RUSSIAN RESEARCH CENTRE "KURCHATOV INSTITUTE"

-

RRC KI, Kurchatov Sq., Moscow 123182, Russia

Mr. Kazuhisa Mori Executive Vice Chairman Japan Atomic Industrial Forum

Dear Mr. Mori,

Thank you for your proposals concerning cooperation of scientists from RRC "Kurchatov Institute" and Japan Atomic Industrial Forum in fields of isotope separation technologies and development means of environmental monitoring. Of course above problem are studied extensively at our Institute during last half century and we are interested in conducting joint works with our Japan colleges.

Russian Research Center "Kurchatov Institute" in cooperation with Ministry of Atomic Energy is continuing joint researches in following directions of uranium enrichment like

general problem of uranium enrichment technologies (review of different enrichment methods, their economical efficiency, present status and perspectives accounting existing and anticipated rate of industrial development etc.);

gas centrifuge technology technical problem solutions (composite materials properties, stability of high-speed rotating objects, resonant frequencies transpassing, centrifuge rotor operation modes at frequencies exceeding high-order resonant ones);

chemical stability of the materials used for in separation technology;

I believe desirable to arrange a meeting between ours and yours specialists for discussion possible cooperation in investigation of above mentioned problems and may new ones like seismic stability of centrifuges or others.

As to problem of environmental control, RRC "Kurchatov Institute" has been developed a set of different means for radioactive pollution detection and industrial wastes control. As an example extensive researches have been done in field of relation between level of radioactive contamination and appearance of accompanying gaseous radiolitic products. To control trace amounts of plutonium methods based on combined using of resonant laser photoionization and massspectrometry have been used and demonstrated good results.

For more detailed discussion, please, contact Prof. Vladimir Baranov, Director of the Institute of molecular physics (Tel. +7 095 196 9335, Fax: +7 095 196-0407, e-mail: <u>baranov@imp.kiae.ru</u>)

Very best regards Evgenity P.Velikhov President