COMMENTS

When I heard that a symposium was being planned in honor of John Dawson's 60th birthday, I immediately approached Dr. Tom Katsouleas, chairman of the symposium, and requested a summary be prepared for *Fusion Technology*. The intent was to provide an opportunity for *Fusion Technology* to join in the reflection back over the many contributions John made to fusion plasma physics and fusion technology. The resulting summary, prepared by T. Tajima, University of Texas, appears in this issue. In addition to technical matters, it provides an interesting, intimate view of John Dawson the man.

Indeed, I have also had the privilege of knowing John for a number of years. My first acquaintance came when I visited Princeton University at the time the Tokamak Fusion Test Reactor (TFTR) was in the beginning conceptual stages and the famous two-component fusion plasma paper came out by Dawson, Furth, and Tenney (MATT-841, Princeton Plasma Physics Laboratory, May 1971). This was an exciting idea, and, after some discussion with the authors, I set several students to work on extending the concept to advanced fuels [Bathke, Towner, and Miley, *Trans. Am. Nucl. Soc.*, **17**, 41, (1973)].

Not long after that, I discovered that John Dawson also had a strong interest in developing advanced fuels; indeed, we were both in search of a high-beta system. This led me to become extremely interested in field-reversed configurations, while John took the route of multipoles. I followed his work very closely and found that, in addition to developing the confinement concept, he made a number of important additions to the physics understanding of advanced fuel systems. Thus, I particularly remember his work on nuclear elastic scattering and enhancement of the $\langle \sigma v \rangle$ due to upscattering of ions in the tail of distribution. Indeed, John had the ultimate goal of finding a way to burn p-^{11}B, and each of these new thoughts brought him a step closer to that goal. While he never quite made it, he certainly came as close as anyone else has done (and he keeps working on this, so success may come yet!).

Even before I met John, I was aware of his important early contributions to laser-driven inertial confinement fusion (ICF). I always thought that one of his early papers [Dawson, *Phys. Fluids*, **7**, 981 (1964)] provided an important conceptual understanding of the area and frequently used it as a handout in an ICF class that I taught.

When the National Center for Supercomputer Applications was opened

at the University of Illinois, I was pleased to find John on campus as a member of the advisory committee for the center. His contributions to computer simulation techniques placed him in high regard among peers in that field also. Most recently, I attended a meeting on D-^{3}He fusion at the University of Wisconsin in which John was also a participant. He had been asked to provide a paper on new thoughts about possible uses of such reactors, and, true to form, he came up with unique new possibilities including several in the medical field. He is that type of person. His mind is constantly probing new directions in any area in which he is involved. Indeed, a reading of the symposium summary in this issue will further confirm this.

Certainly the fusion community has benefited greatly from the many contributions by John Dawson and we at *Fusion Technology* are extremely pleased to join in the recognition of his 60th birthday.

George Miley