

Materials Professor Tresa Pollock Awarded ASM Gold Medal

☒ [Tresa Pollock](#), professor and chair of the [Materials Department](#) at UC Santa Barbara, has been awarded the Gold Medal by [ASM International](#). ASM awards recognize achievements of members of the materials science and engineering community.

Pollock has been recognized for "enlightenment of the microstructure, processing, and property relationships of structural alloys, and for imparting that knowledge to her students and other technologists in industry, universities, and national laboratories." Pollock is a renowned expert in the science and technology of advanced structural alloys with applications in aerospace, energy and automotive industries. She holds a PhD from MIT and began her career at GE Aircraft Engines, where she worked in the development of advanced superalloys for gas turbine engines.

Pollock's current interests include the mechanical and environmental performance of materials in extreme environments, unique high temperature materials processing paths, ultrafast laser-material interactions, alloy design and 3-D materials characterization. Her recent research is in the areas of thermal barrier coatings systems and platinum group metal-containing bond coats, new intermetallic-containing cobalt-base materials, vapor phase processing of sheet materials for hypersonic flight systems, growth of nickel-base alloy single crystals with a new liquid tin-assisted Bridgman technique, development of new femtosecond laser-aided 3-D tomography techniques and development of models for Integrated Computational Materials Engineering efforts.

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