Chapter 3

General Developments 1944–1986

3.1 Introduction

As with many aspects of our national life, the years 1944–1985 can be considered a watershed in the development of the Biochemical Society. The end of the Second World War left the Country exhausted but a spirit of optimism was in the air. Thanks to the efforts of the Honorary Officers, the Society successfully survived the War and the mood of optimism within the Society was fully justified and has lasted well after the hopes of a brave new world have long faded in other areas of human activity. Biochemistry rapidly developed into a thriving discipline and this has been maintained throughout the post-War period, although in recent years the pace has slackened somewhat mainly owing to the parsimony of recent Government policy on support of Science.

This blossoming of Biochemistry in the post-War years has been one of the great scientific successes of all time and in the

U.K. the simultaneous expansion of the Biochemical Society has been equally impressive. The number of members has increased smoothly for nearly 30 years, from 1017 in 1946 to 5877 in 1973, from when there was an overall slight downward trend until 1981. Since then there has been a very marked increase (Fig. 3.1) and in early 1986 the membership topped the 6500 mark. A more detailed study of the changes in the membership over the past 10 years (Table 3.1) shows

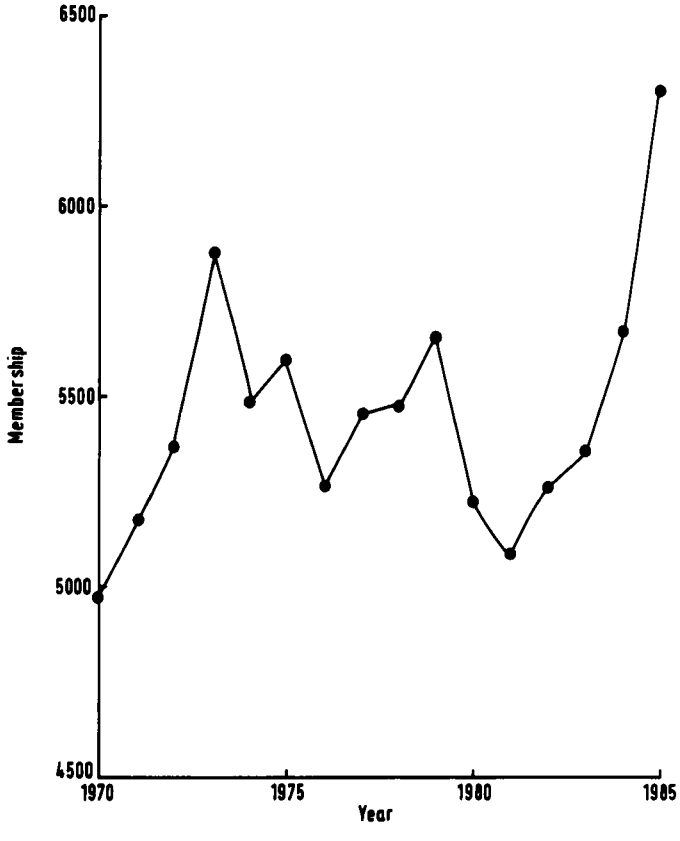

Fig. 3.1. Changes in membership of the Society between 1970 and 1985.

Table 3.1. Changes in the pattern of membership of the Biochemical Society, 1976–1985

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
TOTAL B/F	5186	5263	5447	5474	5654	5221	5082	5258	5356	5662
New members	381	513	456	587	434	390	463	487	638	1111
(includes students)	(167)	(242)	(238)	(296)	(223)	(209)	(277)	(253)	(271)	(520)
Resigned	89	61	85	35	144	136	142	47	25	96
Deceased	17	8	12	25	13	16	17	19	5	35
Lapsed	365	260	332	347	432	377	128	323	302	337
Total C/F	5263	5447	5474	5654	5221	5082	5258	5356	5662	6305

that new student membership fluctuates around 50% of the total membership. Emeritus membership, a new category established in 1971 with 98 members, now stands at 356. Overseas members come from 60 countries and a recent zonal breakdown is given in Table 3.2. In 1985 the highest number of members in Western Europe was from Spain (90), and the largest number (795) in the 'overseas' category was inevitably found in the U.S.A. A total of 31 members in South America, 12 of which are in Argentina, is surprisingly low. The one member in the U.S.S.R. must feel very lonely.

The post-War increase in membership alone demanded organizational changes but the additional commitments which the Society was also shouldering, some inevitable and some innovative, soon made these changes an urgent necessity. By the early 1960s the Society could no longer be run by Honorary Officers working on sufferance in University offices on a shoe-string budget. A headquarters with professional staff was clearly needed and this was eventually achieved in 1966. Many felt that this development took too long to materialize, but as we shall see in the next section, many problems had to be overcome before the Society could settle down in its headquarters in Warwick Court, which provided a much improved base as well as being an impressive capital investment.

Table 3.2. Geographical distribution of members in 1985

Zone	Number*	
North America	795	(78)
South America	31	(2)
Western Europe (excluding U.K.)	644	(52)
Eastern Europe	20	(1)
Australia	91	(1)
Africa	37	(−1)
Japan	29	(2)
Overseas	135	(23)
United Kingdom (including Ireland)	4503	(479)
Total	6285	(637)

*Numbers in parentheses indicate the change in membership from 1984 to 1985.

3.2 Administrative Developments

Immediately after the Second World War the Honorary Secretaries worked from their University bases and used departmental secretaries when and if they were available. Christmas boxes were solemnly voted by the Committee each year to the ladies concerned.

Fig. 3.2. Professor E. J. King. Chairman of the Editorial Board, 1946–1952. Chairman of the Society Committee, 1957–1959.

With increasing activities both in general administration and in running the *Biochemical Journal* it was inevitable that demands for full time staff and proper office accommodation would arise. The pressure first came from the Chairmen of the Editorial Board of the *Biochemical Journal*, who were faced with a rapid increase in the number of papers being submitted. The first move was made by E. J. King (Fig. 3.2) (Chairman of the Editorial Board, 1946–1952), who ran the journal from his department at Hammersmith, in accommodation rented from the University of London.

When A. Neuberger (Plate 3A) took over from E. J. King, the Editorial Office was moved to the National Institute for Medical Research and the Society paid £50 [£425] p.a. rent for "two years plus telephone". A more permanent solution was required but discussion in 1954 with the Linnean Society to obtain accommodation in their rooms at Burlington House came to nothing. However, living once again from hand to mouth, the Editorial Office moved into temporary quarters (two rooms in the Director's former top-floor flat) in the Lister Institute in 1955. This accommodation became available when it was vacated by Biological and Medical Abstracts Ltd. The rent was £20 [£170] p.a. plus £20 p.a. for library facilities. Attempts to obtain a more permanent arrangement failed, as did approaches to the University of London for office space. The inevitable ultimatum came in October 1959 from the Director of the Lister Institute, who required the space by Christmas 1959 or March 1960 at the latest. The Committee hoped to take up accommodation in the new Medical Research Council (MRC) premises in Park Crescent but this was not due to become available until 1961. Temporary offices were eventually found in 133–135 Oxford Street at a rent of £675 p.a. [£4750], excluding rates, on a 7 years' lease. After strong pressure by Harington in the face of Treasury obstructions an agreement with the MRC for the use of office accommodation was concluded in February 1961 at a total rent of £1425 [£10,000] p.a. and the Editorial Office, now comprising three full time and two part time staff, moved there in September 1961. By December 1961 the Oxford Street offices had been sub-let on favourable terms. Apparently the MRC was happy to have a Learned Society temporarily in four rooms in the basement of its premises at Park Crescent as it made their negotiations with the Treasury somewhat easier.

The first official move in the effort to obtain general office, rather than Editorial Office, accommodation was in 1950 when the Committee Secretary represented the Society on a Scientific Societies Accommodation Committee set up by The Royal Society to consider the proposals initiated by our Secretary for a new Science Centre. However, it was noted that the Centre was not expected to be completed for 10 years. In fact, the project never materialized, and it was not until 1960

when P. N. Campbell (Plate 1B) was elected Honorary Secretary that he persuaded the Committee to provide him with a part-time secretary.

In 1961 the Society appointed an Administrative Secretary, Mr G. McHardy, and he was housed temporarily in UCL from April 1961 until he joined up with the Editorial Administration at Park Crescent.

The breathing space provided by the tenancy at Park Crescent allowed the Committee to look to the future. A Finance Sub-Committee to advise the Treasurer on investments and general financial policy was set up. It recommended that the Society should have its own headquarters. After a number of abortive efforts, 7 Warwick Court (Fig. 3.3) was bought in 1966 for £57,094 [£345,000]. It contained a small flat which was sub-let. This was by far the largest financial transaction which the Society had undertaken and was made possible only by selling about 70% of the Society's investment. The responsibility for this decision was a heavy one on the Officers concerned; but the future has more than justified their action and the Society must be forever grateful that they took the decision they did.

At the time the purchase of Warwick Court was being negotiated, the Administrative Secretary resigned and a new post, Executive Secretary, was established. Mr A. I. P. Henton (Fig. 3.4) was appointed and by 1969 the senior office staff numbered nine.

In the early 'seventies there was a feeling of optimistic expansionism in the air in the U.K. and nowhere was it more apparent than in Biochemistry. The lively Honorary Officers and most Committee members responded to this general feeling and wished to develop the activities of the Society, particularly in publications. These views were not without their opponents and many doughty battles were fought in Committee, some of which are recalled later in this chapter. However, the 'progressives' eventually won but implementation of their plans was obviously quickly going to overstretch the facilities at Warwick Court. Perhaps even more importantly the basic activities associated with current commitments were also increasing rapidly. So, only after a few years Warwick Court became too small to handle expansion on two fronts and the need for larger premises became acute.

Wide searches in London revealed no suitable accommodation available at a price which was not wildly beyond the Society's means. Removal of the office to the provinces had financial attractions but the disruption of the domestic arrangements of the permanent staff was not acceptable. Advice was sought from the Location of Offices Bureau, an organization set up to help those seeking accommodation outside London. Eventually warehouse and office accommodation, recently built and unoccupied, was found on the

Fig. 3.3. 7 Warwick Court, London WC1R 5DP. Headquarters of the Society since 1966.

Fig. 3.4. A. I. P. Henton. Executive Secretary, 1966–1984.

Fig. 3.5. The Society's Depot at Colchester, Essex.

Whitehall Industrial Estate just outside Colchester (Fig. 3.5). However, the building, which was for sale on a long lease, was too big for the Society's needs but it was possible to divide it into two self-contained units, one of which could be let. Dr D. F. Elliott (Plate 4A), the Honorary Treasurer who masterminded these activities, writes:

> "At the price being asked, purchase was an attractive proposition and it was decided to proceed. We were indeed able to find occupants for one half of the building at a rental which partly offset the loss of income resulting from the sale of the investments required to raise the capital for the project, the investments chosen having made substantial capital gains since they were acquired. Some expenditure was also needed for the modernization of equipment moved from Warwick Court and for the fitting out of the building as a book depot. With the appointment of a Publication Manager (Mr A. Sabner: Fig. 3.6) and an assistant from amongst our senior staff, the Colchester enterprise commenced operations on 12 June 1972. There was now ample room for growth of the *Journal* and for any additional publishing projects that were likely to occur. It was also intended that income would be raised by taking on distribution work for sister societies lacking such facilities themselves."

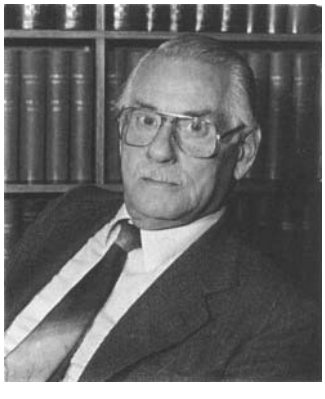

Fig. 3.6. A. S. Sabner. Manager of Colchester Depot, 1972–1985.

