

1. **An N.M.R. Study of Keto-Enol Tautomerism in β -Diketones.**
Allen, G. and Dwek, R.A. (1966) *J. Chem. Soc. B*, 161-163.
2. **Effect of Correlation Time on the Sign of the Overhauser Effect in Liquids.**
Dwek, R.A., Kenworthy, J.G. and Richards, R.E. (1966), *Chem. Comm.*, 74-75.
3. **Nuclear electron double resonance and scalar interactions in solutions.**
Dwek, R.A., Kenworthy, J.G., Natusch, D.F.S., Richards, R.E., F.R.S. and Shields, D.J. (1966), *Proc.Royal.Soc. 291*, 487-499.
4. **Positive Enhancement of Proton Resonances by Dynamic Nuclear Polarization.**
Dwek, R.A., Kenworthy, J.G. and Richards, R.E. (1966), *Mol.Phys.*, **6**, 529-532.
5. **Dynamic Polarisation of Phosphorus-31 Nuclei at 12,500 Gauss.**
Dwek, R.A. and Richards, R.E. (1966) *Chem. Comm.*, 581-582.
6. **The dependence of the fluorine-electron Overhauser effect upon the correlation time of the molecular motion in liquids.**
Dwek, R.A., Kenworthy, J.G., Ladd, J.A. and Richards, R.E. (1966), *Mol.Phys.*, **11**, 287-298.
7. **Relaxation theory I. Variation of N.M.R line-widths in AB Systems.**
Atkins, P.W., Dwek, R.A., Kenworthy, J.G. and Richards, R.E. (1967), *Mol.Phys.*, **12**, 125-131.
8. **Study of Molecular Motion in Liquids by Measurement of Nuclear Relaxation.**
Dwek, R.A. and Richards, R.E. (1967) *Discussions of The Faraday Society*. **43**, 196-204.
9. **Dynamic polarization of protons and fluorine nuclei in solutions of free radicals.**
Dwek, R.A., Hill, H.D.W., Kenworthy, J.G., Natusch, D.F.S. and Richards, R.E. (1967), *Mol.Phys.*, **13**, 27-36.
10. **Nuclear Magnetic Resonance.**
Dwek, R.A. and Richards, R.E. (1967), *Annu.Rev.Phys.Chem.* **18**, 99-124.
11. **Scalar interactions in phosphorus-31 systems as studied by dynamic nuclear polarization.**
Atkins, P.W., Dwek, R.A., Reid, J. B. and Richards, R.E. (1967), *Mol.Phys.* **13**, 175-180.
12. **Proton-electron double resonance in organic compounds.**
Dwek, R.A., Howarth, O.W., Natusch, D.F. and Richards, R.E. (1967), *Mol.Phys.* **13**, 457-460.
13. **Proton relaxation studies of dimethyl sulphoxide in dilute solutions of nickel (II) ions.**
Blackstaffe, S. and Dwek, R.A. (1968), *Mol.Phys.*, **15**, 279-284.
14. **Dynamic Nuclear Polarization in Phosphorus Compounds at 74 Gauss.**
Dwek, R.A., Caplan, P.J., Poindexter, E.H. and Potenza, J.A. (1969) *Chem.Phys.Lett.*, **3**, 283-285.

15. **Dynamic Polarization of Phosphorus-31 Nuclei. Some Effects of Chemical Environment.**
Potenza, J.A., Poindexter, E.H., Caplan, P.J. and Dwek, R.A. (1969) *J.Am.Chem.Soc.* **91**, 4356-4360.
16. **Dynamic Polarization of ^{31}P Nuclei: Some Evidence for Stereospecific Hyperfine Interactions in Liquids.**
Poindexter, E.H., Dwek, R.A. and Potenza, J.A. (1969) *J.Chem.Phys.* **51**, 628-631.
17. **Dynamic Nuclear Polarization in Phosphonitrilic Ring Compounds.**
Dwek, R.A., Paddock, N.L., Potenza, J.A. and Poindexter, E.H. (1969) *J.Am.Chem.Soc.* **91**, 5436-5439.
18. **Phosphorus-31 Nuclear Electron Overhauser Studies of Phosphorus Chalcogenides.**
Dwek, R.A., Richards, R.E., Taylor, D., Penney, G.J. and Sheldrick, G.M. (1969) *J.Chem.Soc. A*, 935-937.
19. **Nuclear Electron Double Resonance in Liquids.**
Dwek, R.A., Richards, R.E. and Taylor, D. (1969) IN "Annual Review of NMR Spectroscopy", 293-344 (ed. Mooney, E.F.) Academic Press, London.
