

■日本燃焼学会創立50周年記念特集■

The Japanese Combustion Society 50th Anniversary The Relationship with the Combustion Institute

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It is an honour and a pleasure for me personally and as President of the Combustion Institute to be with you today in celebration of the 50th birthday of the Japanese Combustion Society and the Japanese Section of the Combustion Institute. The Institute celebrated its 50th birthday in Chicago last year and many of you were there to enjoy the occasion. The fact that the JCS birthday follows so soon after that testifies to the very early involvement of Japanese researchers in the Institute.

Even before the Institute and the JCS were founded, three Japanese researchers attended the 4th International Symposium on Combustion in 1952, presenting a total of 6 papers at that meeting. These papers were devoted to turbulent combustion, detonations and engine combustion, themes that have remained central in combustion research to this day. Already we see the presence of Professor Seiichiro Kumagai whose later, legendary work on droplet combustion and other topics was to continue until the 25th Symposium when his twenty-first paper to the Symposium series was presented. Other notable authors were Professors Hiroshi Jinno, Tsutomu Hikita, and Sakae Yagi (who was one of only a handful of non-US appointees to the Symposium Committee).

Professor Yagi was appointed as Japanese representative to the Combustion Institute Committee at the first Board of Directors meeting of the newly founded Combustion Institute in September 1954. He served on this Committee until the 9th Symposium (1962) - coincidentally, the Combustion Institute Board appointed its first non-US members that year (from Germany and France) but it was not until the 12th Symposium in 1968 that a Board member was appointed from Japan. That was Professor Hikita who had succeeded Professor Yagi in 1962 - he continued on the Board until the 18th Symposium in 1980. The Institute was slowly

internationalising and Professor Kumagai was appointed to the Board at the 15th Symposium in 1974 and served until 1986. There have always been two members of the Japanese Section on the Board since then, including Professors Jinno (1986-1998), Tsuji (1980-1992), and Hirano (1992-2004). Current members are Professors Niioka (since 1998) and Kono (since 2004), with Professor Niioka now serving as Vice President for Sectional Affairs. The Board now stands as a truly international body representing combustion research around the world.

The Japanese Section of the Combustion Institute has hosted the International Symposium on Combustion on two memorable occasions in 1974 (Tokyo) and in 2002 (Sapporo). The first was particularly significant for me as it was my first Symposium - it was such an exciting meeting in such an exciting place, I knew I had found the forum that I would stay with. Beginning in 1997, the Japanese Section has also played a lead role (with the Chinese, Chinese Taipei, Korean, and Australia-New Zealand Sections) in establishing the Asia-Pacific regional combustion meeting, ASPACC, which I know is encouraging young researchers in the region to make their careers in our field.

It is clear that Japanese combustion researchers have made significant contributions to combustion and to the Combustion Institute for a very long time. We all respect age and long service, but it is the strength of those contributions that earns accolades. In this regard, the Japanese combustion community stands out especially. There have been many invited keynote and plenary lectures by Japanese researchers at the Symposia - the first of these appears to have been Professor Kumagai's lecture on fuel sprays to the 6th Symposium in 1956; the most recent being Mizobuchi's contribution to the 50th anniversary lecture on Computational Combustion at the 30th Symposium last year.

Since the Institute introduced Colloquium Co-Chairs to organise designated parts of the Combustion Symposium,

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Japanese researchers have played a significant part in assessing submitted papers and maintaining the very highest of standards that the Symposium represents. Not surprisingly, given their long tradition of outstanding work in the area, Japanese researchers have chaired colloquia on spray flames and microgravity. It bodes well for the future of Japanese combustion research that a Japanese chair has been appointed to the colloquium on new concepts in combustion technology every time since that colloquium was first established.

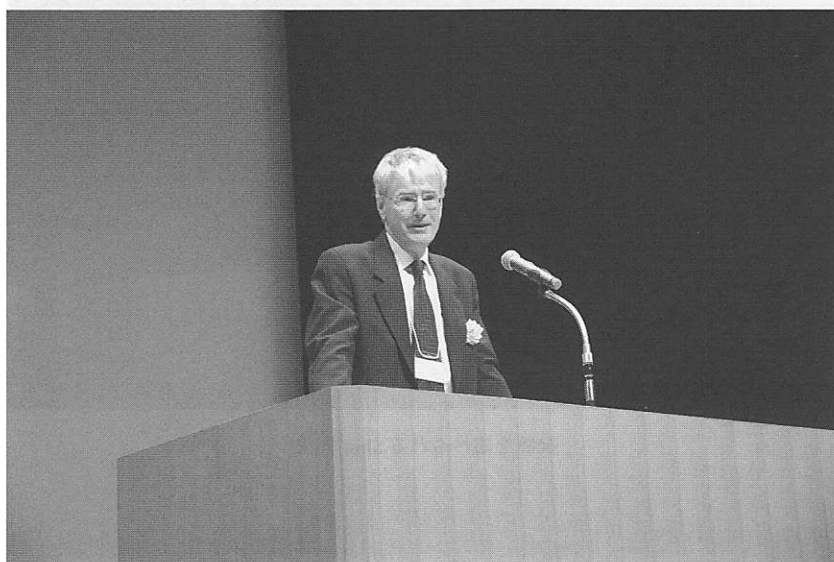
The Institute's journal, *Combustion and Flame*, was established in 1956 and is now the prestige publication in our area. Only the most respected members of the combustion community are asked to serve on its Editorial Board - Japanese involvement began when at the very beginning when Professor Yagi was appointed to founding Editorial Board, serving until 1972 when he was replaced by Professor Hikita, and the line has continued unbroken since then. Professor Tadao Takeno served as Deputy Editor from 1997-2002; Professor Niioka has held the position since 2002.

The highest honour that the Institute pays to researchers in combustion is the award of one of its Gold Medals. Professor Kumagai was awarded the Egerton Gold Medal, "for distinguished, continuing and encouraging contributions to the field of combustion"; Professor Niioka received this medal in 2002. The Bernard Lewis Gold Medal "for brilliant research in the field of combustion" has been awarded to Professor Tsuji in 1988 for his work on the fundamental aspects of flames (most notably of course the counterflow

diffusion flame) and to Professor Toshisuke Hirano in 2004 for work on fire and safety.

The Combustion Institute awards its Silver Medal for an outstanding paper presented at the Combustion Symposium. The first of these was awarded to Professors Kumagai and Hiroshi Isoda for their paper on combustion of fuel droplets in a falling chamber at the 6th Symposium. This paper was not only a major advance in droplet combustion research, but also one of the earliest examples of microgravity combustion research anywhere. Not surprisingly, these themes remain strong in Japanese research today. Professor Hidenori Matsui was awarded the Silver Medal for his paper with John Lee from Canada on detonation hazards at the 17th Symposium.

In reviewing this history of the involvement of the Japanese combustion research community with the Combustion Institute, it is apparent that the Japanese Combustion Society has been blessed with a number of champions who have set the highest standards and maintained them through their students and their students' students. The ignition and early stages of propagation were at the University of Tokyo, but the flame burns brightly now at many other campuses also. How fitting then, that we should be celebrating 50 years of brilliant combustion research here in Tokyo. It is an honour for me to be here to join with you in this celebration, and to thank you on behalf of Combustion Institute for your contributions as scientists, engineers, colleagues and friends to our field and our organisation.



祝辞を述べられる Haynes 先生