

**Professional
Honors &
Activities**

- **Member**, *National Academies Panel for Reviewing NIST Materials Measurement Laboratory*, since 2020.
- **Member**, *External Advisory Board, Materials Science Program, University of Rochester*, since 2020.
- **Member**, *National Academies Intelligence Science and Technology Experts Group*, since 2020.
- **Member**, *National Academies Panel on Reviewing U.S. Army Research Laboratory in Materials Science*, since 2018.
- **Member**, *Scientific Advisory Board, Center for Nanomaterials at Argonne National Laboratory*, since 2017.
- **Member**, *Fellows Advisory Committee, National Academy of Inventors (NAI)*, since 2017.
- **Member**, *Technical Advisory Committee of NYS Pollution Prevention Institute (NYSP2I)*, 2016-2017.
- **Member**, *Board of Governors for the New York Sea Grant*, since August 2015.
- **Chair**, *Eugene P. Wigner Distinguished Lecture Series on Science, Technology & Policy Organization Committee*, Oak Ridge National Laboratory, 2013-2014.
- **Chair**, *Liane Russell Distinguished Early Career Fellowship Committee*, Oak Ridge National Laboratory, 2013-2014.
- **Chair**, *ASM's Edward Camille Memorial Lecture Committee* (2013-2015).
- **Chair**, *ASM's Medal for Advancement of Research and Distinguished Life Membership Committee* (2012- 2013).
- **Committee Member**, *ASM's Medal for Advancement of Research and Distinguished Life Membership* (2011-2015).
- **Chair**, *ASM's Fellows Committee* (2011-2012).
- **Committee Member**, *ASM's Fellow Committee* (2009-2012).
- **Awards Committee Member**, *ASM's Edward Camille Memorial Lecture Committee* (2011 - 2013).
- **Chair, Electronics Division**, *American Ceramic Society* (2011-2012).
- **Awards Committee Member**, *ASM's Medal for Advancement of Research* (2011 - to date).
- **Chair-Elect, Electronics Division**, *American Ceramic Society* (2010-2011).
- **Vice-Chair, Electronics Division**, *American Ceramic Society* (2010-2011).
- **Guest Editor**, Special Focused Issue of the Journal of Materials Research, January 2011 on "*Self and Directed Assembly of Materials*".
- **Secretary, Electronics Division**, *American Ceramic Society* (2009-2010).
- **Member, Executive Editorial Board** (2007-2010) of NanoTech Briefs Magazine.
- **Panel of Judges R&D100 Awards by invitation (2000, 2001, 2002, 2003, 2013, 2014, 2015, 2016, 2017, 2018, 2019)**. The R&D 100 Awards given by R&D magazine to recognize the most innovative 100 new technical products introduced in the world for the year in question.
- **Chair and Vice-Chair, Corporate Fellows Council, UT-Battelle/Oak Ridge National Laboratory (2009-2014)**. The Corporate Fellows Council of Oak Ridge National Laboratory consists of the active ORNL staff members who have been designated corporate fellows and senior corporate fellows. The roles of the corporate fellows are (1) To articulate the ideas and concerns of the ORNL scientific and technical staff regarding objectives and directions of the Laboratory, (2) To advise ORNL management on specific scientific and technological issues and

