ATOMIC POWER MINIATURIZED

Miniature atomic batteries whose energy comes from the emission of particles by radioactive materials are now practical devices for special uses in shipping, meteorology, communications, medicine and other activities. Some of the technology has been developed from extensive use with space satellites but efficiency and reliability has also been proved by use of generators as shipping beacons and weather stations.

The photos here show (a) a compact SNAP nuclear reactor used to test special protective shields as part of space research in USA (Photo: Atomics International); (b) wiring a RIPPLE power source of a type now being tested in Europe to provide marine navigation lights (Photo: UKAEA).

IAEA study groups and meetings have also drawn attention to the possible use of miniature batteries for use inside the body to encourage the working of defective organs or for assisting body functions. Attention is being given to the preparation of guidance both in the use of such sources and in the regulations controlling them.



