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# Model of Xe Radionuclides Measurements on Noble Gas System with a Long Cycle of Sampling

• The model connecting results of measurement of Xe-131m, Xe-133m, Xe-133, and Xe-135 on noble gas system of ARIX type with a long cycle of sampling with average values of concentration activity of these radionuclides in atmospheric air is offered. The model considers: - probable changes of volumetric activity Xe radionuclides in atmospheric air during sampling; -Xe radionuclides decay in an air sample during its fixation in an adsorber; -accumulation Xe-133 at decay Xe-133m in an adsorber; -variation Xe concentration activity during sample processing. The result of these processes in the model is implemented using 5 special coefficients B and allows to improve the accuracy of the results. The numerical values of the coefficients B and the method of their calculation are presented.

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