20. **A Theory for the Intermolecular Nucleus-electron Scalar Interaction and its Application to Dynamic Polarisation Results of Phosphorus-31 Nuclei.**
Dwek, R.A., Richards, R.E., Taylor, D. and Shaw, R.A. (1970) *J.Chem.Soc. A*, 1173-1180.
21. **The proton relaxation of methyl cyanide in the presence of Ni(II) ions, as studied by spin-echo techniques.**
Campbell, I.D., Carver, J.P., Dwek, R.A., Nummelin, A.J. and Richards, R.E. (1971), *Mol.Phys.*, **20**, 913-922.
22. **Nitrogen relaxation of methyl cyanide in the presence of Ni(II) ions.**
Campbell, I.D., Dwek, R.A., Richards, R.E. and Wiseman, M.N. (1971), *Mol.Phys.*, **20**, 933-935.
23. **Oxygen-17 Nuclear Magnetic Resonance and Oxygen Exchange in Aqueous Solutions of Iodate.**
Dwek, R.A., Luz, Z., Peller, S. and Shporer, M. (1971) *J.Am.Soc.* **93**, 77-79.
24. **Nuclear Magnetic Resonance of Aqueous Solutions of Sodium Perrhenate.**
Dwek, R.A., Luz, Z. and Shporer, M. (1970), *J.Phys.Chem.* **74**, 2232-2233.
25. **Program and Examples of Exchange Broadened Magnetic Resonance Spectra.**
Dwek, R.A., Peller, S. and Luz, Z. (1971) Weizmann Institute of Science. 1-16
26. **Structural Studies on Bromoglycosyl Fluorides.**
Campbell, J.C., Dwek, R.A., Kent, P.W. and Prout, C.K. (1968) *Chem.Comm.*, 34-35.
27. **Fluorocarbohydrates. Part XIX. The Molecular Structure of 3,4,6-Tri-O-Acetyl-2-Bromo-2-Dexoy- α -D-Mannopyranosyl Fluoride and Related Compounds.**
Campbell, J.C., Dwek, R.A., Kent, P.W. and Prout, C.K. (1969) *Card.Res.* **10**, 71-77.

28. **The 220 MHz Proton Magnetic Resonance Spectra of Derivatives of 5-Deoxy-5-Iodo- α -D-Xylo-Pentofuranose.**
Young, R.C., Kent, P.W. and Dwek, R.A. (1970) *Tetrahedron*. **26**, 3983-3991.
29. **Fluorine Chemical Shifts in some Monosaccharide Derivatives.**
Dwek, R.A., Kent, P.W., Kirby, P.T. and Harrison, A.S. (1970) *Tetrahedron Letters*. **34**, 2987-2990.
30. **The Lanthanide Cations as Nuclear Magnetic Resonance Probes of Biological Systems.**
Morallee, K.G., Nieboer, E., Rossotti, F.J.C., Williams, R.J.P., Xavier, A.V. and Dwek, R.A. (1970) *Chem. Comm.*, 1132-1133.
31. **The Lanthanide Cations as Probes in Biological Systems. Proton Relaxation Enhancement Studies for Model Systems and Lysozyme.**
Dwek, R.A., Morallee, K.G., Nieboer, E., Richards, R.E., Williams, R.J.P. and Xavier, A.V. (1971) *Eur. J. Biochem.* **21**, 204-209.
32. **Configurational Dependencies of [^{19}F] Fluorine Chemical Shifts and Coupling Constants in Fluoromonosaccharides.**
Kent, P.W., Dwek, R.A. and Taylor, N.F. (1970) *Biochem. J.* **121**, 10-11.
33. **N-Fluoroacetyl- α -D-glucosamine as a Molecular Probe of Lysozyme Structure by Using [^{19}F] Fluorine Nuclear-Magnetic-Resonance Techniques.**
Kent, P.W. and Dwek, R.A. (1970) *Biochem. J.* **121**, 11-12.
34. **Probes for the Conformational Transitions of Phosphorylase b. Effects of Ligands Studied by Proton Relaxation Enhancement, Fluorescence and Chemical Reactivities.**
Birkett, D.J., Dwek, R.A., Radda, G.K., Richards, R.E. and Salmon, A.G. (1971) *Eur. J. Biochem.* **20**, 494-508.
35. **Fluorocarbohydrates. Part XXII. 3-Deoxy-3-fluoro-D-gluconic acid.**
Taylor, N.F., Hunt, B., Kent, P.W. and Dwek, R.A. (1972) *Card. Res.* **22**, 467-469.
36. **Configurational Dependencies of ^{19}F -Shifts in Fluoromonosaccharides.**
Kent, P.W., Dwek, R.A. and Taylor, N.F. (1971) *Tetrahedron*. **27**, 3887-3891.
