroelectrics,” *Advanced Materials.*, **27**, 4330-4335 (2015) (**front cover**).
- [12] A. Pramanick, **X.-L. Wang***, A. D. Stoica, C. Yu, Y. Ren, S. Tang, and Z. Gai, “Kinetics of magnetoelastic twin boundary motion in ferromagnetic shape memory alloys,” *Physical Review Letters*, **112**, 217205 (2014).
- [13] S. Cheng, S. Y. Lee, C. Lei, L. Li, J. Almer, **X.-L. Wang**, Y. M. Wang, T. Ungar, P. K. Liaw, “Uncommon Deformation Mechanisms during Fatigue-Crack Propagation in Nanocrystalline Alloys,” *Physical Review Letters*, **110**, 135501 (2013).
- [14] Y. Wu, D. Q. Zhou, W. L. Song, H. Wang, Z.Y. Zhang, D. Ma, **X. L. Wang**, and Z. P. Lu, “Ductilizing Bulk Metallic Glass Composite by Tailoring Stacking Fault Energy,” *Physical Review Letters*, **109**, 245506 (2012).

- [15] D. Ma, A. D. Stoica, **X.-L. Wang***, Z. P. Lu, B. Clausen, D. W. Brown, "Moduli inheritance and the weakest link in metallic glasses," *Physical Review Letters*, **108**, 085501 (2012)
(covered by News and Views, *Nature Materials*, **11**, 275–276 (2012))
- [16] **X.-L. Wang**, K. An, L. Cai, Z. Feng, S. E. Nagler, C. Daniels, K. J. Rhodes, D. L. Wood, III., A. D. Stoica, H. D. Skorpenske, C. Liang, W. Zhang, Y. Kim, Y. Qi, and S. J. Harris, "Visualizing the chemistry and structure dynamics in Li-ion batteries by in-situ neutron diffraction," *Scientific Report*, **2**, 747 (2012).
- [17] I. Robertson, C. Schuh, J. Vetro, N. Browning, D. Field, D. Juul-Jensen, M. Miller, I. Baker, D. Dunand, R. Dunin-Borkowski, B. Kabius, T. Kelly, S. Lorano-Perez, A. Misra, G. Rohrer, T. Rollett, M. Taheri, G. Thomson, M. Uchic, **X.-L. Wang**, G. Was, "Towards an integrated materials characterization toolbox," a viewpoint paper in *Journal of Materials Research*, **26**, 1341-1383 (2011).
- [18] Z. W. Zhang, C. T. Liu, **X.-L. Wang**, K. C. Littrell, M. K. Miller, K. An, and B. A. Chin, "From embryos to precipitates: a study of nucleation and growth in a multicomponent ferritic steel," *Physical Review B*, **84**, 174114 (2011).
- [19] S. Cheng, Y. Zhao, Y. Wang, Y. Li, **X.-L. Wang**, P. K. Liaw, and E. J. Lavernia, "Structure modulation in nanocrystalline NiFe driven by cyclic deformation," *Physical Review Letters*, **104**, 255501 (2010).
- [20] S. Cheng, Y. Zhao, Q. Wei, **X.-L. Wang**, Y. Ren, P. K. Liaw, H. Choo, and E. J. Lavernia, "Substantial Deformation of Nanocrystalline NiFe Alloy under Dynamic Loading," *Advanced Materials*, **21**, 5001–5004 (2009).
- [21] S. Cheng, A.D. Stoica, **X.-L. Wang***, Y. Ren, J. Almer, J.A. Horton, C.T. Liu, B. Clausen, D.W. Brown, P.K. Liaw, and L. Zuo, "Deformation cross-over: from nano to meso scales," *Physical Review Letters*, **103**, 035502 (2009).
(selected for inclusion in August 3 issue of *Virtual Journal of Nanoscale Science & Technology*)
- [22] D. Ma, A. D. Stoica, and **X.-L. Wang***, "Power-law scaling and fractal nature of the medium range order in metallic glasses," *Nature Materials*, **8**, 30-34 (2009).
- [23] L. Yang, M. K. Miller, **X.-L. Wang***, C. T. Liu, A. D. Stoica, D. Ma, J. Almer, and D. Shi, "Nano-scale solute partitioning in devitrified bulk metallic glass," *Advanced Materials*, **21**, 305-308 (2009)
(featured on the cover).
- [24] C. T. Liu, C. L. Fu, M. F. Chrisholm, and J. R. Thompson, Krcmar, and **X.-L. Wang**, "Magnetism and solid solution effects in NiAl (40%Al) alloys," *Progress in Materials Science*, **52**, 352-370 (2007).
- [25] **X.-L. Wang**, "Application of neutron diffraction to engineering problems," *JOM*, March, 53-58 (2006).
- [26] **X.-L. Wang***, T. M. Holden, G. Q. Rennich, A. D. Stoica, P. K. Liaw, H. Choo, and C. R. Hubbard, "VULCAN – The Engineering Diffractometer at the SNS," *Physica B*, **385-386**, 673-675 (2006).
- [27] **X.-L. Wang***, J. Almer, Y. D. Wang, J. K. Zhao, C. T. Liu, A. D. Stoica, D R. Haeffner, and W. H. Wang, "In-situ Synchrotron Study of Phase Transformation Behaviors in Bulk Metallic Glass Using Simultaneous X-ray Diffraction and Small Angle Scattering," *Physical Review Letters*, **91**, 265501 (2003).
- [28] Y.D. Wang, H. Tian, A. D. Stoica, **X.-L. Wang***, P. K. Liaw, and J.W. Richardson, "Development of Large Grain-Orientation-Dependent Residual Stresses in a Cyclically-Deformed Alloy," *Nature Materials*, **2**, 103-106 (2003).
(covered by *Materials Today*, http://www.materialstoday.com/pdfs_6_3/research.pdf)
- [29] W.-T. Lee and **X.-L. Wang**, "IDEAS, a General-purpose Computer Program for Simulation of Neutron Scattering Instruments," *Neutron News*, **13** (No. 4), 30-34 (2002).
- [30] **X.-L. Wang**, "Conceptual Design of the SNS Engineering Diffractometer", SNS Report No. IS-1.1.8.2-6035-RE-A-00 (2000).
- [31] Z. Wang, **X.-L. Wang**, J. A. Fernandez-Baca, D. C. Johnston, and D. Vaknin, "Antiferromagnetic Ordering and Paramagnetic Behavior of Ferromagnetic Clusters in BaCuO_{2+x}," *Science*, **264**, 402-404 (1994).
- [32] L. L. Miller, **X. L. Wang**, S. X. Wang, C. Stassis, D. C. Johnston, J. Faber Jr., and C.-K. Loong, "Synthesis, Structure and Properties of Sr₂CuO₂Cl₂," *Physical Review B*, **41**, 1921 (1990).

