Prof. Michael Corradini
Chair of the Department of Nuclear Engineering and Engineering Physics at the University of Wisconsin - Madison
Recent Chair of the Nuclear Waste Technical Review Board (NWTRB)

Tuesday January 27, 2003
Innsbrook Technical Center - Richmond, VA

"HIGH-LEVEL NUCLEAR WASTE DISPOSAL CURRENT STATUS and FUTURE ISSUES"

In 1982, the US Congress enacted the High-Level Waste Policy Act and amended it in 1987. In those landmark pieces of legislation, the federal government agreed to take possession of high-level nuclear waste (HLW - reprocessed and unreprocessed spent fuel) and safely dispose of it via underground geological disposal. Since that time the Yucca Mountain site, southwest of the Nevada Nuclear Test Range has been extensively studied by the Department of Energy and its contractors to determine if it is a potentially suitable site for HLW disposal. In 2002, the Secretary of the Department of Energy recommended to the President and the Congress that the site was indeed suitable and after Presidential approval, Nevada veto and Congressional override, the Yucca Mountain site obtained a Site Suitability Recommendation. This talk will briefly review this history and examine the key technical and policy issues that are outstanding as the Yucca Mountain Repository submits its safety case to the USNRC for license approval and eventual operation.

Michael L. Corradini is Chair of Engineering Physics and Wisconsin Distinguished Professor of Nuclear Engineering and Engineering Physics at the University of Wisconsin-Madison. He served from 1995 to 2001 as Associate Dean for the College of Engineering. He also holds appointments in the Department of Mechanical Engineering and Institute of Environmental Studies. Previously, at Sandia National Laboratories he was principal investigator for the LWR vapor explosion research for the USNRC as well as other severe accident research. He was chosen as a NSF Presidential Young Investigator in Nuclear Reactor Safety in 1984. He has been a consultant for fifteen years to the NRC Advisory Committee on Reactor Safeguards in severe accidents, containment systems, and multiphase flow as well as many DOE National Laboratories, the AECL and CEC. He was Vice-Chairman of the 1985 NRC Steam Explosion Review Group and other NRC safety review panels. He has published widely in areas related to vapor explosion phenomena, jet spray dynamics, and transport phenomena in multiphase systems. He was elected a 1990 Fellow of the American Nuclear Society. In 1998, he was elected to the National Academy of Engineering. He was also served as a presidential appointee in 2002 and 2003 as the chairman of the Nuclear Waste Technical Review Board (a separate government agency).