

*Scientific
Research*





Richard J. Norby, Environmental Sciences

For outstanding leadership in research culminating in the publication of a seminal paper in the Proceedings of the National Academy of Sciences on the response of forest tree roots to elevated atmospheric CO₂



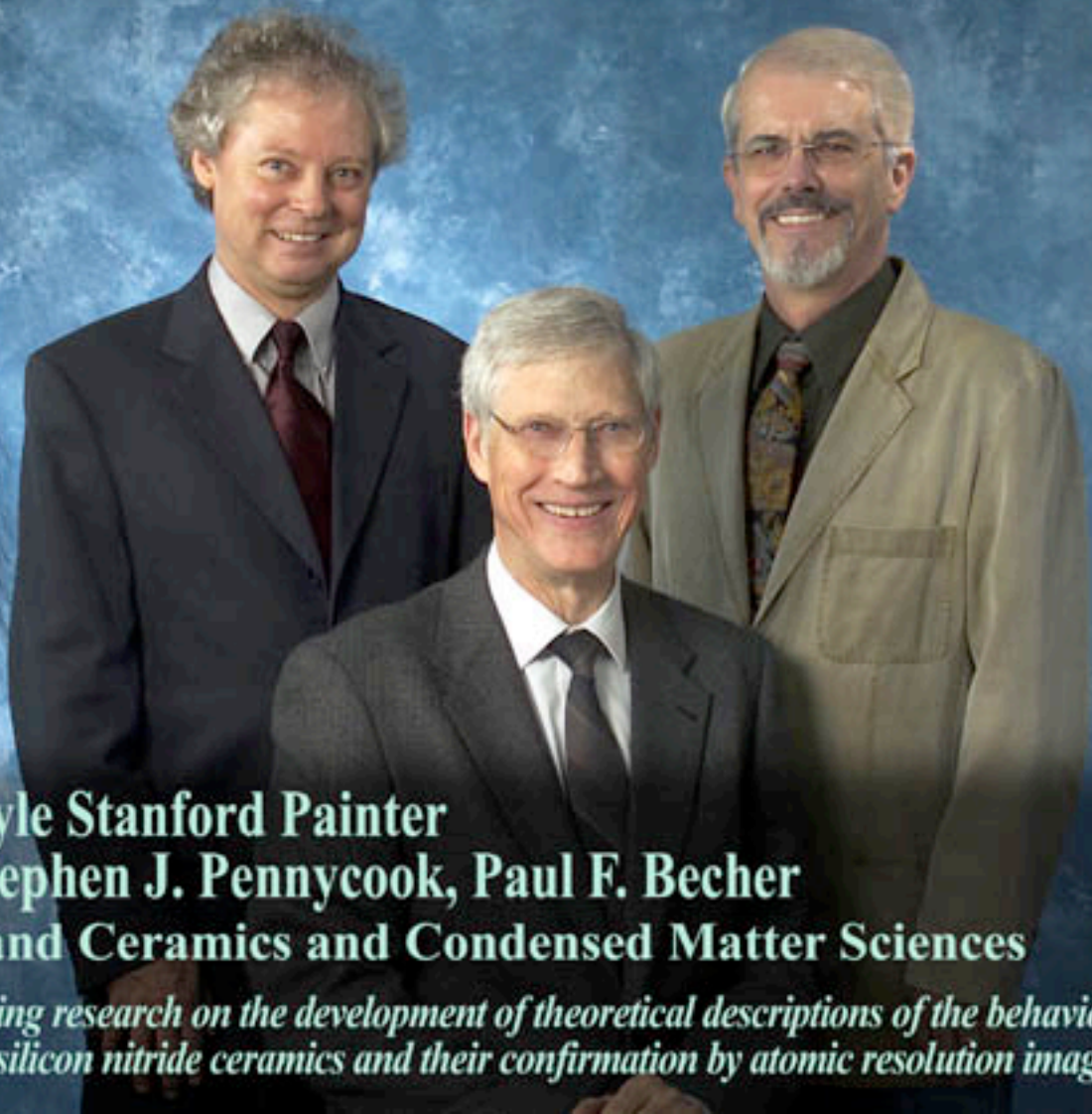
seated: William Raphael Hix, David Jarvis Dean

standing: Anthony Mezzacappa

not shown: Hans-Thomas Janka, Karlheinz Langanke, Matthias Liebendörfer, Gabriel Martínez Pinedo, O. E. Bronson Messer, Markus Johannes Rampp, Jorge Miguel de Brito Almeida Sampaio

ORNL Physics Division; University of Tennessee; Max-Planck-Institute für Astrophysik, Germany; Aarhus Universitet, Denmark; Canadian Institute for Theoretical Astrophysics; Institut d'Estudis Espacials de Catalunya, Spain; University of Chicago; Universitat Basel, Switzerland

For discovering the importance of electron capture on heavy nuclei during supernovae explosions and for innovative theoretical work drawing both from their advanced supernovae modeling and their novel models of nuclear structure



seated: **Gayle Stanford Painter**

standing: **Stephen J. Pennycook, Paul F. Becher**

Metals and Ceramics and Condensed Matter Sciences

For pioneering research on the development of theoretical descriptions of the behavior of additive elements in silicon nitride ceramics and their confirmation by atomic resolution imaging