



MECHANICAL & MATERIAL COLLOQUIUM

Innovations in High-Efficiency Air Conditioning and Energy Storage by Daniel Betts (Blue Frontier, Industrial Speaker)

This seminar will present the innovative air conditioning technology developed by Blue Frontier, Inc., led by its CEO and Founder, Dr. Daniel Betts. Blue Frontier's system, recognized with the **2026 AHRI Product of the Year Award** and the **R&D 100 Award** last year, represents a major advancement in cooling technology by achieving up to three times the efficiency of conventional air conditioning systems while integrating energy storage capabilities. The seminar will explain how this novel system operates, highlight the key differences between Blue Frontier's technology and traditional air conditioners, and discuss its broader significance for energy efficiency and sustainability. In addition, the talk will explore the entrepreneurial journey behind developing this technology in South Florida and the process of transforming engineering innovation into successful commercial products. The discussion will be framed through both strategic engineering and business perspectives. Dr. Betts holds a Ph.D. in Mechanical Engineering with a concentration in Thermal Sciences from the University of Florida, as well as an MBA from UF.

Dr. Daniel Betts is the CEO and co-founder of Blue Frontier, a South Florida cleantech company revolutionizing air conditioning with ultra-efficient systems and integrated energy storage. Under his leadership, Blue Frontier transitioned from lab innovation to commercialization, raising \$47.8M in venture capital, including funding from Bill Gates' Breakthrough Energy Ventures. Recognized with awards like the 2023 Climate Tech Company To Watch by MIT Technology



Review and Florida Atlantic University's Distinguished Entrepreneur in 2024, Dr. Betts has over 25 years of experience in energy technology. A prolific inventor with 20+ patents, he holds a Ph.D. and MBA from the University of Florida.

*For questions, comments and suggestions, contact Colloquium Organizers
Dr. Saja AL Rifai (salrifai@fiu.edu) or Dr. Jiuhua Chen (chenj@fiu.edu)*

Place:
EC 1110

Time:
2:00-3:15PM

March 10, 2026