

**REPORT ON VIIIth INTERNATIONAL CONFERENCE ON
MAGNETIC RESONANCE IN BIOLOGICAL SYSTEMS
NARA, JAPAN, 11-14 SEPTEMBER 1978**

The VIIIth International Conference on Magnetic Resonance in Biological Systems was held at the Nara Hotel, Nara, Japan, September 11-14, 1978, and was attended by about 250 persons. This report includes some of the subject matter presented at this meeting.

Twenty-three papers were presented in six lecture sessions. Eight papers in two sessions on biological membranes dealt with ^2H nmr in model and biological membranes (I.C.P. Smith), phase equilibria in model membranes (H.M. McConnell), lipid-protein interactions as studied by spin-labeling techniques (D. Marsh), anisotropic motion by saturation-transfer spectroscopy (J.S. Hyde), epr studies of free radicals and carcinogenesis (R.A. Floyd), ^{19}F nmr studies of membranes (C. Ho), spin-label studies of lipid-protein interactions (P.F. Devaux), interaction of Sendai virus with erythrocytes (K. Kuroda, T. Masuda, and S. Ohnishi).

A progress report on a 600 MHz system was presented by J. Dadok. In this session three more papers were presented on ^{15}N nmr studies of hemoproteins (I. Morishima and T. Inubushi), ^1H nmr studies on Bence Jones proteins (Y. Arata and A. Shimizu), and ^1H nmr studies of histones (E.M. Bradbury). A session on biologically important molecules included three papers on nucleotides (G.B. Sergeev, S.V. Zenin, B.V. Tjaglov), conformational equilibria by the lanthanide probe method (T. Miyazawa), and ribonucleotide reductase from *E. coli* (A. Ehrenberg, A. Graslund, B. M. Sjoberg, and P. Reichard). Five papers were presented in a session on nmr

of living systems, which included a ^1H nmr study of nerve endings (D. Fiat and R. Greenberg), ^{15}N nmr study of the organization of bacterial-cell-wall polymers (A. Lapidot and C.S. Irving), ^{31}P nmr study of bioenergetics in mitochondria (S. Ogawa), ^{31}P nmr studies of biochemical processes occurring in contracting muscle (D.G. Gadian, M. J. Dawson, and D.R. Wilkie), and ^{13}C and ^{31}P nmr studies of living systems such as silkworms and birds (M. Kainosho).

NMR relaxation studies of protein dynamics was the subject of a lecture by O. Jardetzky. Two papers on nmr zeugmatography or imaging were given by E.R. Andrew, P.A. Bottomley, W.S. Hinshaw, G.N. Holland, W.S. Moors, C. Simaraj, and B.S. Worthington, and also by P.C. Lauterbur.

In poster sessions one hundred and twenty papers were presented. The poster session covered a variety of topics, from cryo-nmr to the significance of molecular space in biological systems and to two-dimensional fourier transform spectroscopy; unfortunately, a complete list of the papers in the poster sessions is too long to give here.

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