LETTERS TO THE EDITOR

COMMENT ON "AN OVERVIEW OF INERTIAL FUSION REACTOR DESIGN" AND "TECHNOLOGY REQUIREMENTS FOR COMMERCIAL APPLICATIONS OF INERTIAL CONFINEMENT FUSION"

A paper by M. J. Monsler et al.[1] in the July 1981 issue of *Nuclear Technology/Fusion* (*NT/F*), giving an overview of inertial fusion reactors, including a historical perspective, completely ignores the technical designs published many years earlier by F. Winterberg. The concepts first proposed by Winterberg are both (a) the wetted wall reactor cavity concept and (b) the magnetically protected wall concept. These technical concepts were presented in all detail at the Enrico Fermi School Course on High Energy Density in 1969 and were published in the proceedings by Academic Press in 1971. Thus, Monsler et al. rediscover well-known concepts due to Winterberg.

In another paper by T. G. Frank and C. E. Rossi,[2] in the same July 1981 issue of *NT/F*, no mention is made of the magnetically insulated, pulse power driven light ion beam diode concept, first proposed by Winterberg in the same paper published by Academic Press in 1971. Thus, Frank also rediscovers a well-known idea due to Winterberg.

Since Winterberg is recognized as the originator of these technical concepts in the international literature, it is difficult to conceive that Monsler and Frank were unaware of the original work of Winterberg.

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REFERENCES

1. M. J. MONSLER et al., "An Overview of Inertial Fusion Reactor Design," *Nucl. Technol./Fusion*, **1**, 302 (July 1981).

2. T. G. FRANK and C. E. ROSSI, "Technology Requirements for Commercial Applications of Inertial Confinement Fusion," *Nucl. Technol./Fusion*, **1**, 359 (July 1981).

COMMENT ON "AN OVERVIEW OF INERTIAL FUSION REACTOR DESIGN"

This is in reference to a paper by Monsler et al.[1] in the July 1981 issue of *Nuclear Technology/Fusion*. The paper gives a historic review of inertial confinement fusion (ICF) reactor designs. In Monsler's paper the following claims are made.

1. The first ICF reactor design was made in 1971 by Fraas of Oak Ridge National Laboratory.

2. The wetted wall reactor concepted was first proposed in 1973 by L. A. Booth of Los Alamos National Laboratory (LANL).

3. The magnetically protected wall concept was first proposed in 1974 by T. Frank, D. Freiwald, T. Merson, and J. Devaney of LANL.

In rebutting these false claims, I state the following. In 1969 I proposed at the Enrico Fermi International School of Physics both the wetted wall and magnetically protected ICF cavity reactor concepts. The proceedings of that meeting were published in 1971 by Academic Press of New York as *Physics of High Energy Density*. I therefore believe that the above named LANL scientists had simply reinvented several years later what was already widespread knowledge at that time. I only concede that Fraas did not know of my work because it took Academic Press two years to publish the proceedings. The concept by Fraas, showing great originality, was also quite different from my own proposals.

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REFERENCE

1. M. J. MONSLER et al., "An Overview of Inertial Fusion Reactor Design," *Nucl. Technol./Fusion*, **1**, 302 (July 1981).

REPLY TO "COMMENT ON 'AN OVERVIEW OF INERTIAL FUSION REACTOR DESIGN' "

We welcome the chance to acknowledge F. Winterberg's[1] early suggestion for an inertial confinement fusion reactor, published in the Proceedings of the Enrico Fermi International School of Physics, Course XLVIII, *Physics of High Energy Density*, P. Caldirola and H. Knoepfel, Eds., Academic Press, New York (1971). The authors[2] regret they were unaware of this reference.

We note however that, contrary to H. Wilhelm's[3] statement, Winterberg provided no details or analysis of