

**The Chemical Society Annual Meeting
Imperial College London**

29 September – 1 October 1970

SESSION F: GROUP - N.M.R. SPECTROSCOPY (Organised by the NMRDG)

Theme 1 -N.M.R. Spectroscopy of Nuclei other than Hydrogen

Theme 2 - N.M.R. Spectroscopy of large Molecules

Tuesday, 29 September - Lecture Theatre B, No. 342, Mechanical Engineering Department

Morning Session Chairman: **Dr. E. W. Randall**

- 1100 Carbon-13 Studies of N-Substituted Amides and Lactams
R. G. Jones* and P. Partington (University of Essex)
- 1115 ^{13}C Chemical Shifts in Some Enaminoketones.
G. R. Bedford and D. Greatbanks (I.C.I. Pharmaceuticals Division, Macclesfield)
- 1130 Isotopic Effects in the Tin, Carbon-13 and Proton NMR spectra of Tetramethyl Tin and Related Compounds.
D. G. Gillies* and E. W. Hughes (Royal Holloway College, Englefield Green)
- 1145 Hetero-nuclear INDOR-Spectroscopy of Metal-Vinyl-Compounds.
H. Dreeskamp* and K. Hildenbrand (Max-Planck-Institute, für Kohlenforschung, Mülheim, Germany)
- 1200 Magnetic Double Resonance Studies of Some Derivatives of Tungsten Hexafluoride and Tungsten Oxotetrafluoride. W. McFarlane, A. M. Noble and J. M. Winfield* (University of Glasgow)
- 1215 Double Resonance Studies of ^{195}Pt Chemical Shifts and Coupling Constants in Platinum(II) Complexes.
W. McFarlane (Sir John Cass College, London)

Afternoon Session Chairman: **Dr. L. H. Sutcliffe.**

- 1400 The ^{27}Al NMR Shifts of the Tetrahaloaluminate Ions in Solution.
R. G. Kidd* and D. R. Truax (University of Western Ontario, Canada)
- 1415 ^{19}F and ^{23}Na NMR Studies of Aqueous Sodium Fluoroborate.
J. W. Akitt (University of Newcastle upon Tyne)
- 1430 The Prediction of Changes in the ^{31}P N.M.R. Shifts of Tertiary Phosphines on Coordination.
B. E. Mann*, C. Masters, B. L. Shaw, R. M. Slade and R. E. Stainbank (University of Leeds)
- 1445 ^{31}P N.M.R. Studies of some Phosphorus-Nitrogen Compounds.
J. S. Harman, R. Keat* and D. W. A. Sharp (University of Glasgow)

* to read paper

- 1500 Tea
- 1530 Application of Superconducting Magnet Spectrometers in High Resolution N.M.R.
L. F. Johnson and D. Shaw* (Varian Associates Limited Walton-on-Thames)
- 1545 The ^{13}C and ^{19}F N.M.R. Spectra of Some 1-Substituted 2,3 Difluorobenzenes and of Some Fluorobenzofurans.
R. J. Abraham, G. R. Bedford, D. Greatbanks and D. F. Wileman* (University of Liverpool and I.C.I. Pharmaceuticals Division, Macclesfield)
- 1600 The Use of ^{19}F N.M.R. for the Study of Steric Interactions between Aromatic Side Chains and Ring Substituents.
L. Phillips* and L. M. Twanmoh (Imperial College, London)
- 1615 Solvent Effects on Fluorine Chemical Shifts.
W. T. Raynes* and M. A. Raza (University of Sheffield)
- 1630 **GROUP PLENARY - SOME ASPECTS OF CARBON - ^{13}C N.M.R. SPECTROSCOPY.**
E. Lippmaa (Tallinn, Estonia, SSR)

Wednesday, 30 September - Lecture Theatre B, No 342 Mechanical Engineering Department

Morning Session Chairman: **Dr J. Feeney**

- 1100 P.M.R. Studies on the Enzymic Hydrolysis of p-Nitrophenyl α -D-Galactoside.
P. M. Dey, D. G. Gillies* D. M. Lake-Bakaar, J. B. Pridham and A. F. Weston (Royal Holloway College, Englefield Green)
- 1115 The H.M.R. Spectra and Conformations of Some Cyclodepsipeptides in Solution.
O. H. Hassall, M. C. Moschidis and W. A. Thomas* (University College of Swansea)
- 1130 Structure Analysis and Block Length Determination of Polyurethanes by Proton Magnetic Resonance.
W. G. B. Huysmans (Akzo Research Laboratories, Arnhem, Holland)
- 1145 Analysis of Resole Type Phenol-Formaldehyde Resins.
W. Ledger and D. F. G. Pusey* (Cray Valley Products Ltd., and Borough Polytechnic, London)
- 1200 An Empirical Reassessment of the Semi-classical Theory of π -electron "Ring Currents" in Planar, Condensed, Benzenoid Hydrocarbons.
R. B. Mallion (University of Oxford)

* to read paper