

# STEVEN C. JOHNSON, Ph.D.

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## **Professional Preparation**

University of Wisconsin-Madison	Metallurgical Engineering	B.S.	1983
The Ohio State University	Materials Science and Engineering	M.S.	1993
The Ohio State University	Materials Science and Engineering	Ph.D.	1997

## **Appointments**

**2016 – present**    **Central Connecticut State University**, New Britain, CT  
*Associate Professor* (tenured), Engineering Department, School of Engineering, Science, & Technology, 2021 to present.  
*Assistant Professor*, 2016 to 2021.

**University of Connecticut**, Storrs, CT  
*Research Scientist*, Institute of Materials Science, 2019 to present.

**2009 – 2015**    **Westinghouse Electric Company, LLC**, Columbia, SC  
*Principal Materials Engineer*, in the PWR Fuel Technology group, Engineering Center of Excellence.

**2000 – 2009**    **The Pennsylvania State University**  
**DuBois Campus**, DuBois, PA  
*Instructor in Engineering and Program Coordinator*, in the University College and School of Engineering Design, Technology, and Professional Programs, 2004 to 2009.

**The Applied Research Laboratory**, State College, PA  
*Research Associate* in the Metals and Ceramics Processing Department, Materials Processing Division, 2000 to 2004.

**1997 – 2000**    **The Boeing Company**, Seattle, WA  
*Lead Engineer - Materials Analysis Laboratories* in the Metallurgy Group of Boeing Material Technology, Boeing Commercial Airplane division.

**1989 – 1996**    **The Ohio State University**, Columbus, OH  
*Graduate Research Associate* in the Department of Materials Science and Engineering.

**1986 – 1989**    **Praxair Surface Technologies, Inc**, Indianapolis, IN  
*Development Engineer*

**1984 – 1986**    **Wagner Castings Company**, Decatur, IL  
*Ductile Foundry Metallurgist*, 1986.  
*Supervisor - Research and Product Development*, 1984 to 1986.

## **Products**

1. **Steven C. Johnson** and William A. Caron, “Research Towards Sintering Improvement During Press and Sinter Processing of Mg and Mg Alloy Powders”, *Magnesium Technology 2024*, The Minerals, Metals & Materials Series, A. Leonard et. al. (eds.) (February 03, 2024), pp. 117 - 120, [https://doi.org/10.1007/978-3-031-50240-8\\_25](https://doi.org/10.1007/978-3-031-50240-8_25).

2. **Steven C. Johnson** and William A. Caron, “Research into Near Shape Processing of Magnesium and Magnesium Alloy Powders”, Powder Metallurgy & Particulate Materials - 2021, Metal Powder Industries Federation, G. Falleur and R. Warzel eds., ISBN 978-1-943694-27-3 (September 2021) pp. 463-473.
3. **Steven C. Johnson**, Corey D. Clark, and Jason S. Alvarez, “Development and Analysis of Al7075 Alloy Materials Using Press and Sinter Processing”, *Light Metals 2020*, The Minerals, Metals & Materials Series, A. Tomsett (ed.) (February 2020) pp. 233-240, [https://doi.org/10.1007/978-3-030-36408-3\\_33](https://doi.org/10.1007/978-3-030-36408-3_33).
4. P. Ashcheulov, R. Skoda, J. Skarohlid, **S.C. Johnson**, et.al., “Thin polycrystalline diamond films protecting zirconium alloy surfaces: From technology to layer analysis and application in nuclear facilities”, *App. Sur. Sci.*, v359 (30 December 2015) pp. 621-628.
5. **Johnson, S.C.**, Henry, R.E., and Paik, C.Y., “Severe Accident Modeling of a PWR Core with Different Cladding Materials”, paper 12175, Proceedings of the 2012 International Congress on the Advances in Nuclear Power Plants (ICAPP 2012), American Nuclear Society, (June 2012) pp. 1-9.

### **Other Significant Products**

1. G.S. Mazzi and **S.C. Johnson**, “Effect of Processing Parameters on Mechanical Behavior and Structure of FDM Printed Polylactic Acid and Carbon Fiber Polylactic Acid Composites” NASA CT Space Grant Consortium award P-1854, Student Poster Presentations, Hartford, CT, November 2023.
2. **S.C. Johnson** and W.S. Caron, “Towards Improved Understanding of Press and Sinter Processing of Mg and Mg Alloy Powders”, Poster E-28, TMS2023 Annual Meeting & Exhibition, San Diego, CA, 20 March, 2023.
3. **Steven C. Johnson** and Dylan G. Goncalves, “Magnesium and Magnesium Alloy Powder Processing Towards the Development of Near Shape Structural Materials”, *Magnesium Technology 2021*, The Minerals, Metals & Materials Series, V.M. Miller et. al. (eds.) (March 2021) pp. 115 - 123, [https://doi.org/10.1007/978-3-030-65528-0\\_18](https://doi.org/10.1007/978-3-030-65528-0_18)
4. **S.C. Johnson**, H. Patts, and D.M. Schuler, “Mechanical Behavior of SiC<sub>f</sub>/SiC CMC Tubes Relative to Nuclear Fuel Cladding”, paper 14348, Proceedings of the 2014 International Congress on the Advances in Nuclear Power Plants (ICAPP 2014), American Nuclear Society, (April 2014) pp. 2287-2295.
5. **S.C. Johnson**, J. Liu, and H.A. Kuhn, “Microstructure and Mechanical Properties of 3DP™ Processed M4 Tool Steel”, *Advances in Powder Metallurgy & Particulate Materials – 2007*, Metal Powder Industry Federation, pp. 7-95 – 7-105 (2007).

### **Synergistic Activities**

1. National Science Foundation, reviewer for various programs (2005 –present)
2. TMS Light Metals Division, Magnesium committee, voting member (2021 – present)  
Magnesium Technology 2024, Session Chair (2024)
3. United States Advanced Ceramics Association (USACA), corporate representative (2010 – 2015)  
Executive Committee, vice-Chair (2014 – 2015)
4. ASTM International, committee C28 Advanced Ceramics, voting member (2013 – 2015)

### **Collaborators & Other Affiliations**

S. Chakraborty, Central Connecticut State University; Wayne Daye, Kymera International; Sanjeev K. Nayak, University of Connecticut; Rajiv Tandon, Luxfer Magtech; Damien Mangabhai, Coogee Metal Powders

*Complete CV available upon request.*