

Abstract Submitted  
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**Development of NSECT Imaging System with Rotation Modulation Collimator** ANDREW STAGGS, Undergraduate at Western Kentucky Univ, IVAN NOVIKOV, Associate professor at wku — In Neutron Stimulated Emission Computed Topography (NSECT), a beam of fast neutrons is used to excite nuclei of the target area. During de-excitation the nuclei emit gamma rays with specific energies. The detection of these gamma rays allows for the identification of elements present in the target. Recently, it was proposed to use a rotational modulation collimator (RMC) to add imaging capability to the NSECT-based system. The NSECT based system which employs the d-T neutron generator and the 3"x3" HPGe detector is currently under development at WKU. The current status of the system development is discussed.

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