SELECTED INVITED TALKS (~150 in total)

1. Plenary Speaker, 2019 Asia Oceana Conference on Neutron Scattering, Kenting, Taiwan, 2019
2. The President's Lecture Series: Excellence in Academia, City University of Hong Kong, 2019
3. Lee Hsun Lecture, Institute of Metal Research, Chinese Academy of Sciences, 2018
4. Gordon Research Conference on Neutron Scattering, Hong Kong, 2017
5. International Conference on Neutron Scattering, Daejeon, Korea, 2017
6. Armourers & Brasiers' Cambridge Forum, University of Cambridge, UK, 2017
7. Seminar at Department of Physics, University of California, San Diego, USA, 2017
8. Material Research Society Fall Meeting, Boston, USA, 2016
9. Material Research Society Fall Meeting, Boston, USA, 2015
10. Keynote at the 3rd Neutron Scattering User Meeting in China, Peking University, China, 2015
11. Gordon Research Conference on Structural Nanomaterials, Hong Kong, 2014
12. Seminar at Department of Chemistry, University of Sydney, Australia, 2014
13. Plenary Lecture, The 16th Hong Kong Physical Society Annual Meeting, Hong Kong, 2013
14. Seminar at School of Physics, Peking University, China, 2013
15. Knowledge Innovation Forum, Institute of High Energy Physics, Chinese Academy of Sciences, China, 2013
16. Colloquium at Department of Physics, Fudan University, China, 2013
17. Distinguished Lecture at the 17th Annual Conference of Hong Kong Society for Theoretical and Applied Mechanics, Hong Kong, 2013
18. Materials Research Society Fall Meeting, Boston, USA, 2012
19. Seminar at Department of Nuclear Engineering, MIT, USA, 2012
20. Seminar at School of Engineering and Applied Sciences, Harvard University, USA, 2012
21. The ISIS Facilities, Rutherford Appleton Laboratory, UK, 2011
22. The 43rd Erice Crystallographic Course, entitled "The Power of Powder Diffraction", Erice, Sicily, Italy, 2011
23. HANARO 15th Anniversary Celebration Symposium 2010, Daejeon, Korea, 2010
24. Colloquium at Department of Physics, University of North Carolina at Chapel Hill, 2010
25. GE Global Research, Niskayuna, New York USA, 2010
26. Institute of Metal Research, Tohoku University, Japan, 2009
27. US DOE-BES workshop "Characterizing Materials Damage in Four Dimensions," 2009
28. The International Conference on Neutron Scattering, Knoxville, USA, 2009
29. The 137th Lecture of Zhong Guan Chun Forum (中关村论坛), Institute of Physics, Chinese Academy of Science, China, 2008
30. US DOE/BES Mechanical Behavior Contractors Meeting, San Antonio, USA (by invitation only), 2006
31. Winter Neutron School, Los Alamos National Laboratory, USA, 2005
32. Institute Laue-Langevin, France, 1997
33. Materials Department, University of California at Santa Barbara, Santa Barbara, California, 1996
34. May 1995, GE Aircraft Engines, Cincinnati, Ohio, 1995