37. **Relationship between Conformationally Sensitive Probe Binding Sites on Phosphorylase b.**
Bennick, A., Campbell, I.D., Dwek, R.A., Price, N.C., Radda, G.K. and Salmon, A.G. (1971) *Nature New Biology*. **234**, 140-143.
38. **N-Fluoroacetyl-D-glucosamine as a Molecular Probe of Lysozyme Structure Using [^{19}F] Fluorine-Nuclear-Magnetic Resonance Techniques.**
Dwek, R.A., Kent, P.W. and Xavier, A.V. (1971) *Eur. J. Biochem.* **28**, 343-348.
39. **Proton Relaxation Enhancement Probes. Applications and Limitations to Systems Containing Macromolecules.**
Dwek, R.A. (1972) IN "Advances in Molecular Relaxation Processes", 1-53. (ed. Thomas, O.) Elsevier Publishing Company, Amsterdam.

- 40. Nuclear magnetic resonance studies of macromolecules with fluorine nuclei as probes.**
Dwek, R.A. (1971) IN "Carbon Fluorine Compounds: Chemistry, Biochemistry and Biological Activities", 239-279 (eds. Elliott, K. and Birch, J.) CIBA Symposium. Elsevier, Amsterdam.
- 41. Molecular Conformation Determinations of Inhibitor/Enzyme Complexes with Respect to the Gd(III) Reporter Site.**
Dwek, R.A., Moralee, K.G., Nieboer, E., Richards, R.E., Williams, R.J.P. and Xavier, A.V. (1971) *Proceedings of the Ninth Rare Earth Research Conference*, 518-536.
- 42. A Structural Study by ^{19}F -Nuclear-Magnetic Resonance of the Binding of Sugars to Lysozyme.**
Butchard, C.G., Dwek, R.A., Kent, P.W., Williams, R.J.P. and Xavier, A.V. (1972) *Eur. J. Biochem.* **27**, 548-553.
- 43. Magnetic Resonance Studies on Manganese-Activated Phosphofructokinase.**
Jones, R., Dwek, R.A. and Walker, I.O. (1972) *Eur. J. Biochem.* **28**, 74-82.
- 44. The Location and Response of Probes in Membranes.**
Ballard, S.G., Barker, R.W., Barrett Bee, K.J., Dwek, R.A., Radda, G.K., Smith, D.S. and Taylor, J.A. (1972) IN "Biochemistry and Biophysics of Mitochondrial Membranes", 257-275.
- 45. Probes for the Conformational Transitions of Phosphorylase α . Effects of Ligands Studied by Proton-Relaxation Enhancement, and Chemical Reactivities.**
Dwek, R.A., Radda, G.K., Richards, R.E. and Salmon, A.G. (1972) *Eur. J. Biochem.* **29**, 509-514.
- 46. Probe Studies on the Role of Protein-Protein Interactions and Enzyme Conformation in Control.**
Radda, G.K. and Dwek, R.A. (1972) IN "Protein-Protein Interactions", 213-242 (eds. Jaenicke, R. and Helmreich, E.) 23rd Mosbach Colloquium. Springer-Verlag, Berlin.
- 47. Proton-Relaxation-Enhancement Studies on the Binding to Yeast Pyruvate Kinase of a Substrate and Effectors.**
Fell, D.A., Peacocke, A.R. and Dwek, R.A. (1972) *Eur. J. Biochem.* **29**, 128-133.
- 48. Studies on the Interactions of Ligands with Phosphorylase b Using a Spin-Label Probe.**
Campbell, I.D., Dwek, R.A., Price, N.C. and Radda, G.K. (1972) *Eur. J. Biochem.* **30**, 339-347.
- 49. Mapping of the Binding Site of *N*-Fluoroacetyl-D-Glucosamine and Analogues in Hen Egg Lysozyme by ^1H and ^{19}F -NMR Techniques with Gd(III) and Mn(II) as Paramagnetic Probes.**
Butchard, C.G., Dwek, R.A., Ferguson, S.J., Kent, P.W., Williams, R.J.P. and Xavier, A.V. (1972) *FEBS Lett.* **25**, 91-93.
- 50. On Boiling an Egg.**
Dwek, R.A. and Navon, G. (1972) *Nature*. **240**, 491.

51. **A Spin-Label Probe for the Conformational Change on Conversion of Phosphorylase *b* to Phosphorylase *a*.**
Dwek, R.A., Griffiths, J.R., Radda, G.K. and Strauss, U. (1972) *FEBS Lett.* **28**, 161-164.
52. **Spin-Labelled Phosphofructokinase and its Interactions with ATP and Metal-ATP Complexes as Studied by Magnetic-Resonance Methods.**
Jones, R., Dwek, R.A. and Walker, I.O. (1973) *Eur. J. Biochem.* **34**, 28-40.