When the publishing activities other than the Editorial Office were moved out of Warwick Court, it was possible to refurbish the basement to provide an attractive Committee

Fig. 3.7. The refurbished Committee Room at 7 Warwick Court.

room (Fig. 3.7). During these alterations a major structural fault was disclosed which had to be dealt with immediately. The rest of the building was also renovated in order to comply with the Greater London Council fire regulations — total cost over £30,000 [£120,000].

It is now over 10 years since the additions to and upgrading of the Society's premises, and up to 1985 they proved adequate for all the diversification which had taken place. However, many new projects are scheduled for the future and once again larger premises are required. By the time this appears in print new accommodation in Central London may well have been bought.

In 1984, Mr G. D. Jones (Plate 2A) took over the post of Executive Secretary from Mr Henton who, in his 18 years with the Society, had had to deal with what is likely to emerge on a relative scale as the most expansionist era of the Society. The office is now being developed according to new organizational plans summarized in Fig. 3.8. This development will be expanded on later but it should be noted that two new posts have been established in response to recent requirements, an Assistant Meetings Officer and a Research and Information Officer. These important changes have been achieved without the need to increase the overall number of staff employed.

Since a headquarters was first established in the 1960s, the Society has generally been extremely fortunate in its choice of professional staff who have exemplified a true spirit of co-operation and loyalty, none more so than the present senior staff: Doris Herriott, Meetings Office (Plate 2A) and Tony Evans, Editorial Manager (Plate 2A).

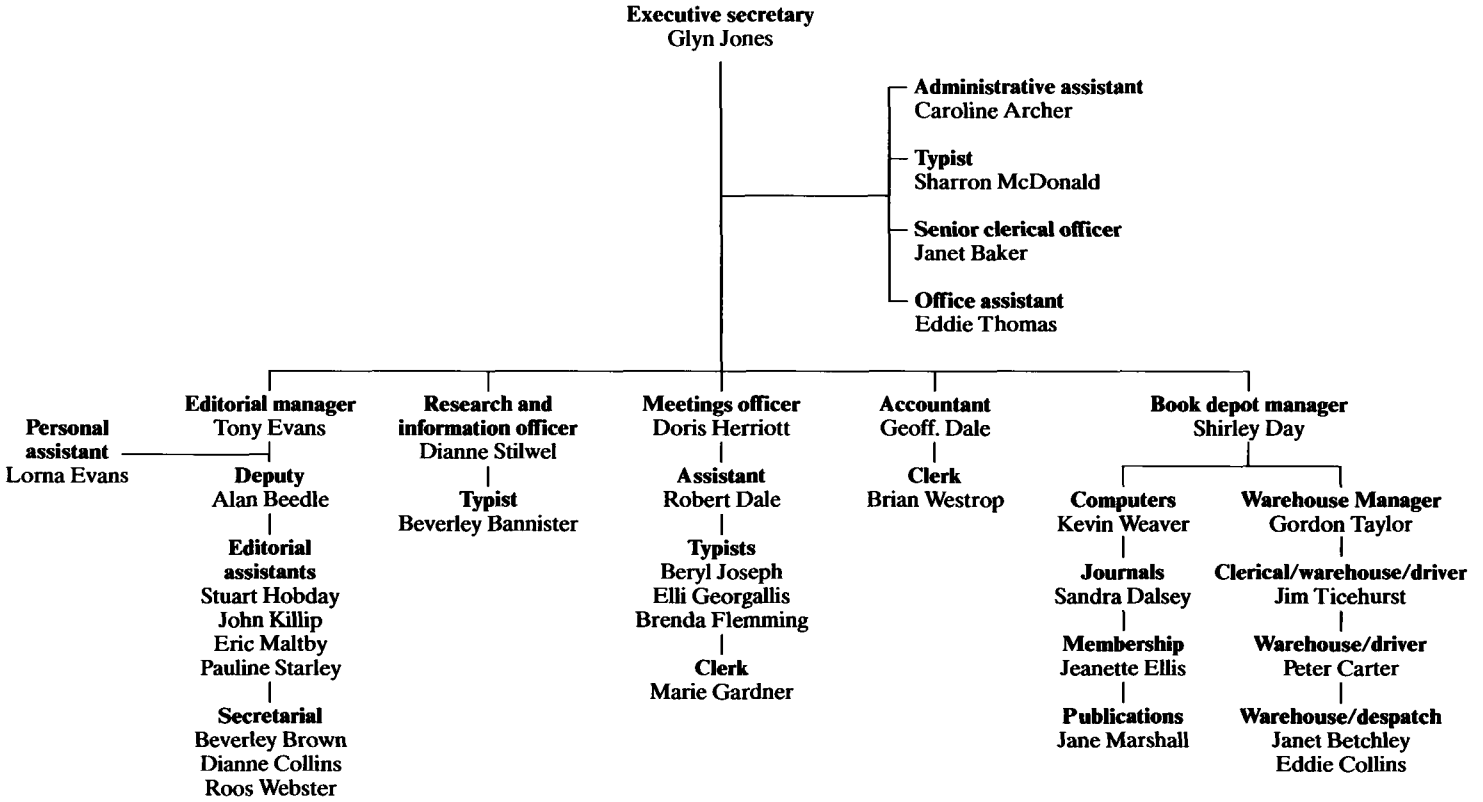

Fig. 3.8. Administrative organization of the Society (1986).

3.3 Legal Status of the Society

The Trustee system of control of the Society, preferred by members before 1944 (Chapter 2) was still favoured after the Second World War and in 1954 a supplementary Trust Deed was sealed which vested the Society's property in the Trustees. In 1960 the Committee made new rules regarding the function of the Trustees and in 1962 agreed that minutes of Committee meetings should be sent to the Convenor of the Trustees (Dr J. H. Bushill, Honorary Treasurer, 1944–1952, see Chapter 4) to keep them "better informed of the Committee's decisions and activities", but at their next meeting they decided to send the minutes to all Trustees.

However, the position of the Trustees had become equivocal after the change of rules in 1960 and the problem came to a head in 1964 when Sir Charles Harington, Chairman of the Trustees, voiced the Trustees' disquiet: "The Trustees were now clearly bound to act on the instructions of the Committee and felt some uneasiness in that they were accepting a measure of responsibility for funds over which they had no control in respect either of expenditure or investment policy". As the Trustees did not see a resolution of this problem within the constitution of the Society, they suggested that the Committee might consider incorporation under the Companies Act. The Committee accepted this suggestion, which it will be remembered (Chapter 2) had been first mooted in 1928. Their deliberations were catalysed by the knowledge that the Society's activities were now 'big business' with a revenue account of around £100,000 [£700,000] and that, in an inflationary period, capital funds tied up in Trustee stocks were not the best use of its money. By September 1964, plans for incorporation had been approved by the Committee and it was agreed to discuss them at the A.G.M. in 1965. However, arrangements were speeded up when early in 1965 the Society received Counsel's opinion that under the present rules payment of Honoraria to editors *et al.* was illegal. Documents and explanatory notes were rapidly prepared and circulated to members so that a decision could be made at a Special General Meeting called in Oxford on 15 July 1965. The proposal was approved after a long and detailed discussion and on 25 November 1965 the Biochemical Society became incorporated under the Companies Act. The Board of Trade agreed that the word 'Limited' could be omitted from the title. However, as members will have observed, official Society notepaper now carries the statement "A Company Limited by guarantee, registered in London No. 892796".

The required "Memorandum and Articles of Association of the Biochemical Society" were drawn up, referring to a company limited by guarantee but not having a share capital. The objectives of the Society and its methods of running its

financial affairs are detailed in the Memorandum. The Articles were drawn up after long discussions; they contain nineteen sections dealing with membership and subscriptions, twenty-one with organization, five with general meetings, seven with vote of members, one with the seal, three with publications, four with accounts, two with audit, two with notices, one with dissolution and one with indemnity to officials. With only one or two minor instances these Articles have worked well and have in no way hamstrung the Committee in its efforts to improve and expand the Society's activity. An early embarrassment, however, was to discover that the Committee had no power to co-opt members. This was put right at an A.G.M. in Liverpool in 1968, when it was agreed that both the Symposium Organizer and the Secretary-General of FEBS (while he is a British member of the Biochemical Society) could be co-opted. Minor changes have been made periodically, and after 20 years the Articles probably need refurbishing, especially in relation to EC rules; this is likely to happen in the near future.

On the advice of the then Honorary Treasurer (W. F. J. Cuthbertson, see Chapter 4), a Finance Sub-Committee was set up in 1966, comprising the Honorary Treasurer (Chairman), the Honorary Committee Secretary, a representative of the Editorial Board of the *Biochemical Journal* and three other Committee members. The Sub-Committee was consolidated into the Finance Board in 1973.

The success of the incorporation of the Society was largely due to the skills of the Honorary Treasurer, the Executive Secretary (A. I. P. Henton) and the Chairman of the Society at that time, Professor Helen Porter (Fig. 3.9).

With incorporation the role of the Trustees came to an end. They had guided the Society through various financial problems for almost 40 years; they acted with great acumen and laid the foundations for the financial prosperity the Society enjoys today. A perusal of the list of Trustees who have helped the Society over the years (Table 3.3) immediately reveals not only their biochemical eminence but also recalls the many other ways in which they have helped the Society.

Incorporation did not alter fundamentally the basis on which the Society was run, that is by a general Committee and

Fig. 3.9. Professor Helen K. Porter, F.R.S. Chairman of the Society Committee, 1965–1967.

Table 3.3. Trustees of the Biochemical Society

	Dates		Dates
J. L. Baker	1929	Sir Charles Harington, F.R.S.	1929–65
H. W. Dudley, F.R.S.	1929–38	A. C. Chibnall, F.R.S.	1938–65
J. A. Gardner	1929–46	Sir Jack Drummond, F.R.S.	1942–65
Sir Arthur Harden, F.R.S.	1929–42	H. Raistrick, F.R.S.	1946–65
H. D. Kay, F.R.S.	1929–65	J. H. Bushill	1956–65
R. H. A. Plimmer	1929	Sir Rudolph Peters, F.R.S.	1956–65

Table 3.4. Biochemical Society Chairmen, 1945–1986

Dates	
1945–46	A. C. Chibnall, F.R.S.
1946–47	F. A. Robinson, C.B.E.
1947–48	Margaret M. Murray
1948–49	W. T. J. Morgan, C.B.E., F.R.S.
1949–50	H. Raistrick, F.R.S.
1950–51	F. Dickens, F.R.S.
1951–52	Sir Charles Dodds, F.R.S.
1952–53	Sir Rudolph Peters, F.R.S.
1953–55	Sir Frank Young, F.R.S.
1955–57	Sir Charles Harington, F.R.S.
1957–59	E. J. King
1959–61	R. A. Morton, F.R.S.
1961–63	J. N. Davidson, C.B.E., F.R.S.
1963–65	F. C. Happold
1965–67	Helen K. Porter, F.R.S.
1967–69	A. Neuberger, C.B.E., F.R.S.
1969–71	G. A. D. Haslewood
1971–74	T. W. Goodwin, C.B.E., F.R.S.
1974–77	T. S. Work
1977–80	R. R. Porter, C.H., F.R.S.
1980–83	S. V. Perry, F.R.S.
1984–86	K. S. Dodgson
1986–	H. M. Keir

Table 3.5. Honorary Secretaries of the Biochemical Society, 1945–1986*

Dates		Dates	
1945–47	W. Robson	1964–69	K. S. Dodgson
1947–52	J. N. Davidson, C.B.E., F.R.S.	1959–61	W. J. Whelan
1950–53	L. Young	1967–73	A. N. Davison
1952–55	R. H. Thompson, C.B.E., F.R.S.	1973–74	A. P. Mathias
1955–58	F. L. Warren	1973–80	J. B. Lloyd
1955–59	C. E. Dalgliesh	1980–85	D. Robinson
1959–64	P. N. Campbell	1981–	R. H. Burdon
1962–67	H. R. V. Arnstein	1985–	A. D. B. Malcolm

*In many cases Honorary Secretaries started as Meetings Secretaries and then moved on to General Secretaries: hence the frequent overlap of dates.

