



# MECHANICAL & MATERIALS COLLOQUIUM

## Twenty Years Without Tenure: A Journey Through Teaching, Research, and Service in Materials Science

*by Dr. Gerald R. Bourne*

*The George S. Ansell Department of Metallurgical and Materials Engineering, Colorado School of Mines*

In academia, tenure is often seen as the ultimate goal—a milestone that defines career success. However, my journey over the past two decades has taken a different path, one that has been rich with professional fulfillment, meaningful contributions, and continuous growth, all without pursuing tenure. In this talk, I will share my experiences navigating a career focused on teaching, research, and service in the field of materials science and engineering. From my early days as a research assistant at the University of Florida to my current role as a teaching professor and associate department head at the Colorado School of Mines, I will discuss the challenges and opportunities that come with choosing a non-tenure-track academic career.

Key topics will include the evolving role of teaching faculty, strategies for maintaining a strong research portfolio, and the importance of mentorship, industry collaboration, and curriculum development. I will also highlight how my passion for metallurgy, student engagement, and the development of open educational resources (OER) has shaped my career trajectory. Through personal stories and lessons learned, this seminar aims to provide graduate students with insights into alternative career paths in academia and encourage them to find fulfillment beyond traditional expectations.

Whether you are considering a tenure-track position or exploring other avenues, this talk will offer practical advice and inspiration for forging a rewarding and impactful career in materials science and engineering.

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Gerald Bourne grew up in a small town in eastern Connecticut, and then moved to Florida where he eventually attended the University of Florida and earned his B.S., M.S. and Ph. D. Dr. Bourne was a faculty member at UF in the MSE Department for five years where he was very instrumental in the development of undergraduate classes and laboratory activities.

In 2011, Dr. Bourne moved to the Colorado School of Mines. He is currently the Charles F. Fogarty endowed chair professor and the Associate Department Head professor in the Department of

Metallurgical and Materials Engineering (MME) at the Colorado School of Mines. He has won several awards chosen by the students at Mines, and he serves as the main advisor for the undergraduate program in MME. In addition to teaching and advising, Dr. Bourne supervises the operation of the Physical Metallurgy Laboratory at Mines.

His research interests included materials characterization using optical and electron microscopy, focused ion beam microscopy, electron and x-ray diffraction, energy dispersive spectroscopy, nanoindentation, nano-wear testing, and recent pedagogy in materials engineering. He has authored and co-authored over 40 peer-review scientific journal publications and he has been referenced over 1500 times. When not at work, he can be found at his mountain home, in his garage, working on one of his many broken-down cars, or attending student events at Mines.



Place:  
EC 1113

Time:  
2:00-3:15PM

Jan 28th, 2024

For questions, comments and suggestions, contact Colloquium Organizers Dr. Benjamin Boesl ([bboesl@fju.edu](mailto:bboesl@fju.edu)) or Dr. Jiuhua Chen ([chenj@fju.edu](mailto:chenj@fju.edu))