53. **Magnetic Resonance Spectra of Macromolecular Systems.**
Campbell, I.D. and Dwek, R.A. (1973) in: "Mediated Information", 147-162 (ed. Kent, P.W.) Medical and Technical Publishing Co. Ltd.
54. **Conformational States of Rabbit Muscle Phosphofructokinase Investigated by a Spin Label Probe.**
Jones, R., Dwek, R.A. and Walker, I.O. (1972), *FEBS Lett.* **26**, 92-96.
55. **Enzyme Conformation and Control.**
Dwek, R.A., Griffiths, J.R. and Radda, G.K. (1973) in: "Rate Control of Biological Processes", 49-63 (ed. Davies, D.D.) Symposia of the Society for Experimental Biology, Cambridge University Press, Cambridge.
56. **Ligand-Enzyme Interactions and Enzyme Regulation.**
Bennick, A., Dwek, R.A., Griffiths, J.R. and Radda, G.K. (1973) *Annals of the New York Academy of Sciences.* **222**, 175-191.
57. **Physiochemical Studies on Regulatory Enzymes.**
Dwek, R.A., Griffiths, J.R. and Radda, G.K. (1973) *Biochem.Soc.Trans.* **1**, 617-622.
58. **Mapping of Inhibitor Molecules in Gd(III)/Lysozyme/Inhibitor complexes using nuclear magnetic resonance.**
Dwek, R.A., Ferguson, S.J., Radda, G.K., Williams, R.J.P. and Xavier, A.V. (1973) *Proceedings of the Tenth Rare Earth Research Conference* **1**, 111-116.
59. **Studies on the Molecular Aspects of Phosphorylase *b* →*a* Conversion.**
Brooks, D.J., Busby, S.J.W., Dwek, R.A., Griffiths, J.R. and Radda, G.K. (1973) in: "Metabolic Interconversion of Enzymes", 7-19 (Organized by Fischer, E.H., Krebs, E.G., Neurath, H. and Stadtman, E.R.) Third International Symposium, Seattle, U.S.A.
60. **Application of Paramagnetic Probes in Biochemistry Systems.**
Dwek, R.A., Williams, R.J.P. and Xavier, A.V. (1974) in: "Metal Ions in Biological Systems", 61-210 (ed. Siegel, H.) Dekker, New York.
61. **The Mechanism of Water-Proton Relaxation in Enzyme-Paramagnetic-Ion Complexes. 1. The Gd(III)-Lysozyme Complex.**
Jones, R., Dwek, R.A. and Forsen, S. (1974) *Eur. J. Biochem.* **47**, 271-283.
62. **The Mechanism of Water-Proton Relaxation in Enzyme-Paramagnetic Ion Complexes. 2. The Mn(II)-ATP-Phosphofructokinase Ternary Complex.**
Jones, R., Dwek, R.A. and Walker, I.O. (1974) *Eur. J. Biochem.* **47**, 285-293.

63. **The Preparation and Properties of Pyruvate Kinase from Yeast.**
Fell, D.A., Liddle, P.F., Peacocke, A.R. and Dwek, R.A. (1974) *Biochem. J.* **139**, 665-675.
64. **Spin Label and Lanthanide Binding Sites on Glyceraldehyde-3-Phosphate Dehydrogenase.**
Dwek, R.A., Levy, H.R., Radda, G.K. and Seeley, P.J. (1975) *Biochim.biophys.Acta.* **377**, 26-33.
65. **Structural Studies on the Combining Sites of the Myeloma Protein MOPC 315.**
Dwek, R.A., Knott, J.C.A., Marsh, D., McLaughlin, A.C., Press, E.M., Price, N.C. and White, A.I. (1975) *Eur. J. Biochem.* **53**, 25-39.
66. **Lanthanide Binding Sites on Antibodies and Active Antibody Fragments.**
Dwek, R.A., Knott, J.A., McLaughlin, A.C., Myatt, R.W., Press, E.M., Price, N.C., Richards, R.E. and White, A.I. (1974). *Proceedings of the 11th Rare Earth Research Conference.* **1**, 184-197.
67. **Antibody-hapten interactions in solution.**
Dwek, R.A., Jones, R., Marsh, D., McLaughlin, D.C., Press, E.M., Price, N.C., and White, A.I. (1975). *Phil. Trans. R. Soc. Lond.* **272**, 53-74.
68. **The Binding of Lanthanides to Non-Immune Rabbit Immunoglobulin G and its Fragments.**
Dower, S.K., Dwek, R.A., McLaughlin, A.C., Mole, L.E., Press, E.M. and Sunderland, C.A. (1975) *Biochem. J.* **149**, 73-82.
