

# correspondence

## Radon emissions

SIR,—Wendy Barnaby (August 28) writes on the problem of radon emission from the tailings of uranium milling in Sweden. This problem would arise from the large volume of uranium shale that has to be treated. She describes Professor Robert O. Pohl's report that "radon can escape more easily from the broken ground of a mine than from an undisturbed terrain". This report is well known among Swedish experts. Thorium-230, a metallic chemical element, and radon-222, a noble gas formed from uranium, can be found wherever there is uranium in the Earth's crust—not only in uranium ores and mines but also in primary rock.

In 1965, the Swedish Atomic Energy Company (AB Atomenergi) started operations at Ranstad where there is a large uranium deposit. From the very beginning, the emission of radon from the leaching residues has been studied. It has been shown that the emission from recently deposited residues is approximately equal to that measured in the open pit on the uranium shale bench. It has also been shown that the emission of radon from the restored tailings is of the same order of magnitude as that from the undisturbed terrain within the open pit area. In Ranstad, large scale tests have been made during the past few years on the deposition of leaching residues. The residues were laid out in stockpiles after mixing with fine-ground limestone and packed with a vibrating roller. After that, the area was covered with earth from the open pit and seeded.

As well as giving the landscape an attractive finish and making it possible to use the ground for agricultural purpose, the emission of radon has been minimised.

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## Cancer at work

SIR,—Your article "Cancer at work" (September 18) is admirable in that it draws attention to environmental carcinogens. It is regrettable, however, that no mention is made of the painstaking work of S. A. Henry of the Medical Inspectorate of Factories in finally convincing authorities of the

risks of tar and in particular of lubricating oils used outside the cotton industries (*Cancer of the Scrotum in Relation to Occupation*, Oxford University Press, 1946). The considerable emphasis laid on the historical background leading to the recognition of these carcinogens does, moreover, distract attention from the fact that these problems are still with us. The sentence "Although less common, scrotal cancer still occurs in industry in conditions in which men are exposed to lubricating oils" is a gross understatement of the present situation. Although there are geographical variations in the occurrence of lubricating-oil cancer which are as yet unexplained, the incidence in the West Midlands not only of scrotal cancer but of skin cancer and possibly of lung cancer is a cause for considerable concern.

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## Leprosy treatment

SIR,—Being engaged in leprosy control work in India, I daily face exactly those problems mentioned by Browne and Davey (May 15) as the main obstacles in implementing regular and sustained treatment of leprosy patients, namely, the social aspects of leprosy and the patients' attitude to leprosy.

I would like to add one more human factor and that is the importance of motivated staff. Much has been written about planning, education of the public and the approach of the leprosy patient, but little or no attention is usually paid to the field worker. Yet he is the key person in the strategy for leprosy. It is not lack of planning or of effective drugs or of a vaccine which has caused so many leprosy control programmes to founder but lack of dedicated and competent field staff. So our first concern must be to give field workers the right motivation.

My second point concerns the treatment of leprosy. Both Browne and Davey, and Crawford (March 20), refer to sulphones only but nowadays no leprosy control unit can function properly unless it has Lampréne at its disposal as well. The absolute indication for Lampréne is resistance against Dapsone. This was very rare, but according to Browne and Davey "it is not now, and the recent figures coming from countries where the problem has

been adequately investigated are very disturbing to say the least."

The greatest advantage of Lampréne, however, is that it has both bacteriostatic and anti-inflammatory properties. Thus treatment of Lampréne can be continued during reactions, whereas treatment with Dapsone is often discontinued during reactions, either by the doctor or by the patient himself. This may ultimately lead to resistance against Dapsone in lepromatous patients who are prone to reactions. It is for this momentous group of patients that Lampréne is absolutely indispensable. In Dichpalli, with approximately 10,000 leprosy patients receiving treatment, 2 to 3% require Lampréne and the proportion is still increasing.

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## Czech conference

SIR,—I recently registered as a participant in the International Conference on Low Radioactivity Measurement and Applications (LRM) in Czechoslovakia (October 6–10,) paid for the conference fee, and got written acceptance of my participation and hotel lodgings. Also a visa for that particular conference I received from the Czechoslovakian Embassy in Bonn.

On September 17, I received a letter from the organiser (also in Czechoslovakia) to say that I would not obtain a visa to attend the LRM conference due to "news from the Czechoslovak ministry of Foreign affairs." The Bonn Czechoslovakian embassy told me on demand that the validity of my visa could by no means depend on such a letter, and that I might still travel there.

Later I received a telegram from the organiser telling me in a harsh tone and without giving reasons that "we cannot accept your participation in the conference."

I never had any political or other differences with my own or foreign countries, but I would not think of participating in this conference after such an incredible sequence of events. May I suggest to Czechoslovakian politicians: If you really want to build up effective scientific research why not treat your scientists better and their guests in a less arbitrary manner?

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