Honorary Officers. The Committee Chairman and Honorary Secretaries who have served the Society are named in Tables 3.4 and 3.5 respectively. The Honorary Treasurers are referred to in detail in Chapter 4. In 1953 the Chairman's period of office was extended to two years and in 1971 to three years. However, it was not until 1958 that it was agreed to pay the Chairman's expenses at the same rate as that for the Officers. This, it was suggested, would help to make him "less anonymous than he had been in the past". The office of International Secretary was established in 1964, when W. J. Whelan (Fig. 3.10) was appointed, but it was abandoned in 1970 when, owing to the formation of FEBS (see Chapter 7), it became superfluous. A. P. Mathias (Plate 1B) was the only other holder of this office (1968–1970). However, because of the

Fig. 3.10. Professor W. J. Whelan. Honorary Secretary, 1959–1962. Honorary International Secretary, 1964–1967.

increased extra-European activities of the Society in the past few years, there is pressure for the office to be restored. The Chairman of the Advisory Committee for Publications became Secretary for Publications when that Committee was upgraded to the Publications Board in 1973. Similarly the Chairman of the Professional and Education Sub-Committee became an Honorary Officer when this Committee was upgraded to the Professional and Educational Committee in 1985.

3.4 General Post-War Planning

The development of the Biochemical Society has depended to a great extent not on detailed formal planning but to informed opportunism and outstanding scientific entrepreneurism by a group of young, talented and enthusiastic Officers who often laboured long into the night (sometimes until 4 a.m., with appropriate liquid sustenance) on behalf of the Society. They had the knack of responding to the pressure of events whilst, at the same time, initiating many of the events. It is to their great credit that they rarely put a foot wrong although in their enthusiasm they sometimes offended the susceptibilities of more cautious and conservative Committee members and they occasionally found the democratic process too ponderous for their needs. An example of the latter is quoted by Morton [5]. "In 1964 exception was taken to the informal way in which a retiring Honorary Secretary tended to find his own successor. The criticism was supported and the Committee decided that in future there should be a nominating Committee consisting of the Chairman, the Honorary Officers and two ordinary members of the main Committee".

Although many developments within the Society, particularly on the international scene (Chapter 7), took place between 1944 and 1965, it was not until the latter date that the Committee discussed the future of the Society in detail and set up a planning Sub-Committee. This reported in the middle of 1966 and indicated that a major expansion should be in publications. This view was based not only on the financial worry that the Society had only one source of income, the *Biochemical Journal*, but also to the fear partly because of this that the *Biochemical Journal* was losing its appeal, because of its breadth of coverage in the rapidly expanding science of Biochemistry and was not attracting the most exciting research papers. The Committee accepted that the formation of Groups, which had recently begun to emerge spontaneously, should be encouraged and that Group meetings should be held at the same time as the ordinary meetings of the Society (see Chapter 6). They encouraged the holding of two-day meetings wherever possible in order to accommodate expanding programmes which frequently included colloquia, discussions, special lectures and Symposia as well as free communications

and demonstrations. They recommended closer discussion and collaboration with the Chemical Society in the areas covered by Biochemical Society meetings because the recent splitting of the *Journal of the Chemical Society* into sections resulted in two of these dealing with material which was appropriate to the *Biochemical Journal*. The recommendation of the Sub-Committee for more support for innovation in teaching and more interest in Biochemistry in industry, has been vigorously pursued so that today we have a thriving Professional and Educational Committee (Chapter 8). The Committee also agreed to transfer more work from the Honorary Secretaries to the Executive Secretary and his staff in Warwick Court.

From 1966 to the present day, the Main Committee has gradually changed its activity, becoming more in the way of a Council dealing with policy matters raised by advisory bodies. The first two were the Advisory Committee for Publications, formed in February 1963, which had evolved from a Sub-Committee set up to resolve differences between the Main Committee and the Editorial Board of the *Biochemical Journal*, and the Finance Sub-Committee, which was established in 1966. They were replaced by the Publications Board and the Finance Board, respectively, in 1973. A Meetings Board was also set up at this time. These Boards, together with the *Biochemical Journal* Editorial Board (which had been set up in 1944) and the Professional and Educational Committee (reconstituted in 1984 from the Professional and Educational Sub-Committee, itself reconstituted in 1977 from the original Professional Sub-Committee formed in March 1970) represent a very strong advisory input into the Main Committee. Cross-representation of the membership of the Boards ensured, in theory and frequently in practice, co-ordination of action. As Dr D. F. Elliott (Plate 4A), the Honorary Treasurer at the time, wrote: "This new organization fulfilled the essential need in the financial area on such crucial issues as the allocation of funds, the pricing for publications, the control of expenditure and the level of the membership subscription". All this will be elaborated on in Chapter 4. An unusual outcome of these developments was that in 1976 the work of the Meetings Board became superfluous and the members themselves recommended that their activities be suspended on the understanding that the situation would be considered in the following year. However, the Board still remains in abeyance. Recently a long-term planning group has been set up; its first report (November 1985) dealt with a number of urgent issues, none of them particularly long term. A completely new organizational plan for the Society is now (1986) before the Committee for consideration.

A summary of the major developments initiated by the Society from 1944 to 1985 is given in Table 3.6. Most of these

Table 3.6. Developments initiated by the Biochemical Society, 1944–1985

1944	Proposed formation of Biological Council
1947	Initiative for organizing First International Congress of Biochemistry
1949	Post of Symposium Organizer established
1955	Post of Deputy Editor of *Biochemical Journal* established
1956	First Meeting with British Biophysical Society
1958	Hopkins Memorial Lecture
1961	First Administrative Secretary appointed
1961	50th Anniversary of Founding of Society
1961	Jubilee Lecture established
1962	Joined with Medical Research Society in publishing *Clinical Science*
1962	Jubilee Lecture established
1963	Initiative taken for establishing a Federation of European Biochemical Societies (FEBS)
1963	Advisory Committee for Publications established
1963	Colworth Medal struck
1964	Post of International Secretary established (discontinued after formation of FEBS)
1964	Essays In Biochemistry first published
1964	First Group established
1964	David Keilin Memorial Lecture established
1965	Ciba Medal struck and Prize established
1965	Unilever European Fellowship scheme initiated
1966	Grants to student Biochemical Societies introduced
1966	Incorporation under the Companies Act
1966	Finance Sub-Committee established
1966	Purchase of 7 Warwick Court
1967	Separation of membership subscription from *Journal* subscription
1967	Harden Conference established
1969	BDH Awards in Analytical Biochemistry established
1970	Professional Sub-Committee established
1970	Heads of Departments conference formalized
1971	First Refresher Course held
1971	Boehringer Mannheim Travelling Fellowship introduced
1972	Colchester Book Depot bought
1973	Finance Sub-Committee changed to Finance Board
1973	Publications Board established
1973	*Biochemical Society Transactions* introduced
1973	Post of Honorary Careers Advisor established
1973	Meetings Board constituted
1976	Meetings Board disbanded
1976	Promotions Organizer post established
1977	Professional Sub-Committee expanded to Professional and Educational Sub-Committee
1978	Morton Lecture instituted
1978	Wellcome Trust Award for Research in Biochemistry Related to Medicine established
1981	*Bioscience Reports* published (transferred to a commercial publisher in 1985)
1981	Meetings charge introduced
1982	Post of Honorary Public Relations Official established to replace Promotions Organizer
1983	Junior Travelling Fellowships established
1983	Schoolteacher Fellowship established
1984	Professional and Educational Sub-Committee upgraded to Professional and Educational Committee
1984	Krebs Memorial Scholarship founded
1985	Sponsorship of the Biochemical Society Exhibition in the Science Museum, South Kensington
1986	Meetings charge abandoned

are discussed in detail in appropriate sections of this and later chapters.

3.5 Biological Council

In March 1944 the Committee agreed to initiate discussions on the possible formation of a Biological Council, and recommended that the number of discussion meetings should

be increased and that the teaching of Biochemistry should be assisted whenever possible.

With regard to the formation of the Biological Council, R. A. Peters (Fig. 3.11), F. G. Young (Fig. 3.12) and W. T. J. Morgan (Plate 4A) were asked to look into the matter and, after various soundings, a meeting of ten interested Societies was held at The Royal Society in September 1944. A memorandum was produced, mainly the work of Walter Morgan, for circulation and comment. At the meeting of the Society's Committee in September 1945 Morgan was able to announce the formation of the Biological Council. It was supported by contributions from constituent societies to the extent of £5 [£60] per annum or one guinea (£1.05) per 100 members "whichever sum be the lesser". The financial limit was soon raised to £10. The present contribution of the Society is £35.

Having helped to achieve the birth of the Biological Council the Society did not continue to take a great part in its activities. The Biological Council eventually spawned the Institute of Biology, a professional organization similar to the Institute of Chemistry (now subsumed within the Royal Society of Chemistry), a development which the Society's Committee viewed with limited enthusiasm. It did, however, eventually send a donation of £5 towards the foundation of the Institute.

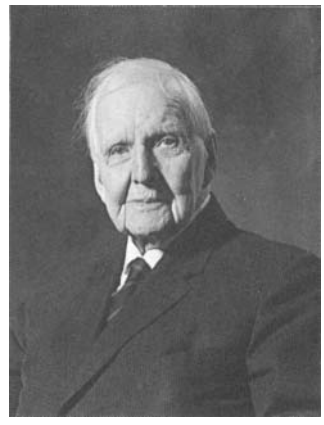

Fig. 3.11. Sir Rudolph Peters, M.C., F.R.S. Hopkins Memorial Lecturer, 1958. Chairman of the Society Committee, 1928–1929, 1938–1939, 1952–1953. Honorary Member, 1967.

3.6 Anniversary Meetings

At the A.G.M. at UCL in March 1961, the fiftieth anniversary of the founding of the Biochemical Society was celebrated. A two-day symposium on 27, 28 March was held on "The Structure and Biosynthesis of Macro-Molecules". A conversazione mounted during the evening of 27 March in the North Cloisters of UCL was attended by 650 members. The event was supported by substantial donations from Industry. On the early evening of 28 March, a historic meeting was held in the Royal Institution when Sir Hans Krebs (Fig. 3.13) delivered the Third Hopkins Memorial Lecture on "The Physiological Role of Ketone Bodies". Apart from the intrinsic scientific merit of the lecture, Krebs described for the first time in public the details of his flight from Nazi persecution and paid a moving tribute to the friendship and help given him by Gowland Hopkins "when the Country of my birth proscribed me". The full text of the tribute is given in Krebs's autobiography [1]. On the Wednesday morning 34 Communications were presented in three separate sessions and the meeting ended with the A.G.M.

The Anniversary Dinner, held in the New Refectory of UCL, was well attended and the Society was honoured by the presence of many scientific guests including the President of The Royal Society, Sir Howard Florey, representatives of 20

Fig. 3.12. Sir Frank Young, F.R.S. Honorary Secretary, 1940–1943. Chairman of the Editorial Board, 1942–1946. Chairman of the Society Committee, 1953–1955. Honorary Member, 1979.

