

# The Separation of Fe from Ga to Produce Ultrapure $^{67}\text{Ga}$

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*Dedicated to Prof. Helgard G. Raubenheimer on the occasion of his 65<sup>th</sup> birthday*

The production of  $^{67}\text{Ga}$  at iThemba LABS is performed by the proton bombardment of a tandem  $^{\text{nat}}\text{Zn}/^{\text{nat}}\text{Zn}$  target.  $^{67}\text{Ga}$  is separated from the target material using a method based on target dissolution, in acidic media, and dual chromatographic methods on Amberchrom CG-161M. The result is a product with a high radionuclidic purity  $^{67}\text{Ga}$  having such a low Fe content in the final product that it may be used in the labelling of peptides.

*Key words:*  $^{67}\text{Ga}$ , Fe, Purification, Ion Exchange