James J. Riley is a Professor Emeritus in Mechanical Engineering at the University of Washington. Until his recent retirement, he was the inaugural PACCAR Professor of Engineering at the University. He received his PhD from the Johns Hopkins University in 1972, having worked under the guidance of Stanley Corrsin. After a year as a post-doctoral fellow at the National Center for Atmospheric Research, he spent ten years in industry at Flow Research Company in Kent, Washington, ultimately as the Director of the Fluid Mechanics Division. He joined the University of Washington in 1983, where he has been a Professor in the Department of Mechanical Engineering, and an Adjunct Professor in both the Departments of Applied Mathematics and of Aeronautics and Astronautics. While on sabbatical at the Joseph Fourier University in Grenoble, France, Riley occupied the Visiting Chair in Industrial Mathematics. More recently he was a Senior Fellow at the Isaac Newton Institute for the Mathematical Sciences at Cambridge University. Riley's research interests have included particle dispersion in turbulent flows, waves and turbulence in stably-stratified and in rotating fluids, boundary layer and shear layer transition and turbulence, fluid/compliant surface interactions, and chemically-reacting turbulent flows. He is an associate editor of the Journal of Fluid Mechanics and of the Journal of Turbulence, and until recently was a member of the editorial boards of the Annual Review of Fluid Mechanics and of the Applied Mechanics Reviews. Riley is a member of the National Academy of Engineering, and of the Washington State Academy of Sciences.