Dr. R. N. Mukherjee Unit of Radiation Biology Division of LIfe Sciences, IAEA Vienna 1, Kaerntnerring Austria

Dear Dr. Mukherjee: Lot

Dr. A. H. Sparrow has mentioned that you are trying to coordinate and collect information on radio-resistant organisms in "liquids used for shielding nuclear reactors".

I have no useful information to offer you, but would appreciate your letting me know of any papers that may have been published on this question. In 1957 I visited the reactor at Trombay and was quite astonished to see the density of blue-green algal growth in the swimming-pool reactor. Subsequently, I believe I saw a note on the question in Nature, but have not been able to retrieve the reference.

My immediate interest in the question has to do with possible sources of radiation-resistant bacteria, and we have already found some interesting organisms, different from Micrococcus radiodurans, at the Brookhaven site, which we are exploring further for genetic investigations. If you can let me have a list of published reference on organisms in reactor pools, as well as any other information that you might have for my immediate research interest, I would be most grateful to you. The particular direction of my interest is to investigate possibly diverse mechanisms of repair of radiation-damaged DNA in bacteria.

Sincerely yours,

Joshua Lederberg Professor of Genetics