

Edward D. Herderick

Profile: Ed Herderick is the Additive Technologies Leader for GE Corporate Supply Chain and Operations. As a member of GE's Corporate advanced manufacturing initiatives group, he is responsible for leading efforts to increase the speed and depth of additive manufacturing insertion across the GE supply chain. His activities include guiding our GE Industrial businesses through strategic planning and additive technology maturation as well as teaching and educating on the latest in 3D printing.

Ed joined GE in 2014 after having led new product development as Director of R&D at additive technology startup rp+m in Cleveland, Ohio. Prior to that, he was Director of the Additive Manufacturing Consortium at EWI in Columbus, Ohio. In addition to his additive work, he has led efforts developing ceramics technologies for extreme environments for gas turbines and nuclear power generation. Ed is a lifelong Buckeye, born and raised in Columbus, Ohio and received his BS, MS, and PhD in materials science and engineering from The Ohio State University. During his graduate work, Ed was a visiting scholar at the National Chemical Laboratory in Pune, India. After finishing his PhD, Ed served as the Materials Societies Congressional Fellow in the Washington, DC office of Ohio Senator Sherrod Brown.

He is an active member of the global materials engineering community serving on the board of directors of The Minerals, Metals, and Materials Society as well as serving as a trustee on the TMS Foundation board. He lives in Cincinnati with his wife and two daughters.

Work Experience

GE Corporate Supply Chain and Operations, Cincinnati, OH (October 2014 – Present)

Additive Technologies Leader, Advanced Manufacturing Initiatives Group

Ed's role has two main parts: 1) Leverage the GE Store to accelerate implementation of additive technologies while driving coordination and planning across all industrial businesses and with GRC; and 2) Support the launch of the new corporate additive center, CATA, through technology roadmapping, staff onboarding and business planning.

Rapid prototype + manufacturing (rp+m), Avon Lake, OH (October 2013 – September 2014)

Director of R&D

Rp+m is focused on sustainable growth driven by world leading technical excellence in the broad field of additive manufacturing including ceramics, metals, polymers and composites.

Ed was responsible for all efforts to drive new product development to serve external and internal customers.

EWI, Columbus, OH (October 2010 – September 2013)

Director, Additive Manufacturing Consortium (AMC)

The AMC is focused on bringing together a diverse group of industry, small business, government, and academic stakeholders to develop projects and recommendations that have the potential to significantly impact the state of the art in AM. This is accomplished through joint industry and government projects, technology demonstrations, and quarterly meetings. Ed led the AMC team on a rebranding and revitalization initiative that launched new programs and culminated in a multi-million dollar project award: *Holistic Approach to Solving Measurement Science Challenges in Additive Manufacturing*

Materials Societies (ACerS, TMS, MRS) Congressional Fellow, Washington, DC (Sept 2009 – 2010) Office of Senator Sherrod Brown

National Chemical Laboratory, Pune, India (August 2006 – September 2006)

Visiting Scholar, IGERT International Internship

The Ohio State University, Columbus, OH (Winter 2005 – August 2009)

IGERT Fellow

Dissertation: Synthesis, Characterization, and Properties of Novel Metal-Oxide-Metal Heterojunction Nanowires with Ferroelectric Functionality, Advisor: Professor Nitin P. Padture

LEADERSHIP AND OUTREACH

The Minerals, Metals & Materials Society (TMS), Warrendale PA

Chair, Public and Government Affairs (P&GA) Committee (Board of Directors level position)

Trustee, TMS Foundation

TMS is the professional organization for those around the world dedicated to the science and engineering fields concerned with minerals, metals and materials. TMS members number nearly 13,000, live in 94 countries on six continents, and include engineers, scientists, researchers, educators, administrators and students. 43% of TMS professionals hail from industry, 39% from academia and 13% from government. It has an annual budget in excess of \$7M.

- Ed's role on the board of directors is to guide strategic planning for TMS including guiding a 4,000+ attendee annual meeting, expanding diversity in the materials field, and STEM education and outreach.
- As a member of the foundation board of trustees, Ed joined an effort in 2014 to revitalize the charitable arm of TMS that provides scholarships and travel grants to students, leadership and professional development, and awards. A deliberate and

focused appeal to members resulted in a 129% donation increase in 2014 compared to 2013.

- As Chair of P&GA Ed leads a volunteer committee responsible for interviewing and selecting Congressional Fellows, coordinating STEM education outreach to decision makers, and developing non-partisan policy positions.

EDUCATION

The Ohio State University, Columbus, OH

- PhD, Materials Science and Engineering
- M.S., Materials Science and Engineering
- B.S., Materials Science and Engineering

HONORS AND AWARDS

- Richard M. Fulrath Award from American Ceramic Society 2014
- Emerging Leaders Alliance TMS delegate 2012
- American Ceramic Society Young Leader 2012
- Materials Societies Congressional Fellow 2009 – 2010

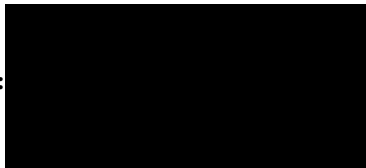
Publication Summary

- 2 book chapters: "Industrial Implementation of Additive Manufacturing" in *Additive Manufacturing* (2015) and "Joining of Ceramics" in *The Welding Handbook, 9th ed.* (2015)
- 12 authored or co-authored journal publications and several patent applications.
- Organized article series "Progress in Additive Manufacturing" in the Journal of the Minerals, Metals & Materials Society, 2015 and 2016

Committee on Energy and Commerce
U.S. House of Representatives
Witness Disclosure Requirement - "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

1. Your Name: Edward D. Herderick		
2. Your Title: Additive Technologies Leader		
3. The Entity(ies) You are Representing: GE		
4. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No N
5. Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2013. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.		
6. Please attach your curriculum vitae to your completed disclosure form.		

Signature:



Date: 2/24/2016