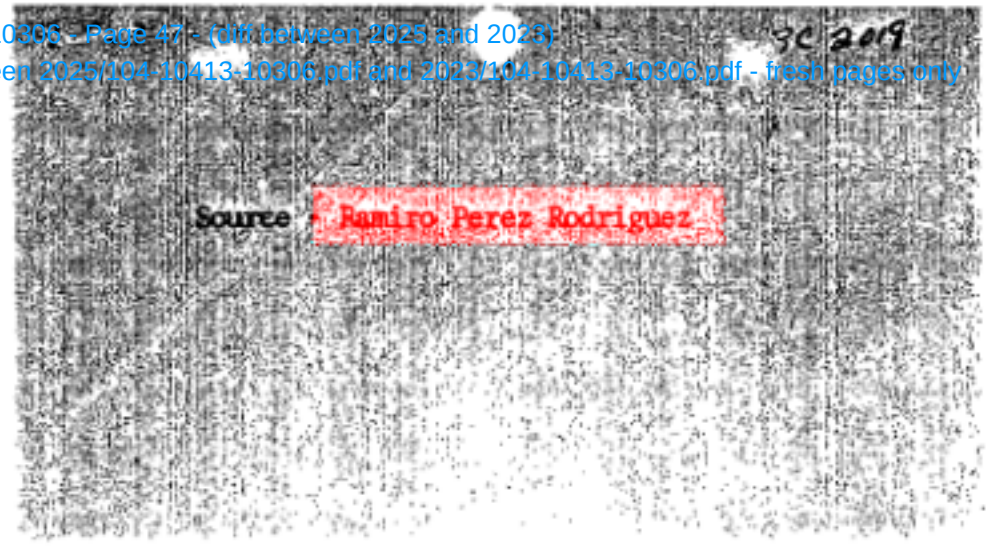

Intelligence Information Report

DIRECTORATE OF INTELLIGENCE

C-O-N-F-I-D-E-N-T-I-A-L

COUNTRY USSR/France/Italy

REPORT NO. OO- B-321/20573-70

SUBJECT Second International Congress on Radiation Protection/Unimpressive Soviet Contribution/Lafuma's Work With DTPA at Fontenay-aux-Roses/ General Interest in Plutonium Protection

DATE DISTR. 24 Aug 70

NO. PAGES 2

REFERENCES DCS Case 54123
NAVINTCOM NIP-10-70
USAFAC/OTSG

DATE OF INFO. May 1970

PLACE & DATE ACQ. BY SOURCE Brighton/Fontenay-aux-Roses - May 1970

THIS IS UNEVALUATED INFORMATION

SOURCE US citizen, radiation physicist who attended the Second International Congress on Radiation Protection, Brighton, UK, 3-8 May 70.

1. The Soviet delegation to the Second International Congress on Radiation Protection arrived several days late. As a consequence, the only presentation from the USSR personally attended was a paper entitled, "Disorders in Embryonal Development of Rats after Injection of 131_I," by A M Lyaginskaya, Y D Parev and S N Sinitsyana. Since this same experiment has been conducted on the human embryo, there was really nothing new or even interesting in Lyaginskaya's presentation.

2. A Soviet delegate who was very busy asking many questions at virtually every session personally attended, was Yuriy I Moskalev. Moskalev is a well known scientist in the fields of radiobiology and radiotoxicity. He asked all of his questions through an interpreter, but when answers were given in English he always seemed to understand without benefit of his interpreter. Moskalev indicated to a US attendee that the USSR was finally planning to request membership in the International Radiation Protection Association (IRPA).

3. The most interesting work presented at the meeting from a personal point of view was that of Professor J Lafuma, Fontenay-aux-Roses, France. He is charged with the responsibility of setting the plutonium protection standards and removal techniques after exposure to plutonium for all of France. Lafuma's most impressive work involves the success he has had in removing copious amounts of plutonium and other transuranium products from humans using DTPA.

4. Lafuma explained that from his point of view he was concerned with only two primary aspects of human contact with plutonium, inhalation and wounds. His studies have shown, of course, that the earlier treatment is begun the better the results; but also he has found it easier to decontaminate an area of the body exposed to plutonium through contact or a wound than to remove it from the lungs. Lafuma has used intravenous injection exclusively for the treatment of wounds and finds that a very significant amount of the transuranium particles are discharged from the body in urine. For the treatment of inhaled particles, Lafuma has used both DTPA aerosols and injection. He find his results from injection are better than the use of aerosols, even in lung decontamination.

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S YES

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NO DISSEM ABRC

Intelligence Information Report 600257

DIRECTORATE OF INTELLIGENCE

C-O-N-F-I-D-E-N-T-I-A-L

COUNTRY International/USSR

REPORT NO. OO-B-321/17309-70

SUBJECT Second Congress of the International Radiation Protection Association, Brighton, UK, 3-8 May 1970/Biology and Ecology of Polonium and Radiolead Conference, Sutton, UK, 30 April - 1 May 1970/Current Research and Findings

DATE DISTR. 1 Jul 70

NO. PAGES 2

REFERENCES DCS Case 54,123
NAVINTCOM NIP-10-70

DATE OF INFO. May 70

PLACE & DATE ACQ. BY SOURCE Sutton/Brighton: May 70

THIS IS UNEVALUATED INFORMATION

SOURCE US citizen; a professor and researcher in radiation biology at a US university.

[This report was prepared for submission to the US Atomic Energy Commission and is disseminated in accordance with DCID 2/3.]

1. A US radiation biology researcher attended both the Biology and Ecology of Polonium and Radiolead Conference, Sutton, UK, 30 April - 1 May 1970, and the Second Congress of the International Radiation Protection Association, Brighton, UK, 3-8 May 1970.

2. The nature of the Sutton meeting was such that few significant scientific positions were taken: however, in general, the quality of the papers was very high. The scheduled Soviet participants, P V Ramzayev and /FNU/ Moskalev, were presumably not permitted by the USSR to attend; D Panov (Yugoslavia) was in the US, and D Djuric (Yugoslavia) did not attend for unknown reasons. The countries represented were UK (26), Italy (5), France (1), Sweden (2), Poland (1), South Africa (1), and the US (7).

3. To the extent that the proper "half-life for lead in man" was discussed, the consensus appeared to be that (a) the loss rate can not be represented as a single exponential; (b) the presently available data on baboons and beagle dogs does not extend for a sufficient period of time to provide a measure of the "last slow rate loss constant"; (c) it is likely that lead and radium loss rates will differ because of the selective reutilization of Pb in bone. D Barltrop (UK) and US researchers have been performing experiments which indicate that lead is not bound by red cell membranes, but at sites in the cell interior.

4. C R Hill (UK) provided a useful summary of the contribution of polonium to human radiation dose. He stipulated that the distribution of polonium will depend on whether it is administered as polonium per se or is allowed to grow in an animal as the daughter of an ingested parent. This is a significant consideration to biological researchers engaged in dose calculation work.

5. Twenty-nine countries and five international bodies were represented at the Second Congress of the International Radiation Protection Association. W G Marley (UK) was the congress president and H J Dunster (UK) was the secretary of the scientific program committee. The congress shared the common problems and advantages of similar large meetings. Concurrent sessions inevitably brought about some conflicts in important papers, discussion was generally absent or quite limited, and there was the usual number of papers given in "broken" English by foreign scientists.

U NO | C-O-N-F-I-D-E-N-T-I-A-L | S YES

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