

LNE-LNHB Publications for 2009 to 2011

J. M. Bordy et al., « Radiation protection dosimetry in medicine – Report of the working group n°9 of the European Radiation Dosimetry Group (EURADOS) Coordinated Network for Radiation Dosimetry (CONRAD – contract EC n°FP6-12684) ». Rapport CEA-R-6220

L. de Carlan, F. Delaunay, A. Ostrowsky, J. Daures, S. Sorel, J.-M. Bordy, "Traceability of absorbed dose in radiotherapy: from primary standard to patient treatment", Accreditation and Quality Assurance.

I. Clairand, J.-M. Bordy, J. Daures, J. Debroas, M. Denozière, L. Donadille, M. Ginjaume, C. Itié, C. Koukorava, S. Krim, A.-L. Lebacqz, P. Martin, L. Struelens, M. Sans-Mercé M. Tosic and F. Vanhavere, "Active personal dosimeters in interventional radiology: tests in laboratory conditions and in hospitals", *Radiation Protection Dosimetry* (2010) 1-6, doi :10.1093/rpd/ncq556 (journal web site)

J. Daures, J. Gouriou, J.M. Bordy, "Conversion coefficients from air kerma to personal dose equivalent $H_p(3)$ for eye-lens dosimetry ». Rapport CEA-R-6235

J. Daures, J. Gouriou, J.M. Bordy, "Monte Carlo determination of the conversion coefficients $H_p(3)/K_a$ in a right cylinder phantom with Penelope code. Comparison with MCNP simulations", *Radiation Protection Dosimetry* (2011)1-6, doi: 10.1093/rpd/ncq359 (journal web site)

F. Delaunay, M. Donois, J. Gouriou, E. Leroy, A. Ostrowsky, "New LNHB primary standard for ^{60}Co air kerma", *Metrologia* **47** (2010) 652-658

M. Denozière, J.M. Bordy, J. Daures, N. Lecerf, "Pulsed X-Rays for Interventional Radiology: test on Active Personal Dosimeters (APD), European Project FP7 ORAMED WP3" . Rapport CEA-R-6233 (2009)

C. Falgueres, J.-J. Bahain, M. Duval, Q. Shao, F. Han, M. Lebon, N. Mercier, A. Perez-Gonzalez, J.-M. Dolo, T. Garcia (2010) "A 300-600 ka ESR/U-series chronology of Acheulian sites in Western Europe" *Quaternary International*, 223-224, 293-298.

T. Garcia, M. Lin, I. Pasquié, V. Lourenço, "A methodology for choosing parameters for ESR readout of alanine dosimeters for radiotherapy", *Radiation Physics and Chemistry*, **78** (2009) 782-790

F. Han, C. Falguères, J.-J. Bahain, Q. Shao, M. Duval, M. Lebon, T. Garcia, J.-M. Dolo, C. Perrenoud, G.J. Shen, H. Lumley (2010) « Effect of deposit alterations on the dating of herbivorous teeth from Arago Cave by the ESR-U-series method" *Quaternary Geochronology*, **5**, 376-380.

M. Lin, T. Garcia, V. Lourenço, Y. Cui, Y.Z. Chen, F. Wang., "Bilateral dose comparison of alanine ESR dosimetry system at radiotherapy dose level", *Radiation Measurements* **45** (2010) 789-796

A. Ostrowsky, J.M. Bordy, J. Daures, L. de Carlan, F. Delaunay, "Dosimetry for small size beams such as IMRT and stereotactic radiotherapy, is the concept of the dose at a point still relevant? Proposal for a new methodology", Rapport CEA – R – 6243 (2010)

C.G. Soares, G. Douysset and M.G. Mitch, "Primary standards and dosimetry protocols for brachytherapy sources", Metrologia 46 (2009) S80-S98

G. Wagner, M. Krbetschek, D. Degering, J.-J. Bahain, Q. Shao, C. Falguères, P. Voinchet, J.-M. Dolo, T. Garcia, G.P. Rightmire, "Radiometric dating of the type-site for *Homo heidelbergensis* at Mauer, Germany". Proceedings of the National Academy of Sciences of the United States of America, 107 (2010), 19726–19730

Communications

I. Aubineau-Lanièce, J.-M. Bordy, B. Chauvenet, D. Cutarella, J. Gouriou, J. Plagnard "Development of a primary standard in terms of reference air kerma rate for ^{125}I brachytherapy seeds", International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopses, IAEA-CN-182, p. 23

I. Aubineau-Lanièce, P. Aviles-Lucas, J.M. Bordy, B. Chauvenet et al., "Development of a primary standard in terms of absorbed dose to water for ^{125}I brachytherapy seeds", International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopses, IAEA-CN-182, p. 211

T. Garcia, P. François, N. Périchon, V. Lourenço, JM. Bordy « Calibration of helical tomotherapy using ESR/alanine dosimetry". International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopsis, IAEA-CN-182, p.251

T. Garcia, T. Lacornerie, R. Popoff, V. Lourenço, J.-M. Bordy. "Preliminary study to calibrate Cyberknife using EPR/Alanine dosimetry". EPRBioDose 2010, Mandelieu-La-Napoule, France, 10-14 October 2010.

T. Garcia, V. Lourenço, A. Ver, J.-M. Bordy. "Dose mapping of a GammaCell 220 High-dose irradiator - Comparison of Monte-Carlo simulation and experimental approaches". Sixth International Workshop on Dosimetry for Radiation Processing, Karlsruhe, Germany, 4-8 October 2009.

V. Lourenço, D. Vermesse, D. Cutarella, M. P. Avilés-Lucas, I. Aubineau-Lanièce. « 3D distribution measurement of the absorbed dose to water around ^{192}Ir brachytherapy source by thermoluminescent dosimeters". International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopses, IAEA-CN-182, p.337

V. Lourenço, T. Garcia. "The new French Standard for Industrial Radiation Processing". Sixth International Workshop on Dosimetry for Radiation Processing, Karlsruhe, Germany, 4-8 October 2009.

A. Ostrowsky, J.M. Bordy, J. Daures, L. De Carlan, F. Delaunay " Dosimetry for small size beams such as IMRT and stereotactic radiotherapy, Is the concept of the dose at a point still relevant? Proposal for a new methodology", International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopsis, IAEA-CN-182, p.315

B. Rapp, A. Ostrowsky et J. Daures "The LNE-LNHB water calorimeter: measurements in ^{60}Co beam", International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS), Book of extended synopses, IAEA-CN-182, p.13