CLASSIFICATION [redacted] FOR OFFICIAL USE ONLY

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT NO [redacted]

STAT

COUNTRY	USSR	DATE OF INFORMATION	[illegible]
SUBJECT	Scientific Research		20
HOW PUBLISHED	Periodical	DATE DIST.	December 1946
WHERE PUBLISHED	USSR	NO. OF PAGES	1
DATE PUBLISHED	1945		
LANGUAGE	Russian	SUPPLEMENT TO	

THIS IS UNEVALUATED INFORMATION FOR THE RESEARCH USE OF TRAINED INTELLIGENCE ANALYSTS

SOURCE IDENTIFICATION Documentary as indicated. (Information requested.)

RECENTLY PUBLISHED RESEARCH OF THE KHARKOV INSTITUTE OF PHYSICAL TECHNOLOGY

"The Flow of Gas Into Vacuum Through a Long Narrow Pipe," M. I. Korsunskii and S. A. Vekshinskii, Kharkov Physicotech Inst

"Zhur Eksper i Teoret Fiziki" Vol 15, 1945, pp 593-9

The effusion of a molecular beam from a long narrow pipe into vacuum is calculated under the following conditions: (1) The length of the pipe is large as compared with its diameter. (2) The mean free path of the molecules in the pipe is larger than the length of the pipe. The equations give the angular distribution of molecules in a solid angle and on a plate perpendicular to the axis of the tube at the distance h from its opening. Experimental data on the distribution of the δ of Ag evaporated from a pipe on a glass plate in high vacuum agree well with calculated figures. The amount of deposit in this case has a sharp maximum in the center as compared with the broader distribution in an effusion through a hole in a thin plate.

- E N D -

FOR OFFICIAL USE ONLY

CLASSIFICATION [redacted]

STATE	X	NAVY	X	NSRB		DISTRIBUTION									
ARMY	X	AIR	X												

RESTRICTED