

Thomas R. Watkins

Group Leader

Scattering & Thermophysics Group

Materials Science & Technology Division

Oak Ridge National Laboratory

P.O. Box 2008

Oak Ridge, TN 37831-6064

Phone: (865) 387-6472

Fax: (865) 574-3940

e-mail: watkinstr@ornl.gov

Scope of Research:

- Understanding residual stresses in ceramics, coatings and metals.
- Applications of grazing incidence x-ray diffraction.
- Measurement of residual stresses at high temperatures using x-ray diffraction.
- Understanding the relationship between the macroscopic and crystallographic responses of materials under mechanical load.

Broad Fields of Endeavor:

- X-ray diffraction, residual stress and mechanical properties of materials.

Education:

- Ph.D. (Ceramic Science) from The Pennsylvania State University, 1992
- MS (Ceramic Science) from The Pennsylvania State University, 1988
- BS (Ceramic Engineering) from Alfred University, 1985

Education Discipline:

- Ceramic Science

Professional Societies:

- American Ceramic Society