69. **Application of Physical Methods to the Determination of Structure in Solution.**
Campbell, I.D. and Dwek, R.A. (1975) in: "The Nature of Seawater: Dahlem Workshop Report", 165-189 (ed. Goldberg, E.D.) Abakon Verlagsgesellschaft, Berlin
70. **Spin-Labelled Phosphofructokinase: A Simple and Direct Approach to the Study of Allosteric Equilibria Under Near-Physiological Conditions.**
Jones, R., Dwek, R.A. and Walker, I.O. (1975) *Eur. J. Biochem.* **60**, 187-198.
71. **Conformational Changes in Glycogen Phosphorylase Studied with a Spin-Label Probe.**
Griffiths, J.R., Dwek, R.A. and Radda, G.K. (1976) *Eur. J. Biochem.* **61**, 237-242.
72. **Heterotropic Interactions of Ligands with Phosphorylase b.**
Griffiths, J.R., Dwek, R.A. and Radda, G.K. (1976) *Eur. J. Biochem.* **61**, 243-251.
73. **Interactions of the Lanthanide- and Hapten-Binding Sites in the Fv Fragment from the Myeloma Protein MOPC 315.**
Dwek, R.A., Givol, D., Jones, R., McLaughlin, A.C., Wain-Hobson, S., White, A.I. and Wright, C. (1976) *Biochem. J.* **155**, 37-53.
74. **Lanthanides as Probes in Immunoglobulin Systems.**
Burton, D.R., Dower, S.K., Dwek, R.A., Gettins, P., Givol, D., Jackson, R., Jaton, J.C., McLaughlin, A.C., Reid, K.B.M., Sunderland, C.A., Sutton, B.J., Wain-Hobson, S., Wallace, K., Willan, K. and Wright, C. (1976) *Proceedings of the 12th Rare Earth Research Conference*, 202-211.

75. **Structural Studies in Solution on the Combining Site of the Myeloma Protein MOPC 315.**
Dwek, R.A. (1977) in: "Contemporary Topics in Mol.Immunol", 1-52 (eds. Porter, R.R. and Ada, G.L.) Plenum Press.
76. **Difficulties in Determining Accurate Molecular Motion Parameters from Proton Relaxation Enhancement Measurements as Illustrated by the Immunoglobulin G-Gd(III) System.**
Burton, D.R., Forsen, S., Karlstrom, G., Dwek, R.A., McLaughlin, A.C. and Wain-Hobson, S. (1976) *Eur. J. Biochem.* **71**, 519-528.
77. **The Determination of Molecular-Motion Parameters from Proton-Relaxation-Enhancement Measurements in a Number of Gd(III) antibody-fragment Complexes. A Comparative Study.**
Burton, D.R., Forsen, S., Karlstrom, G., Dwek, R.A., McLaughlin, A.C. and Wain-Hobson, S. (1977) *Eur. J. Biochem.* **75**, 445-453.
78. **The Use of Gadolinium as a Probe in the Fc Region of a Homogeneous Anti-(Type-III Pneumococcal Polysaccharide) Antibody.**
Willan, K.J., Wallace, K.H., Jaton, J-C. and Dwek, R.A. (1977) *Biochem. J.* **161**, 205-211.
79. **High-Resolution ^1H - and ^{13}C -N.M.R. Spectra of D-Glucopyranose, 2-Acetamido-2-Deoxy-D-Glucopyranose, and Related Compounds in Aqueous Media.**
Perkins, S.J., Johnson, L.N., Phillips, D.C. (1977) *Card.Res.* **59**, 19-34.
80. **A Novel Approach to Water Proton Relaxation in Paramagnetic Ion-Macromolecule Complexes.**
Burton, D.R., Dwek, R.A., Forsen, S. and Karlstrom, G. (1977) *Biochemistry*. **16**, 250-254.
81. **The Gross Architecture of an Antibody-Combining Site as Determined by Spin-Label Mapping.**
Sutton, B.J., Gettins, P., Givol, D., Marsh, D., Wain-Hobson, S., Willan, K.J. and Dwek, R.A. (1977) *Biochem. J.* **165**, 177-197.
82. **Comparison of the Dimensions of the Combining Sites of the Dinitrophenyl-Binding Immunoglobulin A Myeloma Proteins MOPC 315, MOPC 460 and XRPC 25 by Spin-Label Mapping.**
Willan, K.J., Marsh, D., Sunderland, C.A., Sutton, B.J., Wain-Hobson, S., Dwek, R.A. and Givol, D. (1977) *Biochem. J.* **165**, 199-206.
