

**Calvin L. White**  
**Resume**

**BUSINESS ADDRESS**

Michigan Technological University  
Department of Metallurgical and Materials Engineering  
1400 Townsend Dr.  
Houghton, Michigan 49931  
E-mail [cwhite@mtu.edu](mailto:cwhite@mtu.edu)

**PERSONAL INFORMATION**

Citizenship: USA

**EDUCATION**

**Ph.D., Metallurgical Engineering (October, 1974)**

Michigan Technological University  
Houghton, Michigan

**M.S., Metallurgy and Materials Science (December, 1971)**

University of Minnesota  
Minneapolis, Minnesota

**B.S., Mechanical Engineering, with Honors (June, 1969)**

University of California  
Davis, California

**RESEARCH INTERESTS**

- Study of interfaces in engineering materials, and of the mechanisms by which those interfaces influence their processing and performance.
- The influence of material properties on joining processes.
- Mechanical behavior of materials
- Corrosion and environmental effects on materials

**PERMANENT POSITIONS**

**January, 2014 – Present**

Professor Emeritus/Research Professor  
Department of Materials Science and Engineering  
Michigan Technological University  
Houghton, Michigan 49931

**November, 1986 – January, 2014**

Professor  
Department of Materials Science and Engineering  
Michigan Technological University  
Houghton, Michigan 49931

**August, 1996 - October 2002**

Department Chair  
Department of Materials Science and Engineering  
Michigan Technological University  
Houghton, Michigan 49931

**November, 1974 - November, 1986**

Research Staff  
Metals and Ceramics Division  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee 37831

**PART TIME, ADJUNCT AND VISITING APPOINTMENTS****August, 2003 – May, 2004**

Visiting Professor, Institute of Materials Technology, Norwegian University of Science and Technology, Trondheim, NORWAY

**March, 1997**

Visiting Professor, Programa de Engenharia Metalurgica e de Materiais, Universidade Federal do Rio de Janeiro, Rio de Janeiro, BRAZIL

**June - July, 1989**

Visiting Distinguished Professor, Department of Materials Engineering, University of Alabama at Birmingham, Birmingham, Alabama 35294

**January, 1985 - January, 1988**

Adjunct Associate Professor, Department of Materials Science and Engineering, The University of Tennessee, Knoxville, Tennessee

**September, 1977 - September, 1986**

Adjunct Professor, Department of Mechanical Engineering and Materials Science, Vanderbilt University, Nashville, Tennessee

**February, 1983 - August, 1983**

Visiting Professor, Programa de Engenharia Metalurgica e de Materiais, Universidade Federal do Rio de Janeiro, Rio de Janeiro, BRAZIL

**CONSULTING (partial)**

- Metals and Ceramics Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831
  - Grain boundary segregation in intermetallic compounds.
- US Army Tank Automotive Research Engineering and Development Laboratory (TARDEC), Warren, Michigan, 48397-5000
  - General metallurgical and selected materials joining issues
- VanAire, Inc., Gladstone, MI
  - Hydrogen embrittlement testing
- Clean Green Energy LLC, Brighton, MI
  - Mechanical testing of PMC's for wind turbine applications
- Accuride Corporation, Henderson, KY
  - Aluminum alloy corrosion & fatigue

**PANELS, COMMITTEES, AND WORKSHOPS**

- U. S. Department of Energy, OBES/DMS Workshop on “Time Dependent Fracture of Materials at Elevated Temperatures,” Feb. 15-16, 1979. Proceedings available through NTIS, CONF 790236/UC-25.
- U. S. Department of Energy, OBES/DMS Workshop on “Micromechanics and Physics of Fracture,” July 28 - Aug. 2, 1985. Panel Report published in Materials Science and Engineering, 94, 1-69 (1987).
- United States/India Scientific and Cultural Program (1989). Member of the U. S. Visiting Team assigned to visit Indian educational institutions and report on the feasibility of establishing a joint U. S./India research program to measure grain boundary and surface energies in metals and ceramics using PL-480 Funds.
- Second International Conference on Fundamentals of Fracture, Gatlinburg, Tennessee, Nov. 4-7, 1985 (Member of Local Organizing Committee).
- Acta Metallurgica et Materialia/Scripta Metallurgica et Materialia Outstanding Paper Judging Panel, 1989 - 1992.
- NSF-DMR Site Visit Panel for Lehigh University MRL Proposal, 1990.
- NSF-DMR Site Visit Panel for Lehigh University MRL Proposal, 1991.
- NSF-DMR Review Panel for Academic Research Infrastructure Program, 1992.
- NSF-MPM Review Panel, 1997
- NSF-DMR Educational Proposal Review Panel, 1999
- ABET Program Evaluator, Metallurgical and Materials Engineering (9 program visits since 2000)

**PROFESSIONAL SOCIETIES**

- ASM International (formerly American Society for Metals), Member since 1979
- The Metals, Mineral, and Materials Society (formerly The Metallurgical Society), Member since 1976
- Materials Research Society (member since 1992)
- American Welding Society (member since 1988)
- Sigma Xi (member)
- Alpha Sigma Mu National Honor Society for Materials Science and Engineering (Board of Directors 2009-present, Secretary/Treasurer 2010-2013)
- Tau Beta Pi National Engineering Honor Society (member)

**AWARDS/RECOGNITIONS**

- Distinguished Life Member of Alpha Sigma Mu - 2013
- Fellow of Alpha Sigma Mu - 2012
- ISI Highly Cited Researcher – Materials Science (A0342-2003-J)
- American Men and Women of Science
- Fellow of ASM International – 1999
- Who’s Who in Science and Engineering
- Michigan Association of Governing Boards of State Universities Distinguished Faculty Award Recipient – 1997
- Michigan Technological University Faculty Research Award – 1996

- Department of Energy Materials Sciences Research Competition, award for research having “Significant Implication for Energy Technology,” (with C. T. Liu and J. A. Horton, Jr.) - 1984
- International Metallographic Exhibit, First in Class -1982

**PUBLICATIONS/CITATIONS:** >100 technical publications, complete list available on request (>50 archival journals, >1700 citations)

**RESEARCH:** Sponsors include NSF, DOE, NASA, Ford, AC Rochester, Dow Chemical, Hydro Aluminium, ILZRO, WRC, EWI, EPRI, Battelle Memorial Institute, The Nippert Co., DCT Corporation

**PATENTS:** “Thorium Doped Iridium Alloy for Radioisotope Heat Sources”: C. T. Liu, H. Inouye, A. C. Schaffhouser, and C. L. White, U. S. Patent 4,253,872 issued March 3, 1981.

**GRADUATE STUDENTS ADVISED:** 8 PhD, 7 MS