

**Radon and progeny in the city of São Paulo Brazil**

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In this work, results of indoor radon and daughters concentration measurements carried out during the winter of 2003 in dwellings in the city of São Paulo - Brazil are presented. A random sample of 70 residences was prepared all over the city. Monitoring was carried out using the time-integrated passive detector technique, using bare cellulose nitrate (LR115 - type II) Solid State Nuclear Track Detector (SSNTD) as alpha particle detector. Total alpha emission concentration was evaluated, considering the influence of the plate-out effect near the detector surface. First results show great variation of total alpha emission concentration and an arithmetic average of  $147 \text{ Bq/m}^3$ . Some dwellings show values of total emission concentration similar with other places with more rigorous weather conditions and lower winter temperatures and strict radiation protection laws compared to São Paulo.

Topic classification: **G. Environmental Science and Radiometry**

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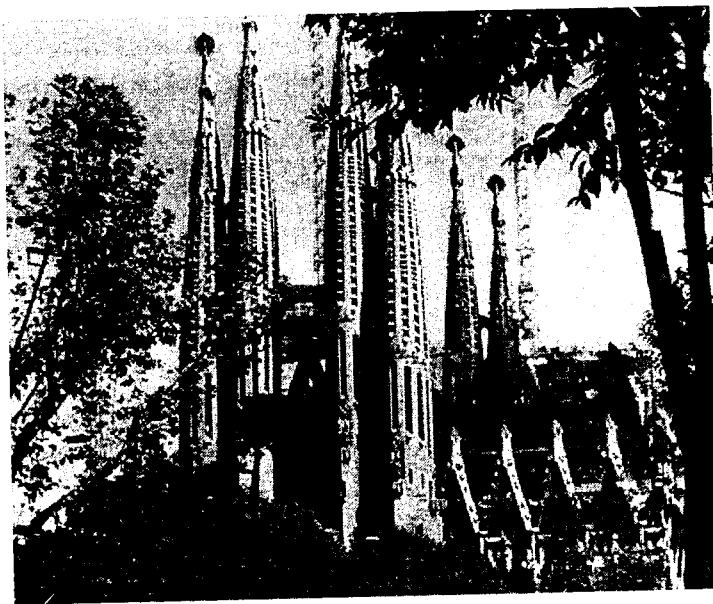
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