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**Beta Detected NMR a New Probe for Nanoscience**

ANDREW MACFARLANE, Chemistry Department, University of British Columbia, Vancouver, Canada

TRIUMF's ISAC facility in Vancouver, Canada produces intense beams of shortlived radioactive ions for research in nuclear and materials science. The latter uses  $^8\text{Li}^+$  as an implanted spin-polarized radioactive probe. Using the technique of beta-detected Nuclear Magnetic Resonance, local magnetic information is extracted via detection based on the asymmetric property of nuclear beta-decay. The probe ion implantation energy can be varied from  $\sim 30$  keV down to  $\sim 100$  eV, allowing the implantation depth to be varied from a few hundred nanometers down to a few nanometers. Thus depth-resolved measurements of thin films, heterostructures and near-surface and buried-interface effects can be performed on a wide range of condensed matter systems. The facility and some examples (in superconductors and magnetic materials) will be reviewed, and prospects for the growth of this user-facility within the larger TRIUMF Centre for Molecular and Materials Science will be presented.