Sanitized Copy Approved for Release 2011/08/31 : CIA-RDP80-00809A000700200258-2

50X1-HUM

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

CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

COUNTRY	USSR	DATE OF INFORMATION	1954
SUBJECT	Scientific - Chemistry, biology, isotopes		
HOW PUBLISHED	Quarterly periodical	DATE DIST.	23 Dec 1954
WHERE PUBLISHED	Kiev	NO. OF PAGES	2
DATE PUBLISHED	May 1954		
LANGUAGE	Russian	SUPPLEMENT TO REPORT NO.	

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Ukrains'kiy Biokhimichniy Zhurnal, Vol 26, No 2, pp 226, 227

RESOLUTION CONCERNING METHODS OF WORK WITH RADIOACTIVE ISOTOPES PASSED BY USSR COORDINATION MEETING ON BIOCHEMISTRY OF NERVOUS SYSTEM

After considering the problems pertaining to (a) the dosage of tracer atoms in investigations on the metabolism of the nervous system, (b) methods of reporting the results obtained in this type of work, and (c) extension of the use of isotopes in biochemical research, the coordination meeting made the following decisions:

1. The dosage of radioactive substances used in investigations of brain metabolism must correspond to the characteristics of the substance being investigated and to the physiological problems subjected to study. Although a minimum quantity of the radioactive substance must be used, the dose must be large enough to yield at least twice the number of impulses produced by the background when samples are examined. A desirable range is five to six times the number of impulses produced by the background.

2. To achieve greater precision in work with radioactive phosphorus, block or end [scintillation?] counters must henceforth be used, which are much more sensitive than the metal counters that are being used extensively at present.

3. The Institute of Biophysics, Academy of Sciences USSR should be requested to develop the best designs of both block (or end) counters and flow counters suitable for biochemical research.

4. It is recommended that the dosage of tracer atoms used in work with radioactive substances be expressed in international units.

5. The substances being used should be checked for purity. The radioactivity corresponding to the time at which the substance is introduced must be established precisely.

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

50X1-HUM

STATE		NAVY		NSRB		DISTRIBUTION									
ARMY		AIR		FBI											

Sanitized Copy Approved for Release 2011/08/31 : CIA-RDP80-00809A000700200258-2

Sanitized Copy Approved for Release 2011/08/31 : CIA-RDP80-00809A000700200258-2

50X1-HUM

The Scientific Council of the President [Presidium?], Academy of Sciences USSR, should be requested to take steps to assure that standards for checking the radioactivity of the substances used be supplied to laboratories which work with radioactive substances.

6. The specific radioactivity should be expressed in the number of impulses per milligram or microgram of the fraction being investigated.

7. In citing values of relative specific activity, it must be explained under all circumstances, what is meant by this activity.

8. It is recommended that the number of isotopes used in the investigation of problems pertaining to the biochemistry of the brain be increased. Specifically, the radioactive isotopes of carbon, sulfur, sodium, potassium, and some other elements should be used.

In connection with this, a request should be made that the Scientific Council of the President, Academy of Sciences USSR, take steps to lower the cost of expensive isotopes, particularly the cost of radioactive carbon.

This resolution was passed unanimously on 19 December 1953 by the coordination meeting on the biochemistry of the nervous system, held in connection with the conference on the biochemistry of the nervous system, conducted in Kiev between 15 and 19 December 1953. The resolution was countersigned by A. V. Palladin, chairman of the coordination meeting, and Ya. V. Belik, secretary.

- E N D -

50X1-HUM

Sanitized Copy Approved for Release 2011/08/31 : CIA-RDP80-00809A000700200258-2