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Comment of the Interagency Intelligence Advisory Group
on Exchanges, dated January 28, 1974

Subject: Chemical Catalysis: Project on In-depth
Study of Selected Catalytic Systems

"The comment was occasioned by the letter of
George Keulks to O. V. Krylov dated November 14, 1973,
and is as follows:

"The particular aspect of catalysis research,
namely the isomerization of butene-1 on zeolites and
silica-alumina, has potential applications in the
cracking (processing) of petroleum, a general area in
which the Soviets have had a long-standing need for
assistance. As a result, we are led to wonder just
what new and useful information the US collaborators
will receive from their Soviet counterparts as a
result of their joint research. Moreover, we noted
with interest Dr. Kazansky's observation that the pure
1-butene needed for his part of the research was
unavailable in the USSR and would Dr. Hall send him
some.

"I trust you will call this opinion to the US experts
working on this topic, and we would welcome any comment they
may have."

On March 12, 1974 the Secretariat forwarded to the
IIAGE Dr. Baldeschieler's review of the above comment:

"As far as I am aware, the isomerization of
paraffins and olefins on zeolites and silica-alumina
is well understood, and I do not believe that
strategic or commercial information is being
transferred. Pure butane is a standard material
for study of catalytic surfaces, and I hope that
in the program, we will have access to Soviet
standard materials as well."

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17 September 1974

MEMORANDUM FOR THE RECORD

SUBJECT: OSI Assessment of Progress in the
S&T Bilateral Agreement Project
on Chemical Catalysis

1. Little substantive information on Soviet catalysis research has yet surfaced as a result of the US-USSR exchange. Since the exchange of researchers between US and Soviet laboratories has only recently begun, it is premature to expect detailed and considered reports on assessments of the quality of Soviet researchers, comments on the Soviet research techniques, and judgements on the state-of-the-art in Soviet catalysis research.

2. Brief visits of technical personnel and short tours of facilities have led to reports on general American impressions of the Soviets--the most significant being that the Soviet catalysis research is overly theoretical and that the Soviets have difficulty in incorporating applicable research results into production techniques. (Note, however, that this judgement was presented in the first support paper).

3. Recent Soviet purchases of petrochemical plants/processes from the US and from other countries (e.g., the 1973 agreement between the USSR and Lummus/Monsanto to purchase a petrochemical complex) comprise the latest indication of longstanding Soviet shortcomings in the chemical industry which have clearly included catalyst technology problems on the industrial level.



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4. Although at the outset of the exchange it appeared the Soviets' goal probably was to get quick answers on catalysts applicable to industrial processes, the US side has succeeded pretty well in keeping the program on the "academic research" plane. The Soviets' objectives now may be somewhat less grandiose and opportunistic than at the outset. This is reflected partly in the fact that the principal Soviet participants are Academy theoreticians, not Ministry of Chemical Industry representatives.