83. **The Combining Site of the Dinitrophenyl-Binding Immunoglobulin A Myeloma MOPC 315.**
Dower, S.K., Wain-Hobson, S., Gettins, P., Givol, D., Jackson, W.R.C., Perkins, S.J., Sunderland, C.A., Sutton, B.J., Wright, C.E. and Dwek, R.A. (1977) *Biochem. J.* **165**, 207-225.

84. **Application of Ring-Current Theory Based on the Johnson-Bovey Equation to the Aromatic Amino Acids.**
Perkins, S.J., Dower, S.K., Gettins, P., Wain-Hobson, S. and Dwek, R.A. (1977) *Biochem. J.* **165**, 223-225.
85. **Specificity of Interactions of Hapten Side Chains with the Combining Site of the Myeloma Protein MOPC 315.**
Wain-Hobson, S., Dower, S.K., Gettins, P., Givol, D., McLaughlin, A.C., Pecht, I., Sunderland, C.A. and Dwek, R.A. (1977) *Biochem. J.* **165**, 227-235.
86. **Structure of an antibody combining site by magnetic resonance.**
Dwek, R.A., Wain-Hobson, S., Dower, S.K., Gettins, P., Sutton, B., Perkins, S.J. and Givol, D. (1977) *Nature*. **266**, 31-37.
87. **Comparison of the Fine Specificity of Anti-Dinitrophenyl-Combining Site Composed of Either V_L Dimer or V_L and V_H of Protein 315.**
Gavish, M., Dwek, R.A. and Givol, D. (1977) *Biochemistry*. **16**, 3154-3159.
88. **The Binding of 2,4,6-Trinitrophenyl Derivatives to the Mouse Myeloma Immunoglobulin A Protein MOPC 315.**
Dower, S.K., Gettins, P., Jackson, R. and Dwek, R.A. (1978) *Biochem. J.* **169**, 179-188.
89. **Some recent applications of the use of paramagnetic centres to probe biological systems using nuclear magnetic resonance.**
Morris, A.T. and Dwek, R.A. (1977) *Quarterly Review of Biophysics*. **10**, 421-484.
90. **The Interaction of Protein A and the Fc Fragment of Rabbit Immunoglobulin G as Probed by Complement-Fixation and Nuclear-Magnetic-Resonance Studies.**
Wright, C., Willan, K.J., Sjodahl, J., Burton, D.R. and Dwek, R.A. (1977) *Biochem. J.* **167**, 661-668.
91. **Specific Spin Labelling of the Fc Region of Immunoglobulins.**
Willan, K.J., Golding, B., Givol, D. and Dwek, R.A. (1977) *FEBS Lett.* **80**, 133-136.
92. **The Structure of an Antibody Combining Site.**
Dower, S.K. and Dwek, R.A. (1978) in: "Biomolecular Structure and Function", 295-328 (eds. Agris, P.R., Leopky, R.N. and Sykes, B.D.) Academic Press, Inc., New York.
93. **Conformational Changes, Dynamics and Assignments in ¹H NMR Studies of Proteins Using Ring Current Calculations. Hen egg white lysozyme.**
Perkins, S.J., Johnson, L.N., Phillips, D.C. and Dwek, R.A. (1977) *FEBS Lett.* **82**, 17-22.
94. **The Architecture of an Antibody Combining Site.**
Gettins, P. and Dwek, R.A. (1977) in: "NMR in Biology", 125-156 (eds. Dwek, R.A., Campbell, J.D., Richards, R.E. and Williams, R.J.P.) Academic Press, London.
95. **Investigation of Hapten-Antibody Interactions in McPC603 by ¹H and ³¹P NMR Spectroscopy.**
Gettins, P., Potter, M., Rudikoff, S. and Dwek, R.A. (1977) *FEBS Lett.* **84**, 87-91.

96. **Conformational flexibility of an antibody combining site composed of two identical V regions.**
Gavish, M., Dwek, R.A. and Givol, D. (1978) *European Journal of Immunology*. **8**, 42-46.
97. **The Role of Nitro Groups in the Binding of Nitroaromatics to Protein MOPC 315.**
Gettins, P., Givol, D. and Dwek, R.A. (1978) *Biochem. J.* **173**, 713-722.
98. **Lanthanide Ions as Probes in Antibodies.**
Burton, D.R., Forsen, S., Karlstrom, G., Willan, K.J., Wright, C. and Dwek, R.A. (1978) in: "The Rare Earths in Modern Science and Technology", 115-120 (eds. McCarthy, G.J. and Rhyne, J.J.) Plenum Publishing Corp., New York.
99. **Comparison by ^1H NMR of the Hapten Environment in the Combining Site of the Dinitrophenyl Binding IgA Protein 315 and its Fragments.**
Morris, A.T., Givol, D. and Dwek, R.A. (1978) *Immunochemistry*. **15**, 519-522.
