PIMAL Publications

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Peer-Reviewed Journals

S. A. Dewji, K. L. Reed, M. Hiller, Comparison of Organ Doses for PIMAL Stylized Phantoms in Upright and Bent Positions for Standard Irradiation Geometries. Radiation and Environmental Biophysics (Manuscript ID: REBS-D-16-00174). Accepted Feb 2017, In Press.

S. Dewji, M. Bellamy, N. Hertel, R. Leggett, S. Sherbini, M. Saba, K. Eckerman. Assessment of Point Source Method for Estimating Doses to Members of the Public from Exposure to Patients with ^{131}I Thyroid Treatment. Health Physics Journal (DOI 10.1097/HP.0000000000000327). Aug 2015

S. Dewji, M. Bellamy, N. Hertel, R. Leggett, S. Sherbini, M. Saba, K. Eckerman. Estimated Doses to Members of the Public from External Exposure to Patients with ^{131}I Treatment. Medical Physics (DOI: 10.1118/1.4915084). April 2015

Conference Abstracts, Transactions, and Proceedings

S. Dewji, E. Sanchez, K. L. Reed, K. Bales, M. Green, M. Hiller, T. Oxenberg. PIMAL: A GUI-Driven Software Package to Conduct Radiation Dose Estimation Using Realistic Postures. 6th International Workshop on Computational Human Phantoms – Annapolis, MD, USA. Aug. 2017

S. Dewji, M. Hiller, N.E. Hertel, K. Bales. Comparison of Neutron Organ Doses for PIMAL Stylized Phantom in Upright and Bent Positions for Standard Irradiation Geometries. Neutron and Ion Dosimetry Symposium (NEUDOS13) – Krakow, Poland. May 2017

S. Dewji, M. Hiller, N. Hertel, S. Sherbini, M. Saba, PIMAL: A GUI-Driven Software Package to Conduct Radiation Dose Assessments Using Realistic Phantom Postures. 14th Congress of the International Radiation Protection Association – Cape Town, South Africa. May 2016

S A. Dewji, M. Bellamy, N. E. Hertel, R. Leggett, K. Eckerman, S. Sherbini, M. Saba. Estimated External Doses to Members of the Public from Patients with ^{131}I Treatment. Proceedings of the 18th Topical Meeting of the American Nuclear Society Radiation Protection and Shielding Division (RPSD 2014). Sept. 2014

E. Sanchez, S.A. Dewji. Correlation of TLD Placement and Organ Dose for Adult Reference Phantoms in Articulated Positions. Proceedings of the 62nd Annual Meeting of the Health Physics Society – Raleigh, NC, USA. July 2017

S.A. Dewji, K. Bales, M. Hiller. Computation of Neutron Dose Coefficients for PIMAL

Stylized Phantoms in Upright and Bent Positions in Standard Irradiation Geometries. Proceedings of the 62nd Annual Meeting of the Health Physics Society – Raleigh, NC, USA. July 2017

S.A. Dewji, K.L Reed, M. Hiller. Computation of Photon Effective Dose Coefficients for PIMAL Stylized Phantoms in Upright and Bent Positions in Standard Irradiation Geometries. Proceedings of the 62nd Annual Meeting of the Health Physics Society – Raleigh, NC, USA. July 2017

S.A. Dewji, M. Green, E. Sanchez. Organ and Effective Photon Dose Coefficients for Reference Phantoms in Articulated Positions in Cranial and Caudal Irradiation Geometries. Proceedings of the 62nd Annual Meeting of the Health Physics Society – Raleigh, NC, USA. July 2017

K. L. Reed, S. Dewji, M. Hiller. Comparison of Organ Doses for PIMAL Stylized Phantoms in Upright and Bent Positions for Various Irradiation Geometries. Proceedings of the 50th Mid-Year Meeting of the Health Physics Society – Bethesda, MD, USA. Jan. 2017

S. Dewji, K. L. Reed, M. Hiller. Comparison of Organ Doses for PIMAL Stylized Phantoms in Upright and Bent Positions for Standard Irradiation Geometries. Radiation Protection Week 2016 – Oxford, UK. Sept. 2016

S. Dewji. Doses to Members of the Public from I-131 Patient Release. Proceedings of the 61st Annual Meeting of the Health Physics Society – Spokane, WA, USA. (Invited) July 2016

S. Dewji, M. Hiller, N. Hertel, S. Sherbini, M. Saba, PIMAL: A GUI-Driven Software Package to Conduct Radiation Dose Assessments Using Realistic Phantom Postures. 14th Congress of the International Radiation Protection Association – Cape Town, South Africa. May 2016

M. Bellamy, S. Dewji, G. Kora, Mauritius Hiller, N. Hertel, K. Eckerman, S. Sherbini, M. Saba. Enhancements to the Phantom wIth Moving Arms and Legs Software (PIMAL 4.0). Proceedings of the 49th Mid-Year Meeting of the Health Physics Society – Austin, TX, USA. Jan. 2016

S. A. Dewji, M. Bellamy, N. E. Hertel, R. Leggett, K. Eckerman, S. Sherbini, M. Saba, Estimated Doses to Members of the Public from Exposure to Patients with ^{131}I Thyroid Treatment. Part I: Comparison to Point Source Methods. Proceedings of the 59th Annual Meeting of the Health Physics Society – Baltimore, MD, USA. July 2014

S. A. Dewji, M. Bellamy, N. E. Hertel, R. Leggett, K. Eckerman, S. Sherbini, M. Saba, Estimated Doses to Members of the Public from Exposure to Patients with ^{131}I Thyroid Treatment. Part II: Dose to the Persons Riding Public Transportation. Proceedings of the 59th Annual Meeting of the Health Physics Society – Baltimore, MD, USA. July 2014

S. A. Dewji, M. Bellamy, N. E. Hertel, R. Leggett, K. Eckerman, S. Sherbini, M. Saba, Estimated Doses to Members of the Public from Exposure to Patients with 131I Thyroid Treatment. Part III: Dose to the Occupants in Nursing Homes and Hotels, Proceedings of the 59th Annual Meeting of the Health Physics Society – Baltimore, MD, USA. July 2014

Akkurt, H., Bekar, K., & Eckerman, K. (2009). Assessment of Organ Doses for a Glovebox Worker Using Realistic Postures with PIMAL and VOXMAT. *Trans. of Am. Nuc. Soc*, *101*, 671-673.

Akkurt, H., Eckerman, K. F., Wagner, J. C., & Sherbini, S. (2007). PIMAL: Computational Phantom with Moving Arms and Legs. Transactions-American Nuclear Society, 96, 396.

Akkurt, H., Wiarda, D., Fleckenstein, A., & Eckerman, K. (2007). A GUI for computational phantom with freely moving arms and legs. Transactions-American Nuclear Society, 96, 640.