

Gold Medal Award for Superconducting Detectors

March 8, 2013 (PA11). Professor Robert Hadfield of the University of Glasgow has been awarded the 2012 J&E Hall Gold Medal of the Institute of Refrigeration. This international prize is awarded annually for the 'most noteworthy contribution to refrigeration and related technologies'. Professor Hadfield received the Gold Medal at the annual dinner of the Institute of Refrigeration last week in the City of London. Professor Hadfield has brought a highly promising new superconducting nanowire infrared single-photon detector technology forward into practical applications, via innovations in cryogenic engineering. He has integrated superconducting single-photon detectors for the first time into closed-cycle refrigerator systems, eliminating the need for liquid cryogenes. Working with leading groups in the UK and internationally, he has used this technology in a number of applications at the frontiers of science, from quantum cryptography to medical diagnostics. Professor Hadfield has thus made a decisive contribution in bridging the gap between a promising superconducting detector technology and end applications.



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