100. **Comparison of the Properties of Antibody Combining Site Composed of either V_L Dimer or V_L and V_H .**
Gavish, M., Dwek, R.A. and Givol, D. (1977) in: "Third International Congress of Immunology", 243-248 (ed. Mandel, T.E.) North Holland Publishing Co., Amsterdam.
101. **Structural Basis of Recognition in the Immune Response.**
Easterbrook-Smith, S.B., Zavodszky, P., Willan, K.J., Gettins, P. and Dwek, R.A. (1978) *Biochem.Soc.Trans.* **6**, 1126-1132.
102. **An Antibody Binding Site: A Combined Magnetic Resonance and Crystallographic Approach.**
Dower, S.K. and Dwek, R.A. (1979) in: Biological Applications of Magnetic Resonance", 271-303 (ed. Shulman, R.) Academic Press Inc, New York.
103. **On the Role of Tyr 34_L in the Antibody Combining Site of the Dinitrophenyl Binding Protein 315.**
Gavish, M., Ben Neriah, Y., Zakut, R., Givol, D., Dwek, R.A. and Jackson, W.R.C. (1979) *Mol.Immunol.* **16**, 957-963.
104. **Comparisons of Ring-Current Shifts Calculated from the Crystal Structure of Egg White Lysozyme of Hen with the Proton Nuclear Resonance Magnetic Resonance Spectrum of Lysozyme in Solution.**
Perkins, S.J. and Dwek, R.A. (1980) *Biochemistry*. **2**, 245-258.
105. **Phosphorus-31 Nuclear Magnetic Resonance Probes for the Combining Site of the Myeloma Protein M315.**
Dower, S.K. and Dwek, R.A. (1979) *Biochemistry*. **18**, 3668-3674.
106. **A novel method for mapping antibody combining sites by ^1H nuclear magnetic resonance spectroscopy.**
Dower, S.K. and Dwek, R.A. (1979) *Int. J. Biol. Macromolecules*. **1**, 119-122.

- 107. The Isolation of a Globular Fragment of Rabbit Immunoglobulin Probably Corresponding to the Intact C γ 2 Homology Region.**
Zavodszky, P., Easterbrook-Smith, S.B. and Dwek, R.A. (1979) *Mol.Immunol.* **16**, 899-905.
- 108. Mobility and Symmetry in the Fc and pFc' Fragments as Probed by ^1H NMR.**
Boyd, J., Easterbrook-Smith, S.B., Zavodszky, P., Mountford-Wright, C. and Dwek, R.A. (1979) *Mol.Immunol.* **16**, 851-858.
- 109. Crystallization of the Fv Fragments of Mouse Myeloma Protein M315.**
Aschaffenburg, R., Phillips, D.C., Rose, D.R., Sutton, B.J., Dower, S.K. and Dwek, R.A. (1979) *Biochem. J.* **181**, 497-499.
- 110. Proton Relaxation Enhancement (PRE) in Biochemistry: A Critical Survey.**
Burton, D.R., Forsen, S., Karlstrom, G. and Dwek, R.A. (1979) *Prog.Nuc.Mag.Res.Spect..* **13**, 1-45.
- 111. N.m.r. investigation hapten binding to the myeloma protein M460.**
Morris, A.T., Lancet, D., Pecht, I., Givol, D. and Dwek, R.A. (1980) *Int. J. Biol. Macromol.* **2**, 39-44.
- 112. The conformation of subcomponent C1q of the first component of human complement.**
Gilmour, S., Randall, J.T., Willan, K.J., Dwek, R.A. and Torbet, J. (1980) *Nature.* **285**, 512-514.
- 113. Antibody Specificity: A 270-MHz Hydrogen-1 Nuclear Magnetic Resonance Study of the Binding of Dinitrophenyl Compounds to the V_L Dimer of Protein 315.**
Jackson, W.R.C., Leatherbarrow, R.J., Gavish, M., Givol, D. and Dwek, R.A. (1981) *Biochemistry.* **20**, 2339-2345.
- 114. Small-angle neutron scattering studies of the conformation of myeloma protein MOPC315 and its Fab fragment, and the interaction with a monovalent dinitrophenyl hapten.**
Gilmour, S., Randal, Sir J.T., Torbet, J., Dwek, R.A., Wain-Hobson, S., Dower, S.K. and van Schravendijk, M.R. (1981) *Proc. Roy. Soc. Lond.* **211**, 433-4535.
