

Session VII: Process Technology

Surfactants, grind aids and defoamers in waterborne applications

Viru Shah

ex-Air Products and Chemical Inc., USA

Mr. Shah received his M.S. in chemistry from Pratt Institute, NY. He did his postgraduate course work in polymer science at Brooklyn Polytechnic College, NY.



Mr. Shah has 36 years experience in applications and new product development in emulsions, surfactants and water soluble polymers. The first 18 years of his career were spent in emulsion and water soluble polymer applications in adhesive, pigment dispersion and coating industries. Later he was responsible for application development of new surfactants and defoamers for waterborne applications. He worked for Air Products and Borden Chemicals. Mr. Shah has written several papers on role of surfactant in waterborne systems.

Mr. Shah has retired and works as a consultant for additives applications for waterborne systems.

Abstract:

Surfactants are widely used in dye and pigment manufacturing and applications as defoamers, dispersing agents, process aids and wetting agents.

This presentation will discuss following topics:

- Surface tension definition and measurement techniques
- Dynamic surface tension and its application
- Surfactants structure/performance
- Types of surfactants
- Surfactant characteristics
- Foam destabilization
- Classes of defoamer
- Dyes and pigment dispersion
- Pigment stabilization