PROFESSIONAL SERVICES

Committees

- Member, the 1st Science and Technology Advisory Committee, Institute of Advanced Science Facilities (IASF), Shenzhen, 2021 – present
- Member of the Academic Advisory Committee, China Center of Advanced Science and Technology (CCAST, 中国高等科学技术中心学术委员会成员), 2020 – present

- Member of the Academic Advisory Committee, Songshanhu Materials Laboratory (松山湖材料实验室第一届学术委员会成员), 2020 – present
- Member of the Oversea Assessment Panel, Chinese Academy of Sciences (中国科学院海外评审专家), 2016 – 2020
- Appointed to a 7-member Advisory Committee on Large Scale Scientific Facilities, Chinese Academy of Sciences (中国科学院重大科技基础设施咨询委员会), 2015 – 2019
- Member, 2016/17 Hong Kong PhD Fellowship Scheme (HKPFS) Selection Panel, Research Grant Council, Hong Kong
- AONSA Prize Selection Committee (six members in total), The Asia-Oceania Neutron Scattering Association (AONSA), August – September 2014
- Member, The Bragg Institute Program Advisory Committee, The Australian Nuclear Science and Technology Organization (ANSTO), 2013 – 2016
- Member of the Selection Committee for “Sustained Research and Science Prize”, Neutron Scattering Society of America, 2012
- Chair, Chemistry and Physics of Materials Committee, TMS (www.tms.org), 2011 – 2013
- U.S. Department of Energy CD-1 (Critical Decision 1) review of Dynamic Compression Sector at Advanced Photon Source, December 19-20, 2011, Argonne National Laboratory, USA
- Review Committee, U.S. Department of Energy, Office of Basic Energy Sciences, Operational Review of the Advanced Photon Source, September 12-15, 2011, Argonne National Laboratory, USA
- Member, Proposal Review Committee Member for CROSS [Comprehensive Research Organization for Science and Society], Japan Ministry of Education, Culture, Sports, Science & Technology (MEXT), 2011 – 2014, Japan
- Member, Neutron Science Proposal Review Committee (NSPRC), Japan Proton Accelerator Complex, 2010 – 2013 (one of the 4 international members out of a 20-member committee), Japan
- Invited speaker and participant of a panel study, “Characterizing Materials Damage in Four Dimensions”, sponsored by the Council for the Division of Materials Sciences and Engineering (DMS&E), Office of Basic Energy Sciences (BES), U.S. Department of Energy (DOE), August 16-19, 2009 in Annapolis, Maryland, USA
- Member, Review Committee of Los Alamos Lujan Neutron Science Center, US DOE, Office of Basic Energy Sciences, February 10-12, 2009, Los Alamos, USA
- Chair, Review Committee of the TAKUMI instrument at Japan Proton Accelerator Complex, October 2006, Japan.

