

## Uncertainty Workshop Recommendations adopted by the CCRI(I):

1. To encourage more evaluations, both theoretical and experimental, of stopping power data so that a new evaluation of  $W$  can be determined.
2. To encourage NMIs to have different shapes and sizes of cavity ionization chamber standards to confirm volume estimations and correction factors.
3. To adopt the notation  $k_{\phi}$  for the fluence correction.
4. To encourage the ICRU to produce their draft report on the base physical data for ionometry by the time of the next CCRI.
5. To encourage laboratories to make their recombination corrections using the Niatel voltage ratio method, ideally using a ratio greater than 2 to reduce the uncertainties [1].
6. To encourage the NMIs to use [1] when evaluating the effects of pressure and humidity on ion recombination corrections.
7. To encourage the BIPM to complete its uncertainty evaluation of  $^{60}\text{Co}$  and  $^{137}\text{Cs}$  half-lives (and the NIM for  $^{60}\text{Co}$ ) and publish the results.
8. To take into account the effect of field size when making x-ray comparisons.
9. To state the field size and calibration distance for x-ray calibrations.
10. To encourage the NMIs and the BIPM to continue to study the effect of scatter by the aperture in x-ray beams and apply the necessary corrections.
11. To encourage the NMIs and the BIPM to continue their research in both water and graphite calorimetry.
12. To encourage the NMIs and the BIPM to undertake research into standards for both high-energy photon and electron beam dosimetry.
13. To recommend that Members look at the [draft GUM Supplement 1](#) to see how applicable it could be to the evaluation of uncertainties in dosimetry.
14. To hold a Dosimetry Workshop in association with the next CCRI in 2007.

[1] Boutillon M., Volume recombination parameter in ionization chambers, *Phys. Med. Biol.*, 1998, **43**, 2061-2072

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