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Supplementary Material

Robert Donald Bruce Fraser 1924–2019

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OTHER HONOURS AND AWARDS NOT LISTED AT THE END OF THE TEXT

Medical Research Council Studentship 1951-1952

Nuffield Foundation Fellowship 1957

Elected to Fellowship of the Institute of Physics 1970-1973

Guest Lecturer, European Molecular Biology Organization, Summer School on Fibrous Proteins, Oxford 1976

Visiting Professor, Department of Macromolecular Science, Case Western Reserve University 1978

Guest Lecturer, Linnaean Society of London 1978

Awarded Commonwealth Foundation Grant to visit United Kingdom 1978

Plenary Lecturer, International Symposium on Biomolecular Structure, Conformation, Function and Evolution, Madras, India 1978

Guest Lecturer, Winter School on Current Trends in Biomolecular Structure, Madras 1979

Plenary Lecturer, Society for Experimental Biology, Symposium No. 34, Leeds, England 1980

Plenary Lecturer, 7th Katzir-Katchalsky Conference, Israel 1980

Visiting Fellow, Weizmann Institute, Rehovot, Israel 1980

Guest and plenary lecturer, 6th Quinquennial International Wool Textile Research Conference, Pretoria 1981

Guest Lecturer, ACS Symposium, Washington, in honour of the 75th Birthday of Milton Harris 1981

Awarded Science Research Council Senior Fellowship for visits to Molecular Biophysics Department, Oxford University 1981

Awarded Royal Society Grant for collaborative research in the Laboratory of Molecular Biophysics, Oxford University 1984

COMPLETE LIST of BRUCE FRASER'S PUBLICATIONS

1. Fraser R. D. B. (1950) Photographic materials for use in the ultra-violet, *Journal of Scientific Instruments*, **27**, 106-107.
2. Price W. C., Fraser R. D. B., Robinson T. S. and Longuet-Higgins H. C. (1950) The infra-red absorption spectra of boron nitrogen compounds, *Faraday Society Discussions*, **9**, 131-137.
3. Fraser R. D. B. (1950) Infra-red microspectrometry with a 0.8 N.A. reflecting microscope, *Faraday Society Discussions*, **9**, 378-383.
4. Fraser M. J. and Fraser R. D. B. (1951) Evidence of the structure of deoxyribonucleic acid from measurements with polarised infra-red radiation, *Nature*, **167**, 761-763.
5. Fraser R. D. B. and Chayen J. (1952) The detection of nucleic acid in tissues by infra-red microspectrometry, *Experimental Cell Research*, **3**, 492-493.
6. Randall J. T., Fraser R. D. B., Jackson S., Martin A. V. W. and North A. C. T. (1952) Aspects of collagen structure, *Nature*, **169**, 1029-1033.
7. Fraser R. D. B. and Price W. C. (1952) Infrared dichroism and protein structure, *Nature*, **170**, 490.
8. Fraser R. D. B. (1952) Infra-red dichroism of tobacco mosaic virus nucleoprotein, *Nature*, **170**, 491-492.
9. Fraser R. D. B. (1953) The chain configuration of wool keratin, *Biochimica Biophysica Acta*, **12**, 482-483.
10. Price W. C. and Fraser R. D. B. (1953) Infra-red dichroism and protein structure, *Proceedings of the Royal Society*, **B141**, 66-67.
11. Randall J. T., Fraser R. D. B. and North A. C. T. (1953) The structure of collagen, *Proceedings of the Royal Society*, **B141**, 62-66.
12. Fraser R. D. B. (1953) The infra-red dichroism of nucleoproteins, *Discussions of the Faraday Society*, **13**, 284.
13. Fraser R. D. B. (1953) The infra-red spectra of biologically important molecules, *Progress in Biophysics and Biophysical Chemistry*, **3**, 47-60.
14. Fraser R. D. B. (1953) The interpretation of infra-red dichroism in fibrous protein structures, *Journal of Chemical Physics*, **21**, 1511-1515.
15. Fraser R. D. B. (1953) Birefringence and elasticity in keratin fibres, *Nature*, **172**, 675-676.
16. Fraser R. D. B. (1953) The elimination of atmospheric water vapour absorption in the Perkin-Elmer infra-red spectrometer, *Journal of the Optical Society of America*, **43**, 929.
17. Fraser R. D. B. (1953) A 0.8 N.A. reflecting microscope for infra-red absorption measurements, *Journal of the Optical Society of America*, **43**, 929-930.
18. Fraser R. D. B. and Rogers G. E. (1953) Microscopic observations on the alkaline-thioglycollate extraction of wool, *Biochimica Biophysica Acta*, **12**, 484-486.
19. Fraser R. D. B., Lindley H. and Rogers G. E. (1954) Chemical heterogeneity and cortical segmentation in wool, *Biochimica Biophysica Acta*, **13**, 295-297.
20. Fraser R. D. B. and Rogers G. E. (1954) The origin of segmentation in wool cortex, *Biochimica Biophysica Acta*, **13**, 297-298.