Organizer of Conferences/Workshops

- Co-Chair of Gordon Research Conference on Structure Nanomaterials, Hong Kong, 2024.
- International Advisory Committee, International Conference on Neutron Scattering, Buenos Aires, Argentina, 2022.
- Co-Chair (with D. H Yu), QENS-WINS2018, The 13th International Conference on Quasielastic Neutron Scattering, and the 8th Workshop on Inelastic Neutron Scattering, July 15-20, 2018, Hong Kong
- Director, Croucher Summer Course on Neutron Scattering, 2014, 2016, 2018, Hong Kong
- Chair of the inaugural Gordon Research Conference on Neutron Scattering, June 21-25, 2015, the Chinese University of Hong Kong
- Lead organizer (with Brent T. Fultz, M. K. Crawford, and M. D. Lumsden), Symposium on “Neutron Scattering Study of Advanced Materials”, 2013 MRS Fall Meeting, December 1-6, 2013, Boston, USA
- Co-organizer (with M. K. Crawford of Dupont), Energy and Engineering Materials (4 sessions), at American Conference on Neutron Scattering, June 24-28, 2012
- Lead organizer (with Brent T. Fultz and Hahn Choo), Symposium on “Emerging Application of Neutron Scattering in Materials Science and Engineering”, 2009 TMS Annual Conference, February 16-19, 2009, San Francisco, USA

- Co-organizer (with Peter K. Liaw and H. Choo) of ANSWER/MRI Tutorial Series: Neutron and Synchrotron Scattering 101 for Structural Materials Researchers, February 14, 2010 at 2010 TMS Annual Meeting, Seattle, USA
- Member of Program Committee, International Conference on Residual Stress, August 6-8, 2008, Denver, USA
- Member of International Program Committee, International Symposium on Pulsed Neutron and Muon Sciences (IPS08), March 5-7, 2008 in Mito, Japan
- Co-organizer, Educational Symposium on Neutrons for Materials Science and Engineering, April 18, 2007, Oak Ridge, USA
- Co-organizer, Neutron Stress, Texture, and Phase Transformation for Industry, April 19, 2007, Oak Ridge, USA
- Session Organizer, *Neutron Diffraction*, International Collaboration on Advanced Neutron Sources (ICANS XVIII), April 25-30, 2007, Dongguan, China
- Session Organizer, *Engineering/Applications*, American Conference on Neutron Scattering, June 18-22 (2006)
- Session Organizer, *Time-dependent Investigations*, American Crystallography Association Annual Meeting, Hawaii, July 22-27 (2006)
- Co-organizer, *MECA-SENS III*, October 2005, Santa Fe, USA
- Co-organizer, *Symposium on Neutron Diffraction Characterization of Mechanical Behaviors*, 2005 TMS Annual Meeting
- Member of the International Organizing Committee, 7th International Conference on Residual Stress, June 14-17, 2004, Xi'an, China
- Co-organizer, 1st NSF *International Materials Institute Workshop*, November 17-20, 2003, Knoxville, USA
- Co-organizer, *NESSI (NEutron Science Software Initiative) Workshop*, October 13-15, 2003, Oak Ridge, USA
- Co-organizer, *Special MRS Symposium on Emerging Applications of Neutron Scattering In Materials Science and Engineering Research*, Material Research Society, November 27, 2001, Boston, USA
- Co-organizer, Joint Institute for Neutron Sciences Workshops on "*Application of Neutron Scattering to Materials Science and Engineering*", October 1-3, 2001, Oak Ridge, Tennessee, USA
- Program Committee Member, Workshop on *Application of Neutron Scattering in Materials Science and Engineering*, October 1-3, 2001, Joint Institute of Neutron Scattering, Oak Ridge, TN, USA.
- Organizer of a workshop on *Performance Requirement for the SNS Engineering Diffractometer*, January 20-21, 2000, Atlanta, Georgia, USA
- Co-organizer of a workshop on Monte Carlo Simulation of Neutron Beam Optics, January 13-14, 2000, Oak Ridge, TN, USA

As Editor or Member of Editorial Boards

- Guest Editor, Applied Physics A, "Emerging Application of Neutron Scattering in Materials Science and Engineering," Vol 99, pp 515-640 (2010) (with B. T. Fultz and H. Choo)
- Member of the Editorial Board of *Intermetallics*, January 2014
- Guest Editor, Materials Science and Engineering A, "Neutron Diffraction Characterization of Mechanical Behaviors," Vol 437, (2006) (with H. Choo, P. K. Liaw, and C. R. Hubbard)