

COMMENTS



This issue of *Fusion Technology (FT)* is quite unique in that the contributed papers are all devoted to cold fusion. An explanation for this is called for. One year ago, *FT* issued a Call for Technical Notes on Cold Fusion. A limited number of technical notes were included in subsequent issues. However, the momentum in this area has been gradually growing, and recently we found ourselves with a large backlog of accepted contributions. To handle that situation, we decided to put them together in a single issue. To complement these specialized papers, we are fortunate to have a comprehensive overview prepared by J. Bockris and colleagues from Texas A&M University. The group at Texas A&M has one of the largest efforts in the cold fusion area and is acknowledged to be among the leaders in the field. Thus, they were in an excellent position to prepare an overview that provides a broad insight in this rapidly emerging field.

The nine technical notes in this issue are themselves quite significant. The contribution from the Bhabha Atomic Research Centre (BARC) represents an extremely large and successful effort by leading scientists in India. The reports included here represent a condensation of contributions included in a limited distribution report issued earlier by BARC. Some of their work was also presented at the recent First Annual Conference in Cold Fusion in Salt Lake City, Utah. Attendees generally viewed the BARC contribution to be quite remarkable.

The remaining technical notes cover a variety of areas. A most striking result is the achievement of vigorous reactions reported by Arata and Zhang. The measurements described by C. Scott and colleagues at Oak Ridge National Laboratory indicate significant excess heat production; it is one of the first reports of coincident increases in neutron and gamma-ray count rates. The experimental results by S. Aiello et al. are also quite interesting. Additional insight to experimental technique is provided by A. Foglio Para et al. and by M. Bittner et al. New theories on cold fusion range from the hypothesis of X -particle catalysis by J. Rafelski et al. to the dynamic model reported by Tabet and Tenenbaum and a discussion of velocity distribution effects by R. Rice et al.

All of these technical notes continue to add to our understanding of the phenomena occurring in cold fusion. Still, as stated in my own presentation at the First Annual Conference on Cold Fusion, the field has not yet matured to the point where theory and experiment can be directly compared. The problem is that diagnostic techniques have not yet conclusively identified the nuclear reaction products and at the same time there has not been a consensus about the appropriate theory. Thus the mystery of cold fusion remains. Still, as seen from these and earlier technical notes, rapid progress is being made, so we can anticipate a rapid maturing of the field. Hopefully, the continued publication of this series of Cold Fusion Technical Notes in *FT* provides a strong catalyst for the maturing of the field.

The reader should also not overlook the other departments in this issue. These include two interesting meeting summaries and an important book review.

George Miley