

IN CONVERSATION

Put a percentage on it

France has shown the way. We need to build as many nuclear reactors as we can and it still would not be enough.

In today's interdependent world, a single event can have catastrophic effects that will influence the entire world. Is there a risk in going nuclear so steadfastly?

The world has never been endangered by nuclear power. Even the consequences of Chernobyl were relatively limited when examined by the WHO. The far greater danger to mankind right now is a status quo policy that carries us into a doubling and tripling of greenhouse gases, which will have catastrophic effects on the biosphere. The dangers from radiation coming out of a nuclear power plant are extremely small, the dangers of catastrophic climate change are extremely great.

And with a captive nuclear power station in place, how do you propose to restrict the clandestine use of such facilities, for example, in the development of weapons.

There is only a thin line separating the two, like Bertrand Russell said 'a martyr is a murderer, once he crosses the border'

The relationship between a nuclear power plant and a nuclear weapon is a very distant relationship. A nuclear power plant is not a potential nuclear weapons factory. It is not a potential bomb. A nuclear power plant will not blow up. A nuclear power plant has one thing in common with a nuclear weapon and that is they both derive from an element put on the planet ubiquitously by our Maker, called uranium. A hundred years ago, people began to understand that it would be possible to get power by splitting an atom. They discovered later that uranium was the one they knew how to split. This has great potential for good or ill. But the technologies that are used to achieve that are very different. To pull energy out of uranium for electricity requires technology that is very different from pulling energy out for a bomb. There has never been a nuclear weapon made through the misuse of a

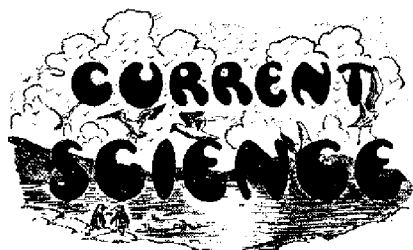
nuclear power plant. All clandestine and publicly open nuclear weapons production has been done through specialized secret military projects. They have nothing to do with the civil production of electricity from nuclear energy.

Finally, what is going to be your mission and WNA priorities in the future? Would you like to highlight any of these?

To fulfil our name by developing genuinely global membership and to begin to coalesce a world nuclear community, nuclear professionals who are existing but in a disaggregated way and to work to promote their common profession which is the use of nuclear energy technology for sustainable development. That is our goal and that is why our subtitle is 'Energy for sustainable development'.

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FROM THE ARCHIVES



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The impact of science upon society

Scientists see very clearly how, if politicians were more intelligent, if businessmen were more disinterested and had more social responsibility, if governments were more fearless, far-sighted, and flexible, our knowledge could be more fully and quickly used to the great advantage of the standard of life and health – the long lag could be avoided, and we should work for social ends. It means, says Mr Julian Huxley, 'the replacement of the present socially irresponsible financial control by socially responsible planning bodies'. Also, it obviously involves very considerable alterations in the structure and objectives of society, and in the occupations and

pre-occupations of its individuals. Now a careful study of the literature of planning shows that it deals mainly with planning the known, and hardly at all with planning for changes in the known. Although it contemplates 'planned' research, it does not generally provide for introducing the results of new research into the plan, and for dealing with the actual *impact* – the unemployment, redirection of skill, and location, and the breaking of sentimental ties that distinguish men from robots. It seems to have not many more expedients for this human problem than our quasi-individualist society with its alleged irresponsibility. It also tends to assume that we can tell in advance what will succeed in public demand and what will be superseded. There is nothing more difficult, and the attempt to judge correctly under the intellectual stimulus of high profits and risk of great losses is at least as likely to succeed as the less personally vital decision on a committee. Would a planning committee, for example, planning a new hotel in 1904, have known any better than capitalist prevision that the fifteen bathrooms then considered adequate for social demand, ought really to have been ten times that number if the hotel was not

to be considered obsolete thirty years later? Prevision thought of in terms of hindsight is easy, and few scientists have enjoyed the responsibility of making practical decisions as to what the public will want far ahead. They, therefore, tend to think of prevision in terms of knowledge and appreciation of particular scientific possibilities, whereas it involves unknown demand schedules, the unceasing baffling principle of substitution, the inertia of institutions, the crusts of tradition and the queer incalculability of mass mind. Of course, in a world where people go where they are told, when they are told, do what they were instructed to do, accept the reward they are allotted, consume what is provided for them, and what is manifestly so scientifically 'good for them' these difficulties need not arise.

What we have learnt concerning the proper impact of science upon society in the past century is trifling, compared with what we have yet to discover and apply. We have spent much and long upon the science of matter, and the greater our success the greater must be our failure, unless we turn also at long last to an equal advance in the science of man.