**Íåêîòîðûå îñîáåííîñòè îòáîðà ðàäèîàêòèâíûõ àýðîçîëåé â óñëîâèÿõ òóìàíà è ìåëêîäèñïåðñíûõ îñàäêîâ**

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Аннотация. Ïðåäñòàâëåíû ðåçóëüòàòû ìíîãîñóòî÷íûõ ïðîäóâîê ïî îòáîðó àòìîñôåðíûõ àýðîçîëåé â ã.×åðíîáûëü ÷åðåç äâóõñëîéíûå êîìïîçèöèè âîëîêíèñòûõ ôèëüòðóþùèõ ìàòåðèàëîâ è íà ïóíêòå êîíòðîëÿ ðàäèàöèîííîé îáñòàíîâêè «×åðíîáûëü-1» ÷åðåç ìàòåðèàë ÔÏÏ-15-1,5. Ïîêàçàíî, ÷òî ïîñòóïëåíèå ìåëêîäèñïåðñíûõ êàïåëü òóìàíà èëè äîæäÿ ìîæåò ïðèâîäèòü ê çíà÷èòåëüíîìó ðîñòó ñîïðîòèâëåíèÿ ôèëüòðóþùåãî ìàòåðèàëà. Ãðàäèåíò è âåëè÷èíà ñîïðîòèâëåíèÿ çàâèñÿò îò ñêîðîñòè ôèëüòðàöèè âîçäóõà, åãî îòíîñèòåëüíîé âëàæíîñòè è ñîäåðæàíèÿ â íåì âëàãè. ×åðåç íåêîòîðîå âðåìÿ ïîñëå îêîí÷àíèÿ àòìîñôåðíûõ âûïàäåíèé ñîïðîòèâëåíèå ôèëüòðóþùåãî ìàòåðèàëà âîçâðàùàåòñÿ ïðàêòè÷åñêè ê íà÷àëüíîìó çíà÷åíèþ, åñëè îí èçãîòîâëåí èç ãèäðîôèëüíûõ âîëîêîí. Ïîëó÷åíû àíàëèòè÷åñêèå çàâèñèìîñòè ñîïðîòèâëåíèÿ ôèëüòðà îò âëàæíîñòè âîçäóõà, ïîçâîëÿþùèå ó÷åñòü èçìåíåíèå ñêîðîñòè ïðîêà÷êè âîçäóõà ïðè îòáîðå àýðîçîëåé âî âíåøíåé ñðåäå.

Êëþ÷åâûå ñëîâà: âîëîêíèñòûå ôèëüòðû, äâóõñëîéíûå êîìïîçèöèè, ñîïðîòèâëåíèå ôèëüòðà, àýðîçîëè, òóìàí, îñàäêè, îòíîñèòåëüíàÿ âëàæíîñòü âîçäóõà, ñêîðîñòü ïðîäóâêè âîçäóõà.

**Some Feàtures Simpling of Radioactive Aerosols in Fog ànd Fine Precipition**

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Abstract. The results of multiday experiments the pumping of atmospheric aerosols in Chernobyl through double-layer composition of fibrous filter materials and on station radiation monitoring “Chernobyl-1” through the material FPP-15-1, 5 are presented. It is shown that the collection of fine droplets of fog or rain can lead to a significant increase in pressure drop of the filter material. The gradient and the pressure drop value depends on the rate of filtration air, its relative humidity and the moisture content therein. The pressure drop filter material will come back close to its initial value after some time when of atmospheric precipitation is over, if it is made of hydrophilic fibers. Analytical dependences of the pressure drop of the filter from humidity are obtained. It is allowing to take into consideration changing flow rate of air at a collection aerosols in the environment.

Key words: fiber filters, prefilter, dual-layer compositions, filter pressure drop, atmospheric aerosols, fog, precipitation, relative humidity, velocity air blowing.