



## Barbara J. Arnold

Barbara Arnold is Chair of Mining Engineering and Professor of Practice in Mining Engineering at Penn State, with over 30 years of experience in the coal and mineral industries. She holds a B.S. (Mining Engineering), M.S. (Mineral Processing), and Ph.D. (Mineral Processing) from Penn State. For over 20 years, she represented several coal and mineral processing equipment companies in the US and consulted with coal companies and engineering contractors to develop flowsheets for new coal preparation plants, and plant retrofits through her company, PrepTech, Inc.

Much of her research experience has focused on coal properties and their effects on coal processing, especially in the areas of froth flotation and dewatering. She is a recognized international expert in coal preparation. Dr. Arnold currently works with Penn State's Center for Critical Minerals (C<sup>2</sup>M), conducting research related to the recovery of rare earth elements and other critical minerals from coal and coal waste materials. Her other research is focused on respirable dust and the beneficial use/revalorization of mine tailings.

Dr. Arnold is a Penn State Alumni Fellow, Society for Mining, Metallurgy, and Exploration (SME) Fellow, and American Institute of Mining, Metallurgical, and Petroleum Engineers Honorary Member. She is the recipient of the Frank F. Aplan Award from SME-AIME, the Percy W. Nicholls Award from AME/ASME, and, most recently, the Howard N. Eavenson Award from SME-AIME.

She is the Secretary of the Coal Preparation Society of America and serves as its representative to the International Organizing Committee for the International Coal Preparation Congress. Recently, she became Editor-in-Chief of the International Journal of Coal Preparation and Utilization. She served as the 2018 SME President and is a registered Professional Engineer in the Commonwealth of Pennsylvania.