Adam M. Boies

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Department of Mechanical Engineering, Building 530, 440 Escondido Mall, Stanford, CA 94305

Associate Professor **2024-Present**
Department of Mechanical Engineering, Stanford University
Professor in Nanomaterials and Aerosol Engineering 2020-2024
Head of Energy Faculty Group (12 Faculty, 70 Researchers) 2020-2024
Reader (Assoc. Prof.) 2017-2020
Lecturer (Asst. Prof.) 2011-2017
Department of Engineering

Fellow Trinity College Cambridge **2012-Present**
Cambridge University, UK

Education

University of Minnesota
Ph.D. Mechanical Engineering **(3.9/4.0)** 2010
Thesis: ***Gas-Phase Synthesis of Composite Nanoparticles via Decoupled Processes***
Advisor: Professor Steven L. Girshick, High Temperature Plasma Laboratory
3M Science and Technology Fellow (2006-2010)
University of Missouri Science and Technology
M.S. Mechanical Engineering **(4.0/4.0)** 2004
B.S. Mechanical Engineering **(*magna cum laude*)** 2003

Research Activities

Aerosol, energy and environment research of particle-laden flows using experimental, continuum simulations and molecular modelling for material synthesis and sensing applications. Previous Head of Energy Faculty Group coordinates research in combustion, fluids, plasmas, energy conversion and storage systems housing the Master of Philosophy in Energy Technologies and Nuclear Energy.

https://aneestanford.com/research

Selected Honors and Awards

Aerosol Science Excellence in Research (JASER) Award (2023), James Dyson Innovation Award for development of a milli-CPC (2020), Environmental Science & Technology Excellence Award (2015),Doctoral Dissertation Fellowship – Awarded to top UMN PhD candidates (2009, 150 awarded from ~900), 3M Science and Technology Fellowship (12 of ~300).

Journal Publications (>100)

https://aneestanford.com/boies-publications

Patents (>20)

https://aneestanford.com/patents

Invited Talks (recent)

2024 Armourers and Brasiers Forum, "Climate Constructive Carbons: can we turn waste to wonder?"
2022 Princeton University, "Floating Catalyst Synthesis of Bulk Carbon Nanotubes Optimizing Kinetics and Catalytic Control for Quality and Quantity" Princeton, NJ.
2022 Stanford University, "Methane Pyrolysis for Sustainable Materials" Palo Alto, CA.
2022 Washington University, "High Performance Carbon Materials" St. Louis, MO.
2022 UC Berkeley, "How Will Particles, Pathogens and Pollutants Be Characterized in the Post Pandemic World?" Berkeley, CA.
2022 MIT, "Floating Catalyst Synthesis of Bulk Carbon Nanotube Materials from Methane" Boston, MA.