

## NMISA Bibliography

### 2011

B.R.S. Simpson, M.J. van Staden, J. Lubbe and W.M. van Wyngaardt, *Accurate activity measurement of Lu-177 by the liquid scintillation  $4\pi\beta\text{-}\gamma$  coincidence counting technique*. ICRM 2011 International Conference on Radionuclide Metrology and its Applications, Tsukuba, Japan, September 2011 (accepted for poster presentation).

W.M. van Wyngaardt, B.R.S. Simpson, M.J. van Staden and J. Lubbe, *Absolute standardization of Pu-241 and effect of the beta spectral shape*. ICRM 2011 International Conference on Radionuclide Metrology and its Applications, Tsukuba, Japan, September 2011 (accepted for oral presentation).

G. Ratel, et al., *Pilot comparison to mimic the operation of the extended SIR for measurements of pure  $\beta$  emitters*. ICRM 2011 International Conference on Radionuclide Metrology and its Applications, Tsukuba, Japan, September 2011 (accepted for oral presentation).

B. E. Zimmerman, et al. *Results of an international comparison for the activity measurement of  $^{177}\text{Lu}$* . ICRM 2011 International Conference on Radionuclide Metrology and its Applications, Tsukuba, Japan, September 2011 (accepted for oral presentation).

W.M. van Wyngaardt, M.J. van Staden, B.R.S. Simpson, J. Lubbe, *Absolute standardization of  $^{137}\text{Cs}$  and  $^{134}\text{Cs}$* . Liquid Scintillation Spectrometry Conference (LSC 2010) proceedings (to be published).

### 2010

Pierino De Felice, Yoshio Hino, Bruce Simpson, Anton Švec and Mike Woods, *Preface by the Guest Editors for the ICRM 2009 Conference Proceedings*. Appl. Radiat. Isot. 68 (2010) 1193-1195.

B.R.S. Simpson, W.M. van Wyngaardt and J. Lubbe, *Fe-55 activity measurements at the NMISA revisited*. Appl. Radiat. Isot. 68 (2010) 1529-1533.

B.E. Zimmerman, T. Altzitzoglou, D. Rodrigues, R. Broda, P. Cassette, L. Mo, G. Ratel, B. Simpson, W. van Wyngaardt, C. Wätjen, *Comparison of triple-to-double coincidence ratio (TDCR) efficiency calculations and uncertainty assessments for  $^{99}\text{Tc}$* . Appl. Radiat. Isot. 68 (2010) 1477-1481.

C. Michotte, G. Ratel, S. Courte, E. Garcia-Toraño, K. Kossert, O. Nähle, W.M. van Wyngaardt, B.R.S. Simpson, *Update report of the BIPM comparison BIPM.RI(II)-K1.Na-22 of activity measurements of the radionuclide  $^{22}\text{Na}$  to include the CIEMAT, PTB and the NMISA*. Metrologia 47 (2010) Tech. Suppl. 06001.

## 2009

W.M. van Wyngaardt and B.R.S. Simpson, *Standardization of Sulphur-35 by the TDCR efficiency calculation technique*, In: Proceedings of the International Conference on Advances in Liquid Scintillation Spectrometry LSC 2008. Radiocarbon 2009, 173.

A. Yunoki, L. Mo, V.V. Shaha, Nazaroh, W.M. van Wyngaardt, M.C. Yuan, D.D. Nhan, T.S. Park, Y. Yuandi, T. Soodprasert, C. Michotte, *APMP comparison of the activity measurements of Ba-133 (APMP.RI(II)-K2.Ba-133) and links to the SIR*. Metrologia 46 (2009) Tech. Suppl. 06014.

## 2008

Yoshio Hino, Bruce Simpson, Mike Woods and Pierino De Felice, *Preface by the Guest Editors for the ICRM 2007 Conference Proceedings*. Appl. Radiat. Isot. 66 (2008) 677-679.

W.M. van Wyngaardt, B.R.S. Simpson and G.E. Jackson, *Further investigations of a simple counting technique for measuring mixtures of two pure  $\beta$ -emitting radionuclides*. Appl. Radiat. Isot. 66 (2008) 1012-1020.

