Contribution ID: **379** Type: **Poster**

Organic Electronic-based Neutron Detectors

Tuesday, 28 May 2024 08:47 (1 minute)

In recent decades organic electronics has entered the mainstream of consumer electronics. Driven by innovations in scalability and low power applications, and low-cost fabrication methods. The potential for using organic semiconductor electronic devices as radiation detectors, and in particular for neutron detection is reported. We report results of laboratory tests using α particles as well as the response to thermal and fast neutrons covering the energy range 0.025 eV to 16.5 MeV. GEANT4 simulations are used to provide a detailed understanding of the performance and potential of this emerging technology for radiation detection.

Collaboration

Role of Submitter

I am the presenter

Primary author: BEVAN, Adrian (Queen Mary University of London)

Presenter: BEVAN, Adrian (Queen Mary University of London)

Session Classification: Applications to Industrial and Societal Challenges - Poster session

Track Classification: T5 - Applications to Industrial and Societal Challenges