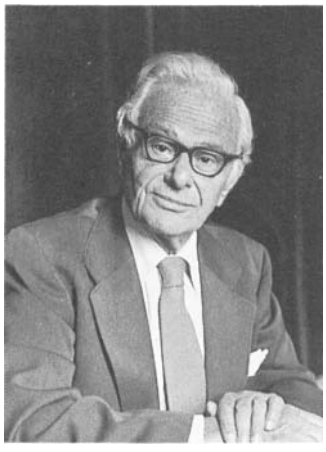

Fig. 3.13. Sir Hans Krebs, F.R.S. Nobel Laureate, 1953. Hopkins Memorial Lecturer, 1961. Honorary Member, 1967.

Fig. 3.14. Professor J. N. Davidson, C.B.E., F.R.S. Honorary Secretary, 1947–1951. Chairman of the Society Committee, 1961–1963.

biochemical societies, the three then extant Honorary Members, Sir Rudolph Peters (Fig. 3.11), Sir Henry Dale (Fig. 2.13) and Sir Charles Harington (Fig. 2.7), and two original members, Sir Charles Lovatt Evans (Fig. 2.13) and G. W. Ellis. The principal guest was Lord Hailsham, then Secretary of State for Science, who replied to the toast of "the Guests" proposed by Professor J. N. Davidson (Fig. 3.14). Professor Marcel Florkin (Belgium) and Academician Oparin (U.S.S.R.) also replied. Sir Howard Florey proposed the toast of "the Society" and Professor R. A. Morton replied.

The 75th Anniversary, which is the *raison d'être* of this book, was celebrated by special events spread over the whole of 1986. Details are given in Chapter 8.

The 500th meeting of the Society was marked by the publication of *The Biochemical Society: its History and Activities 1911–1969*, prepared by R. A. Morton. At the dinner associated with the meeting, Professor Morton was presented with a specially bound copy of his *History* (Fig. 3.15). The then President of the U.S. National Academy of Sciences, Dr Philip Handler, a distinguished biochemist, and his wife were special guests of honour as was Mrs Shirley Williams, then Minister at the Department of Education and Science. Professor G. A. D. Haslewood (Fig. 3.15), Chairman of the Society at the time, recalls that it is not only Britishers who succumb to the famous Williams' charm. Handler, at one point during the evening, turned to Haslewood, "Tell me" he said, "do you have many politicians like that?" [2].

A special two-day symposium was arranged for this anniversary meeting, on "British Biochemistry Past and

Fig. 3.15. Professor R. A. Morton, F.R.S. (Chairman of the Society, 1959–1961. Honorary Member, 1966) being presented with a special leather bound copy of his *The Biochemical Society: its History and Activities, 1911–1969*, by Professor G. A. D. Haslewood, Chairman of the Society, 1969–1971.

Table 3.7. Speakers and the titles of their lectures for Biochemical Society Symposia no. 30, *British Biochemistry Past and Present*, held on the occasion of the 500th meeting of the Society

Molecular biology

Chairman's Introduction
J. N. DAVIDSON
Some remarks on the history of molecular biology
J. C. KENDREW
The development of crystallographic enzymology
D. C. PHILLIPS
The primary structure of proteins
B. S. HARTLEY
Retrospect on the biochemistry of plant viruses
N. W. PIRIE

Immunology

Chairman's Introduction
J. R. MARRACK
The nature of the immune response
J. H. HUMPHREY
The structure and combining specificity of antibodies
R. R. PORTER
Carbohydrate structure responsible for antigenic specificity
W. T. J. MORGAN

Intermediary metabolism

Chairman's Introduction
A. NEUBERGER
Intermediary metabolism of animal tissue between 1911 and 1969
H. A. KREBS
Lessons learnt from small molecules
G. POPJAK
The role and maintenance of the tricarboxylic cycle in *Escherichia coli*
H. L. KORNBERG

Separation methods

(Chairman: A. J. P. Martin)

A retrospect on liquid chromotography
R. L. M. SYNGE
Methods for determining sequences in RNA
F. SANGER and G. G. BROWNLEE
The development of gas-liquid chromatography
A. T. JAMES

Present". It was a survey, inevitably limited, of achievements between 1911 and 1969. It was published as No. 30 in the Biochemical Society Symposia series. As the Editor wrote in the preface: "Scientists are pre-eminently international in outlook and some of our contributors were a little apprehensive of the emphasis which was placed on British Biochemistry. However, this was a unique occasion and we can be well satisfied with the contributions made to the subject from the U.K. during the past 58 years". Consideration of the list of the speakers and the titles of their lectures (Table 3.7) justifies this comment.

3.7 General Pattern of Ordinary Meetings

Despite considerable difficulties the Society's Officers maintained a viable programme of meetings during the Second World War. Instead of the agreed eight meetings per year, the numbers during 1940–1945 varied between five and six with about 50 Communications and 10–15 demonstrations per year. Only once was a meeting cancelled because of lack of a sufficient number of communications. This limited programme was kept alive only by the heroic efforts of the Officers. Professor Walter Morgan (Plate 4A) recalls that "things were pretty grim ... and the programmes show that at some of the meetings very few [papers] were presented and I remember the difficulty of getting the printing done and the uncomfortable journeys to Scotland to see that 4–5 papers (only) were given and read the 'Minutes of the last meeting'. All for the record! But we had enjoyable small dinners and kept in touch with other members" [3].

The number of meetings per year was restored to eight after the War and the size of the meetings rose slowly but steadily until in 1956–1957 the number of Communications was 196 and the number of demonstrations 33. At this time the attendance at meetings varied between 100 and 300, most attracting over 200 participants.

Discussion meetings which had begun again in 1941 (see the preceding chapter) continued to flourish to such an extent that considerable support emerged for the publication of the proceedings at such meetings. In September 1946, the Editorial Board of the *Biochemical Journal* indicated that they did not wish to incorporate these proceedings into the *Journal*. After consideration of the estimated cost of publishing the discussions separately it was decided to launch a new publication of discussion meetings under the title of *Biochemical Society Symposia* with R. T. Williams (Fig. 3.16) as Symposium Organizer. He successfully set the *Symposia* on the right path and served the Society loyally for 10 years in the capacity of Symposium Organizer.

Fig. 3.16. Professor R. T. Williams, F.R.S. Symposium Organizer, 1945–1955.

After a slow start the *Symposia* became popular and sold well; some, for example, "Partition Chromatography and its Application to Biochemical Problems" (1948), were particularly successful. It was agreed that as the *Symposia* were so well established the major contributors would receive a free copy of the proceedings but no reprints and that the discussions following the main papers would not be recorded. The first two rules still apply but certainly by volume 12 (1954) selected contributions to the discussion of main papers were being published. When Professor Williams retired it was agreed that the Symposium Organizer should be given greater status and become an *ex officio* member of the General Committee; it was also agreed that the tenure of office should be limited to 7

Table 3.8. Symposium Organizers

	Dates
R. T. Williams, F.R.S.	1945–1955
E. M. Crook	1955–1958
J. K. Grant	1958–1964
T. W. Goodwin, C.B.E., F.R.S.	1964–1970
R. M. S. Smellie	1970–1976
P. B. Garland	1976–1980
C. E. Phelps	1981–1984
J. Kay	1985–

years. Two symposia per annum were to be aimed for, but this was not always feasible. Under a number of Symposium Organizers (Table 3.8), the *Biochemical Society Symposia* have become an established and scientifically successful activity of the Society.

To return to Discussions for a moment, it is interesting that "The Chemical Basis of Cell Structure" (1945) involved the participation of a number of French biochemists and the meeting was marked by the presentation of a Pasteur Medal to the Society by Professor R. Fabre on behalf of the French Biochemical Society. This was probably the first occasion after the 1939–1945 War that formal contact between British and European biochemists was made. What eventually developed from this contact, and the Society's part in the formation of IUB and FEBS, is given in full in Chapter 7. The topic of the first post-War joint Discussion with another Society (Society of General Microbiology), was "Quantitative Biochemical Analysis by Micro-biological Response" (1946).

When the Symposia became established it was agreed that they could be held outside Oxford, Cambridge and London. The first such meeting was on "The Biochemistry of Fish" at Liverpool in 1949. It is also interesting to note that around this time the Symposium Organizer could not find sufficient speakers for a proposed symposium on "Plant Biochemistry".

In 1967 the first Symposium to be arranged by the Society specifically to pay tribute to one biochemist was held in Oxford. It will come as no surprise that the biochemist was Sir Hans Krebs (Fig. 3.13) and that the title of the Symposium was "Metabolic Roles of Citrate". As we shall see later, *Biochemical Society Transactions* has taken over the role of publishing the proceedings of meetings organized to salute the achievements of members of the Society. The organizing of a Symposium sometimes resulted in an unexpected and fruitful scientific spin-off. The Symposium held on Neurochemistry in 1951 was, according to Professor H. McIlwain [4], of great importance in catalysing activities which eventually led to the formation of the International Society of Neurochemistry (ISN).

Although Symposia helped to focus meetings of the Society on some topical research development, the fact that they were only annual events precluded them from making a significant contribution to a problem which was rapidly developing in the 1960s. The problem was to reconcile the demand for more time to present original work with the rapid increase in specialization within Biochemistry. Many specific papers presented at a meeting were of direct interest only to a small number of the biochemists participating in the meeting. Often the audience for some presentations was the Chairman, the speaker's supervisor and the next speaker and his supervisor. The first attempt to deal with this problem was the decision to organize Colloquia to be held at every meeting, the topics to be of particular interest to the Host Department. The first of these Colloquia was held in Liverpool in January 1964 and the topic chosen was "Aspects of Vitamin A Function". However, even this development, excellent as it was, was not sufficient to deal with the explosive expansion of Biochemistry into all areas of Biology, particularly into Molecular Biology. The Society's response to this was the introduction of Groups. It is not an exaggeration to say that this development, more than any other single activity, saved the Society from the possibility of extinction by the uncontrolled splintering off of new societies. This important development is dealt with in detail in Chapter 5. There are now some Group Colloquia and Poster Sessions at every meeting of the Society. In addition a Society/ Host Colloquium is now also arranged for each meeting so that the Host Department is free to choose its own subject for discussion.

As oral Communications became less and less attractive to members, an innovation which the Society took up with enthusiasm early on and made an outstanding success, was the Poster Session. Such sessions are now an important part of all meetings; indeed they appear to have insinuated themselves into meetings of almost all scientific societies. Presentation of new material as a Poster provides an ideal environment for informal but informed discussion of the work on a one to one basis and leads not only to greater understanding of the problems investigated, but to many contacts and frequently important collaboration mutually advantageous to presenter and discussant. The first Society Poster Session, although not designated as such, was held at the MRC laboratories at Carshalton in 1967 on the initiative of Dr W. N. Aldridge (see Chapter 6). At this meeting authors 'demonstrated' their results in an informal way with the aid of prepared cards. Such sessions soon became part of every meeting and Fig. 3.17 recalls one of the early meetings held at UCL in 1970. It is difficult to decide just when the term 'Poster' came into general use. Oral presentation of free Communications was formally discontinued following a Committee decision of 25 November

Fig. 3.17. One of the early Poster Sessions held at UCL in 1970.

1982; furthermore Groups were encouraged to extend their present practice of incorporating Poster material into specific oral sessions, e.g. round table discussions, organized as part of their Colloquia.

Oral presentations in separate pre-doctoral sessions have, however, been a successful aspect of the Irish Group activities (see Chapter 5). An attempt in 1986 to establish such a meeting in the U.K. on the grounds of giving pre-doctoral students experience in presenting their work to a critical audience, failed through lack of support.

