

## BOOK REVIEW

**Chernobyl: The Real Story.** R. F. MOULD. Pergamon Press (1988) £25.00 hard cover, £9.95 softcover. 255 pages.

On the 26th April 1986 an RBMK 1000 nuclear reactor in the town of Chernobyl in the U.S.S.R. suffered the most serious accident in the history of nuclear power. According to observers near the reactor, at about 0124 h two explosions occurred, one a few seconds after the other, and burning debris and sparks shot into the air above the reactor. Some of these debris fell onto the roof of the machine room and started a fire. So began one of the most unusual events in the history of industrial accidents.

As we now know, this accident arose from a combination of poor reactor design, lack of adequately trained personnel and flagrant disobedience of the reactor operating instructions. Essentially everything that could go wrong did go wrong and, unlike the Three Mile Island accident in the U.S.A., the RBMK reactor was unforgiving in its behaviour and moreover had no specially designed secondary containment building. The situation was likened, by a member of the U.S.S.R. delegation to Vienna, as analogous to the personnel of an aeroplane testing the plane in flight by opening doors and shutting off various systems. The resulting radioactive emissions from the reactor contaminated large parts of Europe and were to have far-reaching physical and political effects.

Richard Mould is a good story-teller and also a very well-qualified scientist who can distinguish between scientific fact and journalistic fiction. He was part of the team which was invited by the U.S.S.R. to visit the Chernobyl site and be briefed at first hand on the causes and consequences of the accident. He met many of the Russians who were responsible

for the clean-up and evacuation processes as well as being able to speak informally to others. The results of his efforts make fascinating reading. He takes the reader through the accident sequence, in the latter stages second by second, we are told who the victims were and something of the associated personal problems they faced. The evacuation of two complete towns, and from outlying regions, led to a total movement of 135,000 people. Decontamination, the food chain and the final entombment of the reactor are all dealt with in a scholarly yet easy-to-read style.

The text has many photographs, some never before published; indeed a good third of the book consists of photographs which help to bring the enormity of the problem closer to home. Despite the seriousness of the matter, life is not without humour and Dr Mould has once again shown his own talent for picking up amusing stories (*Mould's Medical Anecdotes*, Adam Hilger Press). For example, Dr Mould tells us with tongue in cheek, that among the local population, there was a widespread belief that vodka gave some protection against radiation. The dose for this medicine was jokingly given as follows:

“Take a bottle of red wine and add seven drops to a glass of vodka. Repeat this prescription until the bottle of wine is empty. You are cured of radiation sickness but will die of cirrhosis of the liver.”

This book is highly recommended as informative and entertaining.

M. M. R. WILLIAMS

*Professor of Nuclear Engineering  
The University of Michigan*