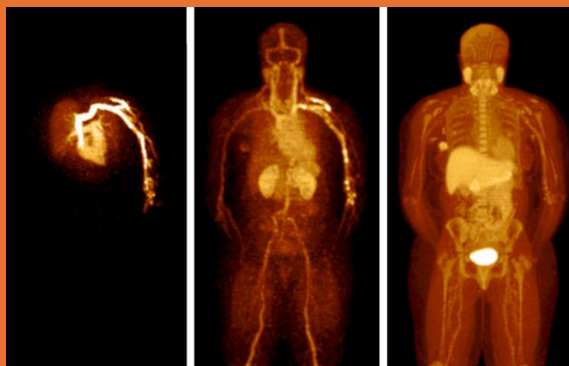
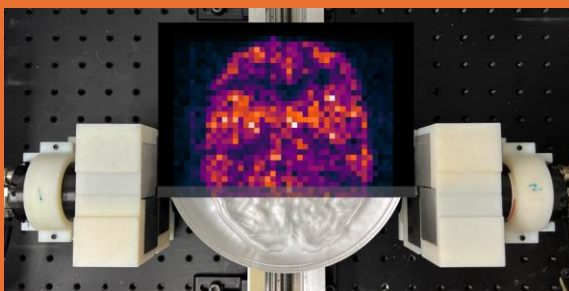


## ADVANCING NUCLEAR MEDICINE RESEARCH

In All Scales



Imaging the entire human body at once (University of Pennsylvania)



30-ps coincidence timing resolution imaging (University of California, Davis)

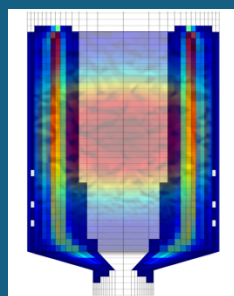


Imaging 80- $\mu$ m scale  $\alpha$ -particle tracks (University of California, SF)

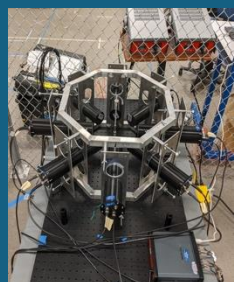
## ADVANCING NUCLEAR ENERGY RESEARCH



Heated sensor test rig at The Ohio State University Research Reactor, positioned near the core, for testing advanced sensors for nuclear reactors. (Prof. Raymond Cao, The Ohio State University)

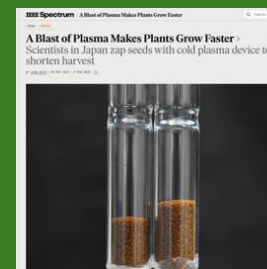


Probable path of pebbles entering at Pebble Bed Reactor (PBR) periphery obtained through DEM-based simulations with neutron flux field overlaid onto pebble path. (Prof. Angela Di Fulvio, University of Illinois Urbana-Champaign)



Radiation detection technology to monitor nuclear power plants for abundant clean energy. New technologies for nuclear non proliferation and safeguards. (Prof. Sara Pozzi, University of Michigan)

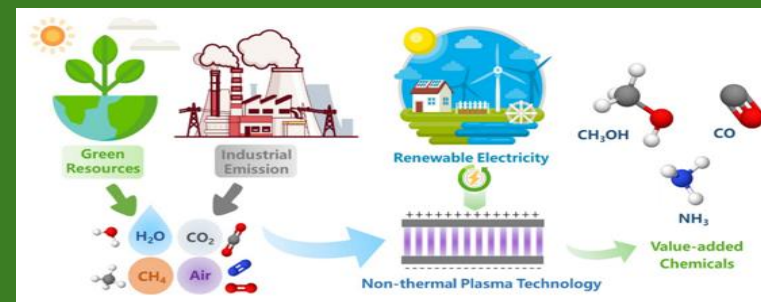
## ADVANCING LOW T PLASMA RESEARCH



IEEE SPECTRUM: A Blast of Plasma Makes Plants Grow Faster  
A Blast of Plasma Makes Plants Grow Faster  
Scientists in Japan zap seeds with cold plasma device to shorten harvest

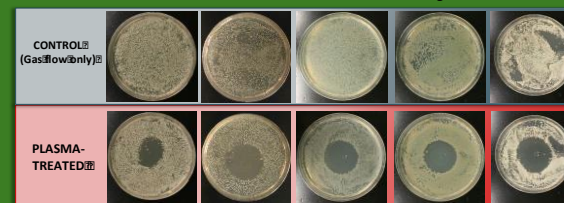
Smart Agriculture

Plasma-aided CO<sub>2</sub> conversion



J Sun et al, J. Phys. D: Appl. Phys. 57 (2024) 50300

Staphylococcus aureus, Staphylococcus epidermidis, Escherichia coli, Pseudomonas aeruginosa, Candida albicans



Better Health

P. Sedghizadeh, et al. IEEE Trans. Plasma Sci. 40, 2012.