Abstract: An integrated R&D program is being conducted to study, qualify, and in some cases, develop materials with required properties for the reactor systems being developed as part of the U.S. Department of Energy's Generation IV Reactor Program. The goal of the program is to ensure that the materials research and development (R&D) needed to support Gen IV applications will comprise a comprehensive and integrated effort to identify and provide the materials data and its interpretation needed for the design and construction of the selected advanced reactor concepts. The major materials issues for the five primary systems that have been considered within the U.S. Gen IV Reactor Program—very high temperature gas-cooled, supercritical water-cooled, gas-cooled fast spectrum, lead-cooled fast spectrum, and sodium-cooled fast spectrum reactors—are described along with the R&D that has been identified to address them.

Biosketch: WILLIAM R. CORWIN is currently the National Director of Gen IV (fission nuclear reactors) Materials Technology Program. He holds an M.S. degree in Metallurgy and Materials Science from M.I.T. in 1974. His research interests are in Environmental fatigue crack propagation, irradiation effects on fracture, and Management of diverse materials development and evaluation investigations for national security. He has managed several materials programs prior to the current assignment, including the heavy steel section irradiation and the Defense materials programs at Oak Ridge National Laboratory.

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All faculty, teaching assistants, students, and guests are welcome to this event.
(Refreshments will be served.)