During the past 25 years or so, many special lectures have been endowed (see section 3.10) so that there are very few meetings which do not include a named lecture in addition to all the other attractions just described, as well as some type of commercial exhibition. The outline programme (Table 3.9) of a meeting which took place in Cardiff in 1985 shows how wide-ranging and attractive the modern meetings are and how rapidly they have progressed since the later 'forties when they consisted of about 10–15 Communications and two or three demonstrations, all taking place in one afternoon (usually Saturday) session, with a break for tea. It is also obvious that Free Communications on General Topics are today very much a minor part of most meetings. Because of the size and complexity of current meetings the number per year has been reduced from eight to four or five. This concentration of effort makes the meeting much more economical of time and money and much more worthwhile scientifically.

The Oxford meeting of the Society in July 1985 broke all records. Attendance was greater than at some FEBS meetings and many intending visitors could not be found accommodation.

Table 3.9. A summary of the schedule for the 613th Biochemical Society Meeting, University College Cardiff, 20–22 March 1985

	John Pryde Lecture Theatre	Physiology A Lecture Theatre	Shared Lecture Theatre	Deck Laboratory/Physiology Foyer/Shared Lecture Theatre Foyer
WED. MARCH 20	Carbohydrate recognition systems in animals (carbohydrate Group Colloquium) 09.30–17.15 COLWORTH MEDAL LECTURE 17.30	Structure and activity of aspartic proteinases (Molecular Enzymology Colloquium) 09.30–17.15	Hormones and receptor-mediated internalization (Hormone Group Colloquium) 09.15–12.40	Posters. Free Commun. A. General topics I 13.15–14.00 B. Molecular Enzymology Group 13.15–14.00 C. Carbohydrate Group 13.50–14.50 D. Hormone Group 14.00–15.30
THURS. MARCH 21	Cellular proteolysis (Society/ Host Colloquium) 09.00–17.15 MORTON LECTURE 17.30	The Pharmacological Biochemistry of stimulus–response coupling (Pharmacological Biochemistry Group Colloquium) 09.00–17.15	Recent applications of HPLC to Biochemistry (Techniques Group Colloquium) a.m. Recent advances in HPLC column technology 13.45–17.00	Posters. Free Commun. A. Society/Host Colloquium 13.00–14.00 B. Pharmacological Biochem. Group 13.15–14.00 C. General Topics II. 13.15–14.00
FRIDAY MARCH 22	Lung surfactants (Lipid Group/ Membrane Group Joint Colloquium) 09.30–16.15	Recent application of HPLC to Biochemistry (Techniques Group Colloquium) A. Recent advances in HPLC analysis of small molecules 09.00–12.30 B. Recent advances in the HPLC analysis of middle molecules and large molecules 14.00–16.30	Newer aspects of the Biochemistry of receptors (Neurochemical Group Colloquium) 09.00–17.00 **Anatomy Lecture Theatre** Wet or dry: the fate of the biochemical practical (Education Group) Informal Session a.m.	Posters. Free Commun. A. Education Group 11.00–11.30 B. Neurochemical Group 13.15–14.00 C. Techniques Group 13.15–14.00 D. Lipid/Membrane Group 13.30–14.00 E. General Topics 13.15–14.00

Even with all these successful activities in train the Committee were still worrying about some members' interests not being effectively covered. So in 1984, on the advice of Professor R. H. Burdon, then Honorary Meetings Secretary, they announced the inauguration of Special Colloquia thus:

> "... it has been pointed out from time to time that some Members' interests are not adequately covered by any of the Groups. Alternatively, it has sometimes been the case that growth areas are not directly in the field of interest of any single Group. This, of course, can often be remedied by Joint Group Colloquia. However, such developments can often be ignored because they are neither one thing nor another. More simply, they sometimes do not receive support because Groups with limited financial resources may promote more 'popular' aspects of their subject area. To compensate a little for this, and to promote a more flexible approach, it is proposed to mount one, or two, Special Colloquia annually. Special Colloquia would be one, or halfday, events, held as part of normal Society Meetings. However, they would be organized on a 'one-off' basis by *ad hoc* groups of Society Members with help from the Meetings Office. Specifically, the subject areas must be in areas not adequately covered by the present Group structure. Indeed, where there is any doubt, the relevant Group Committees would have to be consulted and give their approval.
>
> "Any group of Society Members (5 to 10), therefore, who feel they would like to organize a Special Colloquium with the above constraints in mind, are invited to present their case in writing to the Honorary Meetings Secretary. Depending on suitability of their case, financial backing from the Society and timing of a Special Colloquium will be discussed in relation to other Society activities."

The great surge of activity in the early 'sixties was achieved only by the extraordinary devotion and hard work of the Honorary Meetings Secretaries; their activities frequently bordered on the phrenetic. Thus W. J. Whelan (Fig. 3.10): "... on the press day I set aside practically the whole day to edit the abstracts and prepare the associated announcements. By continuous work in this way I could cut the overall time to a minimum but I usually found myself working against the clock and my wife became more used to a regular midnight drive around London, first to put the abstracts on the overnight train to Cambridge from Liverpool Street and then over to Paddington to catch the corresponding train to Castle Cary for the announcements. On one occasion, when it seemed that everything would be held up in the Christmas postal delays, I drove to Cambridge and transported the abstracts by car to Castle Cary".

H. R. V. Arnstein (Plate 3A), Whelan's successor as Honorary Meetings Secretary, found that the International meetings were particularly frenzied: "We were moving house in

1963 on the day of the deadline for sending everything to the printers. I had received over 100 abstracts, many of them within a day or two before they had to be sent to the press, since papers often arrived late, particularly from abroad. Fortunately, Bill Whelan had kindly agreed to help with the editing and we managed to get the paperwork for the meeting done on a couple of packing cases in my study while our furniture was being unloaded all around us". There was perhaps one advantage which we do not enjoy today: "... in those days the last mail, even as far away from the centre of London as Mill Hill where I lived, was at 11 p.m. and one could rely on delivery the next day".

It was around this time that the burden for Honorary Meeting Secretaries became intolerable and the Society appointed a full time Meetings Officer. Miss Doris Herriott (Plate 2A) was appointed in 1961 and since then her commitment to the Society has been as great as that of the Honorary Officers, whom she has served with such enthusiasm. But with the developments just described the workload exceeded even her capacity and, as indicated in section 3.2, an Assistant Meetings Officer was appointed in 1985.

The Society's response to the requirement of the rapidly burgeoning subject by expanding its scientific activities in the form of larger and more intricate meetings, as exemplified in Table 3.5, has been generally of inestimable benefit. This has been achieved at the cost, which is particularly apparent to older members, of the Society having become a much more impersonal organization. This is an inevitable effect of increase in size. Gone are the days when the Society was indeed a club where all members knew each other and on the whole could understand each others' papers. Gone are the days of 'characters' whose presence at a meeting was always obvious and who generally 'performed' as expected. One such flamboyant character was A. L. Bacharach who, beside being an industrial biochemist, was a reviewer of detective novels (he claimed to have read one a day) and a true musicologist (he edited *The Musicians' Companion*, which has recently appeared in a new updated edition). He was also a very elegant dresser; Professor G. A. D. Haslewood (Fig. 3.15) recalls that "Earl King (Fig. 3.2) and others held sweeps on what colour of tie Bacharach would wear at the next meeting. A particularly acrimonious debate took place when the Committee proposed that the Proceedings ... should be edited (see Chapter 5). 'Not even the combined sagacity of the Editorial Board and its referees could ensure that some revolutionary discovery would not be left unannounced if the Proceedings were edited' said Bacharach in a speech that ensured the motion's defeat". Another typical comment recalled by Haslewood was on a paper read during the Second World War, at Hampstead: "What I admire about this paper" said Bacharach, "is the

author's courage, for these findings had already been published in ... 1916!".

3.8 Proceedings, Agenda Papers, *Bulletin*

As we shall see from Chapter 6 where the history of the *Biochemical Journal* is considered, it was becoming clear in the early 'sixties that the membership subscription could not carry free provision of the *Biochemical Journal*. This meant that the only tangible result of membership would be the receipt of the Agenda Papers, which, as Abstracts of Proceedings, had been precirculated since 1938. The Committee felt that better value for money should be apparent and decided that the style of the Agenda Papers should be changed to match that of the *Biochemical Journal* and that the Proceedings, previously published in the *Biochemical Journal*, would become part of the enlarged Agenda Papers. This arrangement worked satisfactorily until the need for a house journal to keep members informed of the many activities of the Society and its members, resulted in the metamorphosis of the Agenda Papers into the *Biochemical Society Bulletin*. The first number appeared in February 1979 and contained an article by Dr Peter Mitchell, Nobel Laureate. The *Bulletin* has now become accepted as a well established aspect of the Society's activities, although Colloquia at meetings are now recorded by title only. Since 1985, thanks to the efforts of the Honorary Meetings Secretary, Communications have been separated from the *Bulletin* and are printed separately in booklet form from authors' camera-ready copy, and mailed to members with the *Bulletin*. This allowed much more flexibility in arranging the programmes of meetings which, as indicated above, were becoming very large and increasingly complex. The booklet for the Oxford meeting in July 1985 consisted of 153 pages with generally three abstracts on each page.

In spite of the publicity which the Society willingly generates through its meetings, it still insists that the proceedings of the meetings are private and must be reported to the Press only after clearance with the Executive Secretary and the Honorary Public Relations Officer. This sensible rule is mainly to protect the participants from misquotation in the non-scientific press. It stems from 1926 when Sir Charles Harington was incensed to find a garbled version of his Communication in a national newspaper.

This section cannot end before acknowledgment of the debt the Society owes to Heads of University Biochemistry Departments who, together with their own colleagues, shoulder the considerable burden of setting up meetings in their Departments. Even with the expert help of the Meetings Office a great deal of work is always necessary at the grass roots level. Indeed the popularity of meetings meant that sympathetic industrial-

ists had to withdraw from hosting meetings because of lack of sufficient lecture room space. The success of some meetings can occasionally overwhelm Departments. One elder statesman once called an Honorary Meetings Secretary over the coals after an International meeting had disrupted his entire department for more than a week in July. The Secretary was told to arrange the next International meeting in September when a reduced number of participants could be expected. This was accordingly done but the attendance was so poor that the complaint then was that there were too few participants!

3.9 Travel Funds

In the context of the financial support of present day activities in numerous walks of life it will come as a surprise to many members that the business of running the Society was, until 1942, carried out with out-of-pocket expenses rarely being available. In 1942 the Committee eventually grasped the nettle and agreed that Committee members be paid third class travelling expenses if their journey to the meeting place exceeded 30 miles. Nowadays the members of the various Committees are paid first class rail or economy airfare and the Government recommended subsistence allowance.

Since the Second World War, the need for travel funds to allow scientists to present papers at Conferences both at home and overseas has eventually been accepted by the Research Councils and the Universities. The Society was one of the first scientific societies in the field in providing their own travel funds and although originally the funds available were quite modest, the grants now provided represent a considerable proportion of the overall travel monies available to members.

3.9.1 IUB Congress Funds

The first travel funds for members were raised by Professor F. L. Warren (Honorary Secretary, 1953–1958), who persuaded the Wellcome Trust to support the attendance of 25 Members at the Fourth International Congress of Biochemistry in Vienna in 1958. This support by the Wellcome Trust to the extent of £500 p.a. lasted until the Amsterdam Meeting in 1965. Government funds for travel became available to The Royal Society around 1958 and allocations to attend international Congresses organized by members of ICSU are now made by the Council of The Royal Society after consideration of submissions from the various National Committees. In the case of Biochemistry the funds available from The Royal Society are pooled with those provided by the Society and allotted to appropriate participants by a joint *ad hoc* Committee of the Society and The Royal Society. It is an open secret that The Royal Society has always been impressed by the

amount of money collected for travel by the Society. On the other hand, the Society can also be pleased that the submissions of The British National Committee for Biochemistry have always been looked on extremely favourably by The Royal Society.

