

PREFACE

This volume contains the manuscripts of the invited and plenary papers which were presented at the Fifth International Symposium on Magnetic Resonance. The Symposium was held under the auspices of the International Society of Magnetic Resonance and the Association of Magnetic Resonance Spectroscopists (India) and was sponsored by the International Union of Pure and Applied Chemistry, the International Union of Pure and Applied Physics, the International Union of Pure and Applied Biophysics, the Indian National Science Academy, Sir Dorabji Tata Trust, the Tata Institute of Fundamental Research, and the Solid State Physics Laboratory of the Ministry of Defence, Government of India.

It took place at the Tata Institute of Fundamental Research, Bombay, India, 14–18 January 1974 in recognition of the remarkable scientific achievements of the Indian scientists in the field of magnetic resonance and their large participation in previous Symposia. About 280 scientists participated in the Symposium from the following 24 countries—Australia, Belgium, Canada, France, Germany, Greece, Holland, Hong Kong, Hungary, India, Iran, Israel, Italy, Japan, Romania, South Africa, South America, Spain, Sri Lanka, Sweden, Switzerland, UK, USA, USSR. There were 175 papers presented at the Symposium—9 were plenary, 19 invited and 147 contributed. Most of the papers dealt with nuclear magnetic resonance and its applications to physics, chemistry and biology. At this conference the biological applications of n.m.r. were stressed more than at the previous meetings.

The Opening Ceremony was chaired by Prof. A. K. Saha, Chairman of the International Organizing Committee for the Symposium. He welcomed the participants and traced the history of research in magnetic resonance in India. On the occasion of this Symposium, the International Society of Magnetic Resonance presented its second award for outstanding achievements in the field of magnetic resonance to Prof. H. S. Gutowsky of the University of Illinois. His colleague Prof. C. P. Slichter gave a talk outlining Prof. Gutowsky's career, Prof. Felix Bloch presented the award and Prof. Gutowsky gave an Award Address after accepting the prize*.

Previous Symposia have been held since 1965 in Japan, Brasil, Australia and Israel. The next International Symposium on Magnetic Resonance will be held in September 1977. It will take place in Banff, Alberta, Canada under the co-chairmanship of Prof. F. H. A. Rummens and Prof. John A. Weil of the University of Saskatchewan.

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Chairman, International Society
of Magnetic Resonance†

* The papers 'Some scientific contributions of Herbert S. Gutowsky' by C. P. SLICHTER and 'Chemical aspects of nuclear magnetic resonance' by H. S. GUTOWSKY will appear in the *Journal of Magnetic Resonance*, 17 (3) (March 1975).

† The International Society of Magnetic Resonance is an Associated Organization of IUPAC. The Council Members are: *Chairman*: D. Fiat; *Members*: E. R. Andrew, G. J. Béné, R. Blinc, F. Bloch, W. S. Brey, A. D. Buckingham, C. K. Coogan, J. Danon, S. Forsen, S. Fujiwara, H. S. Gutowsky, K. H. Hausser, V. Hovi, O. Jardetzky, A. Kastler, V. J. Kowalewski, A. Losche, L. W. Reeves, A. K. Saha, J. Smidt, I. Solomon, I. Ursu, J. S. Waugh.