

Session: State of the art and current trends in neutron detection

Current trends in neutron detection: an industry perspective on manufacturing and technology transfer

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No one manufacturer offers all the available neutron detector technologies across scintillators as bulk or fibre, proportional counters using ^3He , BF_3 or a ^{10}B coating, fission chambers, semiconductors and track (etch or bubble) devices. Micro Pattern Gaseous Detectors add another technology to the mix, so where would they fit in? What detection needs are presently un-met or under-met? In this presentation we review available technologies and applications from the perspective of a manufacturer of some of the above, with an open mind towards the methods we are not presently involved in. We describe our recent successful collaboration with the Institut Laue-Langevin on technology transfer of ^3He neutron detectors and we reference our preliminary investigation into becoming a potential manufacturer of GEMs foils (2007) and why we chose not to progress with MPGD manufacture at that time.