	<p>opportunities, and (3) To serve as a channel for communication between ORNL scientific and technical staff and ORNL senior management.</p> <ul style="list-style-type: none"> • <u>Invited Lecturer</u> for stand-alone, short course on superconductivity at the University of Talca, Chile, December 18-24, Chile, 2000. • <u>Member, Advisory Board</u> for the Materials Research Science & Engineering Center (MRSEC) of Excellence at Carnegie Mellon University (by invitation during years 1999, 2000).
<p>Editorial Boards / Journals</p>	<ul style="list-style-type: none"> • Member, Editorial Board, <i>Nature Magazine's Scientific Reports</i>, since April 2015. • <u>Guest Editor</u>, Special Focused Issue of the Journal of Materials Research, July, 2013 on "<i>Frontiers in Thin-Film Epitaxy and Nanostructured Materials</i>". • <u>Principal Editor, Journal of Materials Research (since 2002)</u> - The journal of Materials Research is widely recognized as one of the top journals in the area of Materials Science & Engineering. • <u>Member, International Editorial Advisory Board (since 2003)</u>, Journal of the Korean Institute of Applied Superconductivity and Cryogenics. This is a leading journal in superconductivity originating from South Korea. • <u>Associate Editor, Journal of the American Ceramic Society (since 2004)</u> – This journal is recognized as one of the top journals in the field of ceramics. (Associate Editor since 6/2004) • <u>Member, Advisory Board, Superconductor Science & Technology (2005-2012)</u> – This journal is recognized as one of the top journals in the field of superconductivity. The journal is published by the Institute of Physics, UK. • <u>Member, Advisory Board (since 2008) of the Journal "Recent Patents on Materials Science"</u>. This journal publishes review articles written by experts in materials science summarizing recent patents on novel materials/inventions/methods/techniques in material science and debuted in January 2008. The journal is published by Bentham Science Publishers, a leading international publisher of high-quality scientific journals and books. Bentham currently publishes 79 titles in 24 disciplines of science. • <u>Program Committee Member</u>, Applied Superconductivity Conference (ASC) 2002. • <u>Program Committee Member</u>, Applied Superconductivity Conference (ASC) 2000. • <u>Technical Advisor</u> from the Superconducting Materials Committee for the TMS publication "<i>Journal of Minerals, Metals and Materials (JOM)</i>" for 93-95.
<p>Conferences / Workshops</p>	<ul style="list-style-type: none"> • <u>International Advisory Committee, "International Workshop on Coated Conductors for Applications" (CCA2020)</u> to be held at Moji, Kitakyushu, Japan, Oct. 12-15, 2020. • <u>Overall Co-Chair or Organizer, 2014 Fall MRS Meeting</u> held in Boston, December, 2014. • <u>International Advisory Committee, International Workshop on Coated Conductors for Applications" (CCA2014)</u> to be held at Jeju Island, S. Korea, Nov. 30 – Dec. 2, 2014. • <u>Co-Organizer of the 2014 RF Mehl Medal Symposium on Frontiers in Nanostructured Materials and their Applications</u> held at the 2014 TMS Meeting, Feb. 16-20, San Diego, CA. • <u>Co-Organizer</u> of the 2012 "Electronic Materials & Applications (EMA) Conference," held Jan 18-20, Orlando, FL, 2012. • <u>International Advisory Committee, International Workshop on Coated Conductors for Applications" (CCA2012)</u> held at Hiedelberg, Germany, Nov. 14-

16, 2012.