B.R.S. Simpson and W.M. van Wyngaardt, *Absolute activity of  $^{133}\text{Ba}$  by liquid scintillation coincidence counting using the  $4\pi(e,X)$ - $\gamma$  extrapolation technique*. Appl. Radiat. Isot. 66 (2008) 929-933.

## 2007

B.R.S. Simpson and S. Judge, *Foreword for Metrologia Special Issue on radionuclide metrology*. Metrologia, Volume 44, Number 4, August 2007.

## 2006

W.M. Van Wyngaardt and B.R.S. Simpson, *Absolute activity measurement of the electron-capture-based radionuclides  $^{139}\text{Ce}$ ,  $^{125}\text{I}$ ,  $^{192}\text{Ir}$  and  $^{65}\text{Zn}$  by liquid scintillation coincidence counting*. Appl. Radiat. Isot. 64 (2006) 1454.

B.R.S. Simpson and W.M. Van Wyngaardt, *Activity measurements of the high-energy pure  $\beta$ -emitters  $^{89}\text{Sr}$  and  $^{90}\text{Y}$  by the TDCR efficiency calculation technique*. Appl. Radiat. Isot. 64 (2006) 1481.

P. Cassette, G.H. Ahn, T. Alzitzoglou, I. Aubineau-Lanière, F. Bochud, E. Garcia Torano, A. Grau Carles, A. Grau Malonda, K. Kossert, K.B. Lee, J.P. Laedermann, B.R.S. Simpson, W.M. van Wyngaardt, B.E. Zimmerman, *Comparison of calculated spectra for the interaction of photons in a liquid scintillator. Example of  $^{54}\text{Mn}$  835 keV emission*. Appl. Radiat. Isot. 64 (2006) 1471.

A.C. Razdolescu, R. Broda, P. Cassette, B.R.S. Simpson, W.M. Van Wyngaardt, *The IFIN-HH triple coincidence liquid scintillation counter*. Appl. Radiat. Isot. 64 (2006) 1510.

W.M. Van Wyngaardt and B.R.S. Simpson, *A simple counting technique for measuring mixtures of two pure  $\beta$ -emitting radionuclides*. Nuclear Instruments and Methods in Physics Research A 564 (2006) 339-346.

B.R.S. Simpson and W.M. Van Wyngaardt, *Activity measurement of phosphorus-32 in the presence of pure beta-emitting impurities*. South African Journal of Science, July/August 2006 – Vol. 102, No. 7 / 8.

#### 2005

L. Mo, B. Avci, D. James, B. Simpson, W.M. van Wyngaardt, J.T. Cessna and C. Baldock, *Development of activity standard for  $^{90}\text{Y}$  microspheres*. Appl. Radiat. Isot. 63 (2005) 193.

W.M. van Wyngaardt and B.R.S. Simpson, *Preparation and use of standards for a comparison exercise among users of  $^{131}\text{I}$  capsules in South Africa*. Physica Medica Vol. XXI, N. 3 (2005) 101.

#### 2004

B.R.S. Simpson and W.M. Morris, *The standardization of  $^{33}\text{P}$  by the TDCR efficiency calculation technique*. Appl. Radiat. Isot. 60 (2004) 465.

B.R.S. Simpson and W.M. Morris, *Direct activity determination of  $^{54}\text{Mn}$  and  $^{65}\text{Zn}$  by a non-extrapolation liquid scintillation method*. Appl. Radiat. Isot. 60 (2004) 475.

W.M. Morris and B.R.S. Simpson, *Preparation of solid water-equivalent radioactive standards*. Appl. Radiat. Isot. 60 (2004) 557.

#### 2003

G. Ratel, C. Michotte, B.R.S. Simpson and A. Iglicki, *Activity measurements of the radionuclide  $^{60}\text{Co}$  for the CSIR-NML and the CNEA in the BIPM comparison BIPM.RI(II)-K1.Co-60*. Metrologia 40 No. 1A (Technical Supplement 2003) 06010.

#### 2002

B.R.S. Simpson, *Radioactivity standardization in South Africa*. Appl. Radiat. Isot. 56 (2002) 301-305.