DEPARTMENT OF MINING AND NUCLEAR ENGINEERING

Radiation Imaging Technology

New X-Ray and Gamma Ray Sources for Imaging

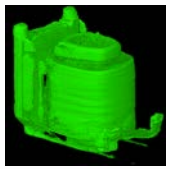
- Developing new types of x-ray and gamma ray sources that can be used for fast imaging and for various medical and industrial applications

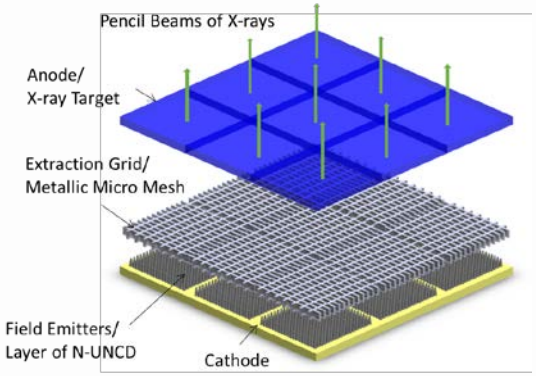
Stationary CT for 4D Cardiac CT

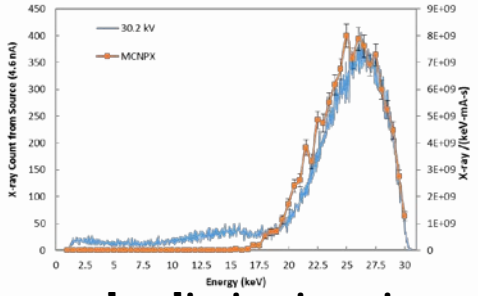
- Developing a stationary CT based on the new x-ray tubes being developed in our lab. Stationary CT can be used for cardiac CT which requires fast acquisition of 3D data in real time

Benchtop CT

- Developing a small scale X-Ray CT system mainly for nondestructive evaluation and testing of 3D printed devices







Develop new and advanced radiation imaging technologies for medical and industrial applications

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- DARPA, Nuclear Regulatory Commission, Dept. of Energy, Dept. of Education, Idaho National Lab.

Keywords

- #RadiationImaging, #X-RaySource, #Radiography, #ComputedTomography, #X-RayImaging, #NeutronImaging, #NeutronCT, #CTReconstruction

Recognitions

- Award: 2012 DARPA Young Faculty Award
- Award: 2012 Faculty Research Award, Missouri S&T
- Service: Chair of Isotopes & Radiation Division of American Nuclear Society