- **Co-Organizer** of the 2011 “**Directed Self-Assembly of Materials MRS Workshop,**” held Sept. 28, 2011 - October 1, Nashville, TN, 2011.
- **Co-Organizer** of the 2011 **Acta Met. Gold Award Special Focus Session**, MRS Spring Meeting, San Francisco, April, 2011.
- **International Advisory Committee**, “**International Workshop on Coated Conductors for Applications**” (CCA2010) held at Fukuoka, Japan, Oct. 28-30, 2010.
- **Co-Organizer** of the **Inaugural 2010 Electronic Materials and Applications (EMA2010)** Conference held at Orlando, FL, Jan. 20-22, 2010.
- **Co-Organizer** of **Symposium on Self-Assembly of Materials & Devices** at the 2010 MRS Spring Meeting, San Francisco, CA, April 5-9, 2010.
- **International Advisory Committee**, “**International Workshop on Coated Conductors for Applications**” (CCA2009) held at Barcelona, Spain, Nov. 22-24, 2009.
- **International Advisory Committee**, “**International Workshop on Coated Conductors for Applications**” (CCA2008) held at Houston, TX, Dec. 4-6, 2008.
- **Co-Organizer** of the **15th International Conference on the Textures of Materials (ICOTOM)** Organized by The American Ceramic Society and The Minerals, Metals & Materials Society (TMS), June 1-6, 2008, Carnegie Mellon University Center - Pittsburgh, Pennsylvania, USA.
- **Co-Organizer** of the **2007 International Workshop on Coated Conductors** held in Jeju Island, S. Korea from November 8-10, 2007.
- **Co-Organizer** of **Symposium on Basic and Applied Needs for Superconductors** at the Materials Science & Technology International Conference & Exhibition (MS&T 2007), held September 16-20, in Detroit, MI, 2007.
- **Co-Organizer** of the **2006 International Workshop on Coated Conductors** held in Ludwigsburg, Germany from July 2-6, 2006.
- **Co-Organizer** of **Symposium on High-Temperature Superconducting Wires and Tapes** at the Materials Science & Technology International Conference & Exhibition (MS&T 2006), held October 15-19, 2006 in Cincinnati, OH.
- **Co-Organizer** of **Symposium on Microstructural & textural requirements for Functional Materials** at the Materials Science & Technology International Conference & Exhibition (MS&T 2006), held October 15-19, 2006 in Cincinnati, OH.
- **Co-Organizer** of a **US-Japan Workshop on High Temperature Superconductors at the PACRIM Meeting**, Maui, Hawaii, 2005.
- **Co-Organizer** of **Symposium** titled “**Epitaxial Growth of Oxides, Nitrides, Borides and Carbides,**” 107th Annual Meeting & Exposition of the American Ceramic Society, April, 2005, Baltimore, MD.
- **Co-Organizer** of the **2004 International Workshop on Coated Conductors** held in Tokyo, Japan in November, 2004.
- **Co-Organizer** of **Symposium** titled “**Synthesis, Properties, and Crystal Chemistry of Perovskite Based Materials,**” 106th Annual Meeting & Exposition of the American Ceramic Society, April 18-21, 2004, Indianapolis.
- **Co-Organizer** of **Symposium** titled “**Epitaxial Growth of Functional Oxides,**” 204th Annual Meeting of the Electrochemical Society,” October 12-17, 2003, Orlando, FL.
- **Co-Organizer** of **Symposium** titled “**High Temperature Superconductor Processing**”, at the 105th Annual Meeting & Exposition of the American Ceramic Society, April 27-30, 2003, held in Nashville, TN.

- **Co-Organizer** of the 2002 International Workshop titled "International Workshop on Processing and Applications of Superconductors", Gatlinburg, TN, August 1-2, 2002.
- **Co-Organizer** of Symposium titled "High Temperature Superconductor Processing", at the 104th Annual Meeting & Exposition of the American Ceramic Society, held in St. Louis, MO, April 28-May 1, 2002.
- **Co-Organizer** of Symposium on High Temperature Superconductors at the 2002 TMS Annual Spring Meeting.
- **Co-Organizer** of Symposium titled "Processing of Long Lengths of Superconductors", at the 1993 TMS Annual Fall Meeting, held in Pittsburgh, PA, Oct. 17-21.
- **Guest Editor**, Special Issue of High-T_c Superconductors, *Journal of Minerals, Metals and Materials (JOM)*, August Issue, 1995.
- **Guest Editor**, Special Issue of High-T_c Superconductors, *Journal of Minerals, Metals and Materials (JOM)*, December Issue, 1994.
- **Session Chairman** at numerous symposia in the following conferences from 1992-2013: Materials Research Society (MRS), Technical Materials Society (TMS), American Physical Society (APS), International Cryogenic Materials, Conference (ICMC), Applied Superconductivity Conference (ASC), International Workshop on Critical Currents (IWCC), US-Japan Workshop on High Temperature Superconductivity, International Conference on Textures in Materials (ICOTOM).