3.9.2 FEBS Congress Funds

As Congresses organized by FEBS became more important on the biochemical scene the Society decided to support applications from members to attend such Congresses. FEBS funds are also provided to support these meetings.

3.9.3 General Travel Funds

Following the financial surplus made in 1982 (see Chapter 4) the Committee of the Society increased the capital of the Travel Fund so as to allow support for attendance at meetings with a substantial biochemical content other than the major FEBS meeting and IUB Congresses. At the moment no single grant is likely to exceed £300. Eligibility for such grants has been made as wide as possible; they are available to members resident in any part of the world to travel to meetings anywhere in the world. There is only one exception: U.K. residents travelling to meetings in the U.K. are not eligible for a grant.

3.9.4 Student Travel Funds

Yet another source of support became available when the Committee agreed to provide Heads of University Departments of Biochemistry and Related Sciences with a grant equivalent to £20 (raised to £30 in 1985) per annum for each full-time student member of the Society registered in the Department. The money can be allocated amongst the students as the Head of Department thinks fit provided that it is all used to cover travelling expenses incurred by the students in attending meetings of the Society. This fund is in addition to that which has been available annually for some years to Student Biochemical Societies for the expenses of a named "Biochemical Society Lecturer". This has been well appreciated and has given Student Societies great encouragement.

Up to date details of available travel funds can always be found in the latest Society Yearbook.

3.10 Medals and Named Lecturers

The portfolio of medals and named Lectures which the Society now holds is impressive. They divide naturally into two groups: firstly those intended to honour famous British bio-

Fig. 3.18. The Hopkins Memorial Medal.

chemists who have contributed outstandingly to the development of the subject; secondly, those sponsored by Industry to recognize outstanding work, frequently with emphasis on the achievements of younger workers.

3.10.1 Hopkins Memorial Lecture

In 1956 there appeared before the Committee a request to establish a memorial lecture to be presented biennially by an outstanding British or French biochemist, a medal to be provided by the sponsors. After much discussion the Committee decided "that since the institution of such a medal and lectureship would involve a completely new departure on the part of the Society it would not agree to the request". On the face of it this would appear to have been a very conservative reaction of the Committee. In fact it was not so; the proposal was not really appropriate for the Society to pursue. However, the ideas of memorial lectures and medals were now in the air and a proposal at the 1957 A.G.M. by Dr T. S. Work (Plate 1A) that a Hopkins Memorial Lecture be established was agreed unanimously. In this case the Committee reacted very positively and formally instituted the lectureship on 14 February 1958. They allocated £2000 [£25,000] for the purpose, had a medal cast by Pinches and drew up the rules for the award with such speed that it was possible to make the first award in 1958. Very appropriately the first recipient was Sir Rudolph Peters (Fig. 3.11), who received his medal and presented his lecture in April 1959. The likeness of Hopkins which appeared on the medal (Fig. 3.18) is from a pencil sketch prepared by Pinches from three photographs obtained by Dr F. A. Robinson (then Treasurer, see Chapter 4) from Hopkins's daughter Mrs E. Holmes; the final sketch was approved by his family. The recipients of the medal, many of whom had worked with or been associated with Hopkins, are listed in Table 3.10.

3.10.2 The Jubilee Lecture

The Committee, in organizing events to commemorate the Society's 50th Anniversary, agreed to establish a Jubilee

Table 3.10. Recipients of the Hopkins Medal

1958	Sir Rudolph Peters, F.R.S.	1971	F. Sanger, O.M.C.H., F.R.S.
1960	A. Neuberger, C.B.E., F.R.S.	1973	M. F. Perutz, C.H., C.B.E., F.R.S.
1961	Sir Hans Krebs, F.R.S.	1975	E. Racker
1963	L. F. Leloir, Foreign Mem. R.S.	1977	R. R. Porter, C.H., F.R.S.
1965	A. Szent-Gyorgi	1979	J. Porath
1967	H. A. Barker	1981	F. Gibson, F.R.S.
1969	F. J. W. Roughton, F.R.S.	1983	E. G. Krebs
		1986	C. Milstein, F.R.S.

Lecture to be given biennially, alternating with the Hopkins Lecture. The lecturer, who receives an honorarium, is required to lecture on his chosen field both in London and at a suitable centre outside London. The first lecture was delivered in 1962 by P. C. Zamecnik. Since 1978 the lecturers have also received the Harden Medal. The Jubilee lecturers who have up to now been elected are listed in Table 3.11.

Table 3.11. Jubilee Lecturers

1962	P. C. Zamecnik	1974	J. H. Quastel, C.C., F.R.S.
1964	E. Lederer	1976	A. Kornberg, Foreign Mem. R.S.
1966	F. Lynen, Foreign Mem. R.S.	1978	C. de Duve, Honorary Member
1968	H. G. Khorana, Foreign Mem. R.S.	1980	S. J. Singer
1970	A. L. Lehninger	1982	H.-G. Hers
1972	C. B. Anfinsen	1985	A. Klug, F.R.S.
		1987	M. Z. Atassi

3.10.3 The Keilin Memorial Lecture

The Society was in 1963 asked to administer a fund raised by friends and colleagues of David Keilin, F.R.S., whose fundamental work on cytochromes is now classical Biochemistry. The Committee readily agreed to this and a biennial Keilin Memorial Lecture was instituted in January 1964. The lecturer also receives a medal. Those who have delivered this lecture are listed in Table 3.12.

Table 3.12. Keilin Memorial Lecturers

1964	A. Lwoff, Foreign Mem. R.S.	1974	E. C. Slater, F.R.S.
1966	B. Chance, Foreign Mem. R.S.	1976	S. M. E. Magnusson
1969	M. Eigen, Foreign Mem. R.S.	1980	J. Kraut
1970	E. Margoliash	1983	M. G. Rossmann
1972	R. J. P. Williams, F.R.S.	1985	H. Beinert
		1987	R. Huber

3.10.4 The Morton Lecture

The latest named lecture was instituted in 1978 to commemorate the achievements in fat-soluble vitamin Biochemistry of the late Professor R. A. Morton, F.R.S. (Fig. 3.15), Johnston Professor of Biochemistry at the University of Liverpool 1944–1966. The Biochemical Society agreed to administer the funds, which were the result of an appeal by Morton's colleagues and friends. The lecture is given biennially, once in the University of Liverpool and once at an ordinary meeting of the Society. The lecturer should have made outstanding contributions to lipid biochemistry. Four lectures have so far been presented, by L. L. M. Van Deenen,

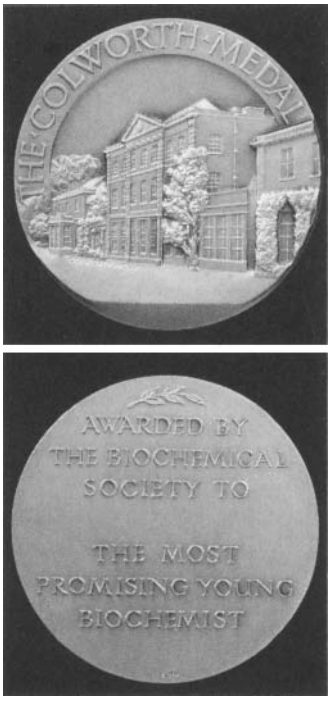

Fig. 3.19. The Colworth Medal.

Fig. 3.20. The CIBA Medal.

H. F. DeLuca, T. W. Goodwin and H. Rilling, in 1979, 1981, 1983 and 1985, respectively. The 1987 lecturer will be J. N. Hawthorne.

3.10.5 CIBA Medal and Prize and Colworth Medal

These two medals are considered together not because they do not deserve to be treated singly, in fact quite the contrary, but because they were the Society's first prizes to be endowed by Industry. The Medals came into being by an interesting concatenation of events. The Honorary Secretary in 1962, Professor H. R. V. Arnstein (Plate 3A) had worked at the National Institute for Medical Research together with Dr A. T. James and Dr D. F. Elliott (later Honorary Treasurer of the Society, see Chapter 4). The two last named moved to Industry and Arnstein soon began to persuade them to interest their firms in the Society. The outcome of the efforts of Dr James and the late Dr H. Wilkinson, then Director of the Unilever Research Laboratory at Colworth House, was the financing in 1963 of the Colworth Medal (Fig. 3.19).

This is awarded annually to a British biochemist, not normally over the age of 35. The recipient is expected to give a lecture to a meeting of the Society and to repeat it at the Unilever Research Laboratories at Colworth House. Over the years this award has gained in prestige and is now generally accepted as the highest accolade which can be bestowed by the Society on a young British biochemist. A glance at the list of recipients (Table 3.13) impressively bears this out and, incidentally, emphasizes the acumen of the awarding Committees.

The CIBA Medal (Fig. 3.20) and prize was inaugurated in 1964 by the CIBA Research Laboratories, Sussex, as a result of the good offices of Dr Elliott, who was their Research Director. It is awarded each year in recognition of outstanding research in any branch of Biochemistry. The award is for work carried out in the U.K. but candidates can be of any nationality. A prize is associated with the Medal and the recipient is

Table 3.13. Colworth Medallists

1963	Sir Hans Kornberg, F.R.S.	1975	W. J. Brammar
1964	J. R. Tata, F.R.S.	1976	G. G. Brownlee, F.R.S.
1965	J. B. Chappell	1977	P. Cohen, F.R.S.
1966	Sir Mark Richmond, F.R.S.	1978	T. E. Hardingham
1967	L. J. Morris	1979	R. A. Laskey
1968	P. B. Garland	1980	R. A. Flavell, F.R.S.
1969	G. K. Radda, F.R.S.	1981	T. H. Rabbitts, F.R.S.
1970	D. A. Rees, F.R.S.	1982	D. M. J. Lilley
1971	A. R. Williamson	1983	E. Oldfield
1972	J. M. Ashworth	1984	M. D. Houslay
1973	J. C. Metcalfe	1985	A. J. Jeffreys, F.R.S.
1974	D. R. Trentham, F.R.S.	1986	G. P. Winter

Table 3.14. Ciba Medallists

1965	Sir John W. Cornforth, C.B.E., F.R.S. } joint award G. J. Popjak, F.R.S. }	1975	E. F. Hartree
1966	R. R. Porter, C.H., F.R.S.	1976	S. V. Perry, F.R.S.
1967	D. M. Blow, F.R.S.	1977	C. Milstein, F.R.S.
1968	W. J. Whelan	1978	J. R. Quayle, F.R.S.
1969	T. W. Goodwin, C.B.E., F.R.S.	1979	J. B. Gurdon, F.R.S.
1970	Sir David Phillips, F.R.S.	1980	S. Brenner, F.R.S.
1971	D. H. Northcote, F.R.S.	1981	I. H. M. Muir, C.B.E., F.R.S.
1972	R. T. Williams, F.R.S.	1983	G. K. Radda, F.R.S.
1973	P. D. Mitchell, F.R.S.	1984	Sir Philip Randle, F.R.S.
1974	E. Kodicek, C.B.E., F.R.S.	1985	E. A. Barnard, F.R.S.

expected to deliver a lecture. The recipients of this award, more senior than those awarded the Colworth Medal, are listed in Table 3.14 which again makes impressive reading.

3.10.6 BDH Award in Analytical Biochemistry

Towards the end of his term as Honorary Secretary Professor Arnstein was approached by Dr Bayley of BDH Ltd. He asked whether the Committee would be interested in accepting a donation for an award to be given in recognition of work leading to the development and application of a new reagent or method. The Committee accepted this generous offer and a triennial award available to Members of the Biochemical Society was instituted in 1969. The first winner, Professor B. H. Hartley, appropriately gave his lecture at the 50th meeting of the Society. A full list of awardees is given in Table 3.15.

