



独立行政法人理化学研究所 仁科加速器研究センター  
第36回RIBF核物理セミナー  
RIKEN Nishina Center for Accelerator Based Science  
The 36th RIBF Nuclear Physics Seminar

## Lattice site determination of Er in Si and GaN using electron emission channeling from radioactive isotopes produced at CERN ISOLDE

Prof. Guido Langouche

(Institute for Radiation and Nuclear Physics, Katholieke Univ. Leuven, Belgium.)

Channeling with accelerator produced He beams is a standard technique to determine the lattice site of foreign atoms in host lattices and the crystallographic structure and quality of epitaxial nanolayers.

Electron emission channeling complements this technique by shifting the sensitivity of the method to an impurity level which is 5 orders of magnitude lower.

The experimental technique will be presented and illustrated by the determination of the lattice site of erbium atoms in Si and GaN, using  $^{167\text{m}}\text{Er}$  produced at CERN ISOLDE.

Oct , 26(Thu), 2006 13:30-  
RIBF Conf. Hall, RIBF Bldg. 2F

*The seminar will be given in English.*

*Contact: RIBF Nuclear Physics Seminar Organizer*

*[seminar@ribf.riken.jp](mailto:seminar@ribf.riken.jp)*

*<http://ribf.riken.jp/~seminar>*