

Brief Resume:

Paul Cooper has 59 years' experience in the design and development of centrifugal pumps, most recently as a consultant for the Flowserve Corporation and others for the past 19 years. Prior to that he specialized in pump hydraulics R&D for Flowserve's predecessor companies IDP and Ingersoll-Rand for 22 years, serving as Director of R&D and also of Advanced Technology. During that time and up to the present, he has specialized in design improvements that have increased the life of high-energy pumps exposed to cavitation. He has also developed performance prediction methods for pumping multiphase fluids in screw pumps. Prior to that he was the hydraulic designer of aircraft fuel pumps and inducers and down-hole centrifugal oil-field pumps for 18 years at *TRW, Inc.* He holds a B.S. in M.E. degree from Drexel University, an M.S. in M.E. degree from M.I.T. and a Ph.D. in Engineering degree from Case Western Reserve University. He holds a dozen patents relating to pump technology; has authored over 50 technical papers and articles; and is a co-editor of the McGraw-Hill *Pump Handbook*. He is a Fellow of the ASME and throughout his career has organized ASME sessions and symposia on pumping machinery.