Table 3.15. Recipients of BDH Award in Analytical Chemistry

1969	B. S. Hartley, F.R.S.
1972	J. E. Scott
1975	J. Landon
1978	H. R. Morris
1981	E. M. Southern, F.R.S.
1984	J. Chayen
1986	D. Robinson

3.10.7 Wellcome Trust Award for Research in Biochemistry related to Medicine

In 1977 the Wellcome Trust generously offered a biennial award of £500 for distinguished research leading to new advances in medical science. The award is intended to recognize the achievements of biochemists who are under the age of 45 at the time of the award. The research attracting the accolade has to have been carried out in the U.K. or Ireland during the seven years preceding the date of the nomination.

The recipients up to date have been D. J. H. Brock (1978), K. B. M. Reid (1981), R. Williamson (1984) and G. G. Brownlee (1986).

The awardees are expected to lecture at a meeting of the Society and to prepare a manuscript for publication in *Biochemical Society Transactions.*

3.11 Fellowships and Scholarships

It is only right and proper that the Society should honour outstanding achievements by awarding medals and lectureships but it is equally if not more important that it should actively support young promising research investigators. In achieving this aim with a series of Fellowships it has been generously supported by Industry.

3.11.1 Unilever (Short-Term) European Fellowships

Help in this direction was again forthcoming from Unilever, who in 1965 established two Fellowships of £1500 each to be awarded annually, one for a British biochemist to work in a laboratory in Continental Europe and one for a European national to work in a U.K. laboratory. The only condition attached to the award of the Fellowship was that any publication arising from work carried out during the period of the award should carry the statement that the author was a 'Unilever Fellow of the Biochemical Society'. Over the years this scheme has been extremely successful, particularly in providing the possibility of European biochemists to carry out research in the U.K.; recently, however, demand for these Fellowships has been falling off and reconsideration of the situation has resulted in Unilever suggesting that the original Fellowships be replaced by a number of short-term Fellowships of up to £1000 (air fare plus £25 per day subsistence) each to fund short-term research visits. The following activities fall within the scope of the amended scheme: (i) training in new techniques; (ii) use of special research facilities; (iii) initiation of scientific collaboration and (iv) support of such collaboration in the absence of other funding. Holders of such Fellowships are expected to submit a report suitable for publication in the *Bulletin*, within two months of completing their Fellowships.

3.11.2 Boehringer–Mannheim Travelling Fellowship

The Boehringer Corporation (London) p.l.c. have provided, in honour of Sir Hans Krebs, £500 per annum since 1967 for a number of travelling Fellowships to allow younger biochemists (not over the age of 30) to spend short periods in another laboratory or to attend summer schools which would allow them to obtain training or experience not available in the U.K.

3.11.3 Biochemical Society Junior Travelling Fellowships

In 1983 the Committee decided to match the Boehringer funds so that it was possible to support even more young biochemists. Awards from this fund were designated 'Biochemical Society Junior Travelling Fellowships'.

3.11.4 Krebs Memorial Scholarship

An appeal was launched in 1982 for funds to be used to celebrate the life and work of Sir Hans Krebs (Fig. 3.13) by instituting a post-graduate Scholarship in Biochemistry or an allied biomedical science in any British University. An extremely generous response by the biochemical fraternity quickly made the Scholarship a reality and the first award was made in 1984. The Scholarship is unique in that it is primarily intended to help those whose careers have been interrupted for non-academic reasons beyond their control and/or who are unlikely to qualify for an award from public funds. This clearly reflected Krebs's continued interest in such unfortunate persons of whom he himself was one in the 1930s. The Scholarship covers a personal maintenance grant at an appropriate level, all necessary fees and a Research Training Support Grant. The last-named is the sum paid by the Research Councils to a Department which has been awarded one of the Research Training Studentships. The Krebs Scholarship is awarded for one year in the first instance but can be renewed up to a maximum period of three years. It is awarded in alternate years. The first award, for the academic session 1984–1985, was made to Mrs Marvash Tavassoli, a second year Ph.D. student at the University of Sussex.

3.11.5 Schoolteacher Fellowships

Following a recent recommendation from the Professional and Educational Committee, the Committee of the Society decided in October 1983 to offer Schoolteacher Fellowships for one year as a trial period. They are tenable for one term and can be held in either a University or a Polytechnic. They are intended to enable practising schoolteachers to take part in research and update their knowledge of Biochemistry. Three such Fellowships, value £500 plus £500 for travel and expenses and £500 for research costs, were awarded in 1984. The experiment was considered successful and the Fellowships are being continued. One holder, Mr A. Myers, was invited to contribute to the Education Section of the FEBS Conference in 1986 in Berlin West.

3.12 Awards Committees

In order to co-ordinate the selection of candidates to be awarded the various lectures, medals and fellowships, Awards

Committees are set up annually each with the same nucleus of main Committee members but with additional member(s) representing the endowing organizations. The nucleus consists of the Chairman of the Society, the Honorary General Secretary and three senior ordinary members of the main Committee.

3.13 The Harden Conferences

Sir Arthur Harden, who did so much for the Society in its early stages, willed money to the Society so that in 1967 £4000 [£22,500] became available to the Society to be held in trust. The resulting income was to be used to help defray the cost of publishing the results of original research. At this time the Committee was considering the expansion of the Society's activities by initiating on a modest scale small, informal Conferences similar to the well known Gordon Conferences in the United States. It was a happy thought to acknowledge Harden's great contributions to the Society and to the *Biochemical Journal* by calling these Conferences 'The Harden Conferences'. However, the money from the Harden bequest could not be used to support these Conferences because they were designed for informal discussions with no publication contemplated. The Committee therefore allotted the Harden Bequest to the *Biochemical Journal* and provided money from general funds to support the Harden Conferences. In practice nothing has been disbursed and at the time of writing the Committee is applying to the Charity Commission for a scheme of variation of the objects of the Harden Legacy to allow use of the funds to assist biochemists to attend the Harden Conferences. The Biological Council was called in at an early stage in the discussions aimed at setting up the Harden Conferences so that their scope would not be constricted. Today this ecumenical approach survives in that seven sister societies, members of the Biological Council, are invited to send representatives to the Harden Conference Committee.

Fig. 3.21. Wye College, University of London: venue for the Harden Conferences.

The site chosen for the Harden Conferences was Wye College (Fig. 3.21), a residential college of the University of London located in Ashford, Kent. It was an inspired choice and provides a delightfully characteristic English setting for the Conferences, which began in 1969 and are now well established and highly successful. Two are held each year and they are organized and administered by the Harden Conference Committee, which consists of the Honorary Harden Conference Organizer, who is an *ex officio* member of the main Committee and who acts as Chairman, and six members of the main Committee of whom two are the two Honorary Secretaries. As indicated earlier, seven sister societies are invited to send representatives to meetings of the Committee. The pattern of the present Conferences is characterized by

formal lectures by invited speakers, Poster Sessions and a special lecture by an invited Harden Lecturer. At the moment the Society provides a limited number of bursaries (currently valued at £200) to assist younger members to attend the Conferences. Furthermore six free places are available by competition for each conference; the age limit for these is usually 27.

3.14 Honorary Membership

The institution of this honour was described in Chapter 2. However, by 1958 The Society had no surviving Honorary Members, the last election being that of Sir Charles Martin in 1957. Clearly this aspect of the Society's activities had slid into the background during the immediate post-War rebuilding period. In 1958 the rules of election were amended to "Honorary members shall pay no subscription but shall receive the *Journal* and have all the privileges of membership of the Society including the right to vote". *Transactions* now also comes with the *Journal.* The Society looked at the situation again in 1964 and accepted the recommendation of a sub-committee, in particular that the total number should not exceed 10 and that Honorary Membership should be confined to members of the Society who are of or near retiring age. In March 1984 the total number was increased to 15 and it was decided to donate a plaque to Honorary Members (Fig. 3.22). The names of members elected to the Honorary Membership are given in Table 3.16. The names of a number of distinguished overseas biochemists in this list gives considerable pleasure. A unique aspect of the 500th Meeting of the Society was the attendance of five Honorary Members (Fig. 3.23).

3.15 The Society's Nobel Laureates

Since their establishment Nobel Prizes for Chemistry and for Physiology or Medicine have been awarded with impressive

Table 3.16. Honorary Members of the Society elected between 1944 and 1986

1959	Sir Henry Dale, F.R.S.	1973	A. Neuberger, C.B.E., F.R.S.
	Sir Rudolph Peters, F.R.S.		J. H. Quastel, C.C., F.R.S.
1961	Sir Charles Harington, F.R.S.	1974	Dorothy M. Needham, F.R.S.
1965	Sir John Gaddum, F.R.S.	1979	T. S. Work
1966	R. A. Morton, F.R.S.		Sir Frank Young, F.R.S.
	Sir Charles Dodds, F.R.S.	1982	M. Dixon, F.R.S.
	Sir Robert Robinson, O.M., F.R.S.		E. F. Hartree
1967	Sir Hans Krebs, F.R.S.	1984	F. Sanger, O.M., C.H., F.R.S.
	F. Dickens, F.R.S.	1985	R. R. Porter, C.H., F.R.S.
1969	A. C. Chibnall, F.R.S.		T. W. Goodwin, C.B.E., F.R.S.
	C. R. M. J. de Duve	1986	S. V. Perry, F.R.S.
	W. T. J. Morgan, C.B.E., F.R.S.		R. H. S. Thompson, C.B.E., F.R.S.

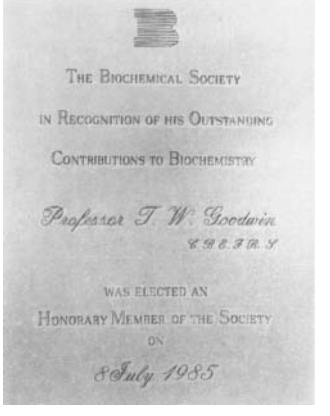

Fig. 3.22. The plaque presented by the Society to Honorary Members on their election.

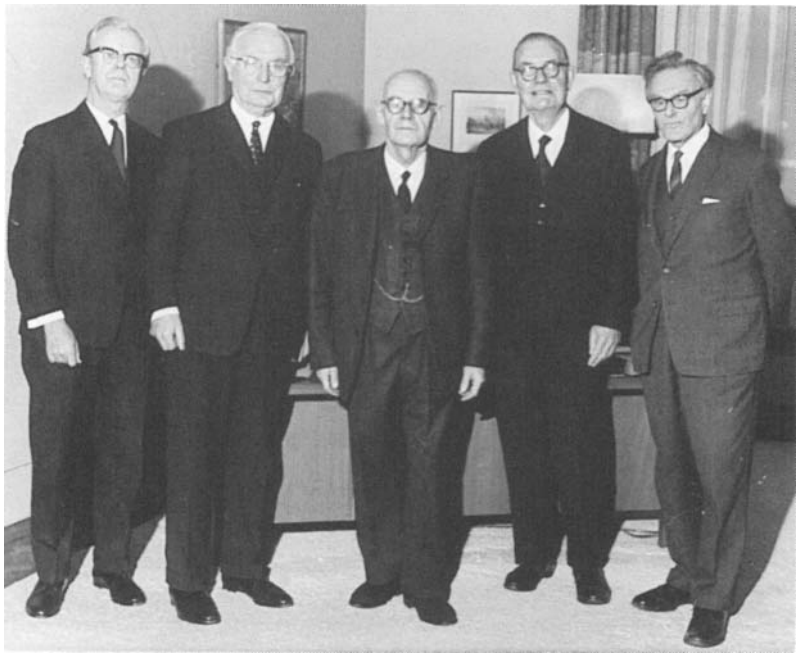

Fig. 3.23. Honorary Members present at the 500th Anniversary Meeting of the Society (left to right): Professor W. T. J. Morgan, C.B.E., F.R.S.; Professor R. A. Morton, F.R.S.; Sir Charles Harington, F.R.S.; Professor A. C. Chibnall, F.R.S.; Sir Hans Krebs, F.R.S.

regularity to biochemists, and many of the recipients have been members of the Society. The prizes received by members have been distributed almost equally between the two categories (Table 3.17). The list emphasizes not only the strength of British Biochemistry in the post-War period but also, when one realizes that a number of those listed in Table 3.17 are not British, the international character of the Society. A glance at the preceding Tables reveals that the Society's Awards

Table 3.17. Members of the Biochemical Society who have been awarded Nobel Prizes since 1945*

Details for 1911–1942 are given in Table 2.7.

