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BR9400004 ✓ Plane parallel ionization chambers for field dosimetry.

Topic codes: I.Principal Investigator: Caldas, L.V.E. Instituto de Pesquisas Energeticas e Nucleares IPEN-CNEN/SP, Caixa Postal 11049, CEP 05422-970 San Paulo, SP Brazil.Telephone: x-0055-11-212-7841.Facsimile: x-0055-11-212-3546.Other Investigators: Dias, S.K.; Souza, C.N.; Albuquerque, M.P.P.; Xavier, M.Sponsoring Organization(s): Comissao Nacional de Energia Nuclear - San Paulo (San Paulo, Brazil).Organization Type: Foundation or laboratory for research and/or developmentCollaborating Organization(s): Conselho Nacional de Desenvolvimento Cientifico e Tecnologico - CNPq.Program Duration:

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Albuquerque M.P.P., Caldas L.V.E.: New ionization chambers for beta and x-radiation, Nucl. Instrum. Meth. Phys. Res. A 280, (1989), 310; Caldas L.V.E.: A sequential tandem system of ionization chambers for effective energy determination of x-radiation fields, Radiat. Prot. Dosim., 36 (1), (1991), 47.

INIS categories: E41.10

Ionization chambers with parallel electrodes for beta and soft X radiation were designed and constructed at the calibration group at IPEN and proved their utility. A Tandem System of ionization chambers was also developed and has the main application at the half-value layers determination in the routine work at hospitals. Ionization chambers for electrode radiation dosimetry were constructed and are being tested in different situations. An extrapolation chamber is in development and has the objective to calibrate dermatological applicators.