21. Price W. C., Bradley J. E. S., Fraser R. D. B. and Quilliam J. P. (1954) The relationship between the infra-red absorption spectra of some 5:5'-substituted barbituric acids and their pharmacological activity, *Journal of Pharmacy and Pharmacology*, **6**, 522-528.
22. Fraser R. D. B. and Rogers G. E. (1954) Shadow casting in visible microscopy, *Biochimica Biophysica Acta*, **15**, 146-148.
23. Fraser R. D. B. (1955) Sidechain orientation in fibrous proteins, *Nature*, **176**, 358-359.
24. Fraser R. D. B. and Rogers G. E. (1955) The bromine Allworden reaction, *Biochimica Biophysica Acta*, **16**, 307-316.
25. Fraser R. D. B. and Rogers G. E. (1955) The surface structure of wool and its components revealed by metal shadowing, *Australian Journal of Biological Sciences*, **8**, 129-135.
26. Fraser R. D. B. and Rogers G. E. (1955) The bilateral structure of wool cortex and its relation to crimp, *Australian Journal of Biological Sciences*, **8**, 288-299.
27. Fraser R. D. B. and Rogers G. E. (1955) The structure of resistant membranes isolated from oxidized wool, *Textile Research Journal*, **XXV**, 235-241.
28. Fraser R. D. B. (1955) Molecular orientation and configuration in keratins, *Proceedings of the 1st International Wool Textile Research Conference, Australia*, **B**, 130-138.
29. Fraser R. D. B. (1955) The infra-red spectra of fibrous proteins in the 2 μ region, *Proceedings of the 1st International Wool Textile Research Conference, Australia*, **B**, 120-129.
30. Fraser R. D. B. and Rogers G. E. (1955) New aspects of the fine histology of wool, *Proceedings of the 1st International Wool Textile Research Conference, Australia*, **F**, 106-111.
31. Fraser R. D. B. and Rogers G. E. (1955) The bilateral structure of wool cortex, *Proceedings of the 1st International Wool Textile Research Conference, Australia*, **F**, 151-155.
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33. Fraser R. D. B. and MacRae T. P. (1956) The distribution of ortho- and para-cortical cells in wool and mohair, *Textile Research Journal*, **XXVI**, 618-619.
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39. Fraser R. D. B. and MacRae T. P. (1958) The hydrogen \rightarrow deuterium exchange reaction in α -keratin, *Journal of Chemical Physics*, **28**, 1120-1125.
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44. Fraser R. D. B. (1958) Determination of transition moment orientation in partially oriented polymers, *Journal of Chemical Physics*, **29**, 1428-1429.
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46. Fraser R. D. B., MacRae T. P. and Rogers G. E. (1959) Structure of α -keratin, *Nature*, **183**, 592-594.
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84. Fraser R. D. B., MacRae T. P. and Miller A. (1965) The Fourier transform of the coiled-coil model for α -keratin. A Correction, *Acta Crystallographica*, **18**, 1087.
85. Elliott A., Fraser R. D. B. and MacRae T. P. (1965) The X-ray diffraction patterns of poly- γ -benzyl-glutamate, *Journal of Molecular Biology*, **11**, 821-828.
86. Fraser R. D. B., MacRae T. P. and Stewart F. H. C. (1966) Poly-L-alanyl-glycyl-L-alanyl-glycyl-L-seryl-glycine: A model for the crystalline regions of silk fibroin, *Journal of Molecular Biology* **19**, 580-582.
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88. Dobb M. G., Fraser R. D. B. and MacRae T. P. (1967) The fine structure of silk fibroin, *Journal of Cell Biology*, **32**, 289-295.
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99. Fraser R. D. B., MacRae T. P., Parry D. A. D. and Suzuki E. (1969) The structure of β -keratin, *Polymer*, **10**, 810-826.
100. Fraser R. D. B., MacRae T. P. and Millward G. R. (1969) Fact and artefact, *Journal of the Textile Institute*, **60**, 498-501.
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102. Fraser R. D. B. and Suzuki E. (1970) Infrared methods, In: 'The Physical Principles and Techniques of Protein Chemistry', (ed. S. J. Leach) Part B, pp 213–273. (Elsevier)
103. Fraser R. D. B. and Suzuki E. (1970) A quantitative study of the amide I vibrations in the infra-red spectrum of α -keratin, *Spectrochimica Acta*, **26A**, 423-425.
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108. Fraser R. D. B., MacRae T. P. and Rogers G. E. (1972) 'Keratins. Their composition, structure and biosynthesis', Charles C Thomas: Springfield, III.
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