## DISCUSSION GROUP P9 ON ENERGY SAVINGS THROUGH FACILITY ORGANIZATION



Joseph A. (Joe) Silvaggio, Jr., Coordinator, is Manager, Pump Projects and Engineering at Siemens Demag Delaval Turbomachinery, Inc., Trenton, New Jersey, and has been with them since 1968. His past experience at Demag Delaval includes the areas of aerodynamics, flow analysis, seal development, design of centrifugal compressor stage elements, centrifugal pump design and flow analysis, boiler feedpump design and analysis, and testing of steam turbines.

Mr. Silvaggio holds both B.S. and M.S. degrees (Mechanical Engineering) from the University of Pennsylvania. He has written and coauthored numerous technical publications, and is a member of the International Pump Users Symposium Advisory Committee.



**Chris Zielewski**, Coordinator, is a Senior Staff Engineer with ExxonMobil Chemical currently working as a machinery group leader in the Baton Rouge Refinery. His past assignments have included project engineering and energy conservation. For the last 25 years he has worked as a machinery engineer in Olefins Cracking Units, Utilities, Cat and Hydro Cracking Units, and Synthetic Rubber Units. His area of expertise ranges from small metering pumps, thru ANSI, UMD, API pumps, vessel mixers and CT Fans to reciprocating compressors, integral gas engines, 500-20,000 HP range of Centrifugal Compressor and gas turbines in both mechanical drive and Cogen applications.

Mr. Zielewski graduated from Rutgers University with a B.S. degree in Mechanical Engineering.