- 115. The binding of monosaccharide inhibitors to hen egg-white lysozyme by proton magnetic resonance at 270 MHz and analysis by ring-current calculations.**
Perkins, S.J., Johnson, L.N., Phillips, D.C. and Dwek, R.A. (1981) *Biochem. J.* **193**, 553-572.
- 116. The simultaneous binding of lanthanide and N-acetylglucosamine inhibitors to hen egg-white lysozyme in solution by ^1H and ^{13}C nuclear magnetic resonance.**
Perkins, S.J., Johnson, L.N., Phillips, D.C. and Dwek, R.A. (1981) *Biochem. J.* **193**, 573-588.
- 117. On the Contribution of Tryptophan to the Affinity and Specificity of Anti-Dinitrophenyl Antibodies.**
Jackson, W.R.C. and Dwek, R.A. (1981) *Mol.Immunol.* **18**, 499-506.

118. **The C1q receptor site on immunoglobulin G.**
Burton, D.R., Boyd, J., Brampton, A.D., Easterbrook-Smith, S.B., Emanuel, E.J., Novotny, J., Rademacher, T.W., van Schravendijk, M.R., Sternberg, M.J.E. and Dwek, R.A. (1980) *Nature*. **288**, 338-344.
119. **The Use of ANS Fluorescence as a Probe for Immunoglobulin Flexibility.**
Easterbrook-Smith, S.B. and Dwek, R.A. (1980) *FEBS Lett.* **121**, 253-256.
120. **Strategies for Spectral Assignment in the ^1H NMR Spectra of A 25 000 M_r Murine Antibody Fragment: (i) *in vivo* deuteration and (ii) use of a denaturant.**
Gettins, P. and Dwek, R.A. (1981) *FEBS Lett.* **124**, 248-252.
121. **Interaction of Saccharide Haptens with Myeloma Proteins. A 270-MHz Proton Nuclear Magnetic Resonance Study.**
Gettins, P., Boyd, J., Glaudemans, C.P.J., Potter, M. and Dwek, R.A. (1981) *Biochemistry*. **20**, 7463-7469.
122. **Nitrogen-15 Nuclear Magnetic Resonance Spectroscopy as a Probe of Hapten-Antibody Interactions: ^{15}N -Enriched trinitrophenyl haptens binding to M315.**
Gettins, P., Dwek, R.A. and Stenhouse, I. (1980) *FEBS Lett.* **117**, 23-27.
123. **The variability of nitro group-protein interaction in the 2,4-dinitrophenyl binding antibodies M315, M460 and X25 investigated by resonance Raman spectroscopy.**
Gettins, P., Dwek, R.A. and Perutz, R.N. (1981) *Biochem. J.* **197**, 119-125.
124. **The Use of Protein A and Concanavalin A to Examine the Possible Role of the Carbohydrate of IgG in the Binding of C1q.**
van Schravendijk, M.R. and Dwek, R.A. (1981) *Mol. Immunol.* **18**, 1079-1085.
125. **Chemical Verification of the C1q Receptor Site on IgG.**
Emanuel, E.J., Brampton, A.D., Gagnon, J. and Dwek, R.A. (1982) *FEBS Lett.* **137**, 298-302.
126. **Formation of the complement subcomponent C1q-immunoglobulin G complex: Thermodynamic and chemical-modification studies.**
Emanuel, E.J., Brampton, A.D., Burton, D.R. and Dwek, R.A. (1982) *Biochem. J.* **205**, 361-372.
127. **A Combined Proton and Phosphorus-31 Nuclear Magnetic Resonance Investigation of the Combining Site of M603, a Phosphocholine-Binding Myeloma Protein.**
Gettins, P., Potter, M., Leatherbarrow, R.J. and Dwek, R.A. (1982) *Biochemistry*. **21**, 4927-4931.
128. **Interaction of C1q with DNA.**
van Schravendijk, M.R. and Dwek, R.A. (1982) *Mol. Immunol.* **19**, 1179-1187.

129. **The Localization of Effector Sites on Immunoglobulin G.**
Burton, D.R., Dwek, R.A. and Novotny, J. (1983) in: "Protein Conformation as an Immunological Signal", 73-81. (eds. Celada, F., Schumaker, V.N. and Sercarz, E.E.) Plenum Press, London.
130. **Role of Tyrosines in the Combining Site of the Dinitrophenyl-Binding IgA Myeloma M315. Specific Nitration and High-Resolution Hydrogen-1 Nuclear Magnetic Resonance Studies.**
Leatherbarrow, R.J., Jackson, W.R.C. and Dwek, R.A. (1982) *Biochemistry*. **21**, 5124-5129.
131. **Magnetic resonance studies on antibody combining sites.**
Dwek, R.A. and Leatherbarrow, R.J (1983) *Periodicum Biologorum* . **85**, 21-29.