Dr. Han’s current focus is on sensing technologies for advanced materials to improve product quality, a multi-disciplinary research area involves:

- Physical principals
- Sensing and imaging
- Electronics and controls
- Optics
- Acoustics
- Precise measurement
- Materials Science
- Fracture Mechanics
- Digital Signal Processing
- Digital Imaging Processing
- Computing & Simulation

Applications

IR images shows cracks in a turbine disk.

a. Showing cracks with their locations in the part.

b. Processed images showing the cracks as a dark-field detection.