# Stability of $^{111}$In-ligand Complexes Studied by TDPAC *

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Z. Naturforsch. **53a,** 630–635 (1998); received October 31, 1997

The TDPAC technique has been applied to study the stability of $^{111}$In complexes with NTA and DTPA in solutions with different concentrations of stable In at pH = 7. A sample of In-DTPA complexes attached to microspheres of albumin (MSA) has been measured at temperatures of 293 and 130 K. The results show that the products formed after $^{111}\text{In} \rightarrow {}^{111}\text{Cd}$ decay and following Auger-effect are determined by the stability of In(Cd)-complexes with organic ligands. The daughter Cd behaviour depends on the In : ligand mole ratio, from $1:\infty$ to 1:1. The possibility of Cd-ligand complex destruction and following Cd rechelating is discussed. The results indicate that the rechelating probability correlates with the stability of the parent and daughter complexes.

PACS: 36, 82, 87.

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