	Chemistry		Physiology or Medicine
1947	Sir Robert Robinson, O.M., F.R.S.	1945	Sir Ernst Chain, F.R.S.
1952	A. J. P. Martin, C.B.E., F.R.S.	1953	Sir Hans Krebs, F.R.S.
	R. L. M. Synge, F.R.S.		F. A. Lipmann, Foreign Mem. R.S.
1957	Lord Todd of Trumpington, O.M., F.R.S.	1958	E. L. Tatum
		1959	S. Ochoa, Foreign Mem. R.S.
1958	F. Sanger, O.M., C.H., C.B.E., F.R.S.		A. Kornberg, Foreign Mem. R.S.
		1962	F. H. C. Crick, F.R.S.
1962	Sir John Kendrew, C.B.E., F.R.S.	1963	Sir Alan Hodgkin, O.M., F.R.S.
1970	L. F. Leloir, Foreign Mem. R.S.	1964	F. Lynen, Foreign Mem. R.S.
1972	S. Moore	1970	U. von Euler
	W. H. Stein	1972	R. R. Porter, C.H., F.R.S.
1978	P. D. Mitchell, F.R.S.	1974	C. de Duve
1980	F. Sanger, O.M., C.H., C.B.E., F.R.S.	1984	D. Milstein, F.R.S.

*A. I. Virtanen (1945), C. F. Cori (1947), A. W. K. Tiselius (1948) and M. F. Perutz (1962) were not members of the Society when they were awarded their Nobel Prizes.

Committee can congratulate themselves in choosing in advance so many future Nobel Laureates for one of the Society's accolades.

One outstanding achievement in this sphere which must be singled out is the award of two Nobel prizes to Dr F. Sanger (Fig. 3.24), in 1958 for his work on the structure of proteins and in 1980 for his work on the structure of nucleic acids. The Society must be proud that most of his protein work was published in the *Biochemical Journal*, but sad that none of his nucleic acid papers appeared there. However, one of the first reviews of this work was contributed to the *Biochemical Society Symposium* No. 30.

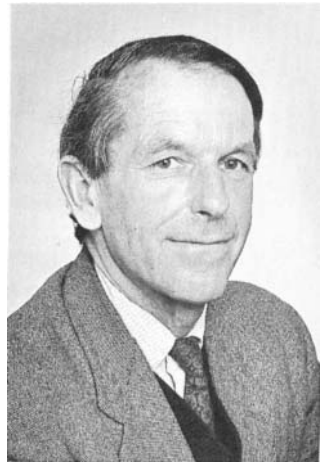

Fig. 3.24. Dr F. Sanger, O.M., C.H., C.B.E., F.R.S. Double Nobel Laureate. Honorary Member, 1984.

3.16 A Royal Charter — To Be or Not To Be?

Early in 1979 the Professional and Educational Sub-Committee (PESC) considered together with the Executive Secretary whether or not the Society should petition for a Royal Charter. The question arose mainly as the result of suggestions that in order to practise in the European Economic Community, biochemists would need some professional accolade such as that provided by the then Royal Institute of Chemistry (now amalgamated with the Chemical Society into the Royal Society of Chemistry). Discussion points raised included (a) the possibility that a Charter would be incompatible with the declared aims of the Society, (b) the Society's responsibility to overseas members, (c) the need to set up an examining body of professional status and (d) the cost of the exercise — probably more than £10,000.

After a great deal of investigation, particularly by the Executive Secretary, and discussion PESC decided in June 1982 that there was no need at present to pursue the possibility of a Royal Charter and this was accepted by the Committee. There is no doubt that in the circumstances prevailing at the time this was a correct and sensible decision, but it did leave the then Executive Secretary rather disappointed that, on the eve of his retirement, he had not achieved a decision which he felt would have moved the Society forwards professionally.

3.17 The Chemical Society Library

The collaboration between the Biochemical Society and the Library of the Chemical Society in the early stages of the Society's development has been succinctly summarized by R. A. Morton, thus:

> "When the Biochemical Society was formed there was no early likelihood that it could have a permanent office or a library. Many members also belonged to the Chemical Society, the Library of which received support from the Chemical Council which

negotiated the method by which different societies subscribed to the upkeep of the library.

"The Biochemical Society was invited in 1919 to participate in a scheme whereby the members would be allowed to use the Library in Burlington House under almost exactly the same conditions as Fellows of the Chemical Society. Copies of the *Biochemical Journal* were presented to the Chemical Society and an annual donation made towards the Library. Until this time many requests for an exchange of the *Biochemical Journal* for that of another Society had been made but had not proved feasible. Exchanges now became possible and with the consent of the Library Committee (one member of the Biochemical Society serving on it) exchanges were made with journals that would be a new addition to the Library. A happy and fruitful system of co-operation grew up.

"The Society's subscription was initially £10 [£140] per annum and for some years it remained at that level. Soon after the 1939–1945 War expenditure on books and journals began to rise phenomenally and the Society agreed to take a share in the maintenance of the Library. By 1955 this share slightly exceeded £300 [£2400] and by 1962 it was over £900 [£6200].

"A new basis of assessment was decided upon in 1963. The net maintenance costs of the Library were to be shared on the basis of the membership of the contributing societies with an allowance for overlap which had been calculated in 1961. Until that time the assessment has been calculated on the previous year's costs and not on the current year's costs. This meant that there was always a deficit which had been met by the Chemical Council but whose funds for this purpose were now running out. In 1964 the Society's contribution was £1,080 [£6900] and for the financial year ending December 1968 it was £1,454 [£8100]."

During the last twenty years proposals have periodically arisen in the main Committee that this arrangement need not continue. The changes in the pattern of scientific publications and the increased ease of communication, combined with the small use members make of the Chemical Society Library, have been the main reasons for the suggestion that we withdraw our subscription. This has not happened yet and the *Bulletin* frequently reminds members of the service provided by the Library. The level of our present annual subscription (£1750 in 1984–1985), however, has in no way kept up with inflation since 1968 and obviously reflects a decreased commitment to this particular enterprise, although the Society still has a representative on the Library Committee.

3.18 Archives and the Science Museum

Rather slowly over the past two decades or so biochemists, who are pre-eminently scientists of the present and future, have come to realize that they should look to the origins of their subject. Apparatus or laboratory note-books of the

pioneers should not be thrown on the scrap-heap but collected, catalogued and made available for study by future generations of biochemists. The first positive step came when Dr G. B. Ansell was appointed the first Honorary Archivist: on becoming Chairman of the Publications Board Ansell was replaced by Professor G. R. Barker and great progress has been made, including the production of audio and visual tapes of the 'grand old men' of Biochemistry. Some of these, in edited versions, may soon be available on loan to members of the Society.

Many historic pieces of apparatus were being donated to the Society by University Departments and the headquarters at Warwick Court was obviously an unsuitable place for their permanent exhibition. By 1979 the Society had arranged with the Science Museum to establish the 'Biochemical Society Collection' as part of the Wellcome Historical Medical Exhibition to be permanently mounted in the Science Museum. Under this arrangement the historical items in the Society's possession would become the property of the Science Museum although the Society retained full rights of access and exhibition. The early display had not been very satisfactory but a small special exhibition "Sir Hans Krebs (1900–1981). The Discovery of Metabolic Cycles in Biochemistry" was successfully mounted for six months from 1 June 1984. Aspects of his life were illustrated by original archives, photographs, his Nobel Prize and other awards. The apparatus and notebooks concerned with his elucidation of the tricarboxylic acid (Krebs) cycle together with explanatory diagrams helped to emphasize the crucial nature of the discovery to non-scientists. The opening of the exhibition was marked by a lecture by Sir Hans Kornberg (one of Krebs's students) on "The Tricarboxylic Acid Cycle: A Half Century's Retrospect" (Fig. 3.25).

Since then progress has been rapid and it was possible for the Committee to announce in March 1985 that the Science Museum had agreed to house a permanent major biochemical exhibition from December 1986, provided the Society would underwrite a minimum sum. This the Society has done; it has also launched an appeal to Industry and to individuals in an attempt to achieve a target of £250,000, which would allow an entire gallery to be set aside for biochemical exhibits. This target is still (1987) far from being reached. Money was provided by the Society to employ a part-time assistant (H. Kamminga) to provide biochemical expertise for the permanent Museum staff, and it was eventually possible to use the Society's contribution to mount a small exhibition on "Cells, Molecules and Life" to mark the 75th Anniversary of the Society. It was opened on Tuesday 15 December 1986 and should be an important step in developing a permanent section on Biochemistry. The opening was preceded by a lecture by Sir Hans Kornberg and was attended by over 600 senior

Fig. 3.25. Lady Krebs and Sir Hans Kornberg, F.R.S. on the occasion of the opening of the exhibition 'Sir Hans Krebs (1900–1981). The Discovery of Metabolic Cycles in Biochemistry' at the Science Museum in July 1984.

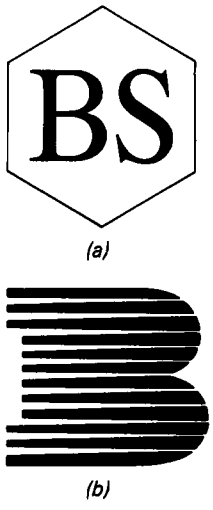

Fig. 3.26. The Society's logos: (*a*) old style; (*b*) new style.

secondary school pupils. It is described in a short article by H. Kamminga [6].

3.19 The Society's Logo

When the Society decided in 1976 to brush up its image it appointed Dr G. A. Snow as a Promotions Organizer, particularly to explore the ways of promoting the Society's publications and to publicize the Society's activities in general. This aspect of the Society's activities will be considered later but arising out of Dr Snow's appointment was his view that the Society's then current symbol, a hexagon surrounding the letters BS (Fig. 3.26*a*), was neither memorable nor particularly appropriate and that a new one was urgently needed. Incidentally it also conflicted with the logo of British Drug Houses. A competition was arranged and members were invited to submit designs for a Society 'logo'. Nearly 100 entries were received and although prizes were awarded, no design was considered suitable, because none exhibited the essential attributes of simplicity and easy recognition. A professional designer was appointed to look into the problem and it emerged that any attempt to symbolize Biochemistry was impracticable and that the two letters BS were difficult to incorporate into an effective design. So it was decided to concentrate on the single letter B and the design eventually chosen (Fig. 3.26*b*) was simple, easy to recognize and suitable for reproduction in a range of sizes. The diminishing white stripes across the face of the letter are intended to give the effect of speedy movement, emphasizing the continuing rapid advance of Biochemistry. As Dr Snow noted "they can also be read as stylized peaks in a chromatogram trace".

This logo now appears on all the Society's official Communications and literature and is apparently satisfactory for this purpose. It remains for individual readers to decide whether or not it is more memorable and less instantly forgettable than the symbol it replaced.

A special logo to celebrate the 75th Anniversary has been designed and appears on the title page of this book.

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