

SECTION B

BRISTOL UNIVERSITY

B.1-B.151

B.1-B.76

PHYSICS DEPARTMENT

B.1 -B.41

Administration

B.42-B.56

Research

B.57-B.76

Teaching

B.77-B.151

UNIVERSITY

B.77 -B.89

General correspondence and papers

B.90 -B.117

Committees

B.118-B.146

Societies and Organisations

B.147-B.151

Tyndall Memorial Lectures

PHYSICS DEPARTMENT

Administration

B.1 -B.15	General correspondence and papers
B.16-B.24	Steering Committee
B.25-B.28	Staff meetings
B.29-B.41	Personnel

General correspondence and papers 1947, 1960-86

- B.1 1947, 1960-64. 1960 material is re visit to Physics Department of Professors G.S. Zhdanov and V.I. Iveronova, 10-11 March. With 2pp manuscript draft of Frank's welcoming remarks.
- B.2 1966-68. 1968 material is questionnaire from the Confederation of British Industry/Vice-Chancellors' Committee Working Party on Universities and Industrial Research, with Frank's replies.
- B.3 1969. Chiefly correspondence and papers re visit of A.W. Merrison, the new Vice-Chancellor of Bristol University, to the Physics Department 9 December.
- B.4 1970-72. Includes 1972 material re activities and aims of the Particle Physics Group.
- B.5 1972 October.
- B.6 1973. Contents of a folder inscribed "Departmental Notes": miscellaneous administrative information.
- B.7 1973, 1974. Includes 1973/74 and 1974/75 departmental budget estimates, and letter of 23 March 1973 to the Vice-Chancellor re staff discontent over the lack of computing facilities.
- B.8 1974 February. Physics Department "General Stores Catalogue and Ordering Instructions." Retained in original folder.

- B.9 1975. Includes material re "presentation to Dr. N. Thompson on his retirement", with 3pp typescript copy of Frank's tribute to Thompson given at the farewell ceremony, 22 July.
- B.10, B.11 1975. University Grants Committee Physical Sciences Subcommittee Regional Conference, Bristol, 1 May. Frank represented the Bristol University Physics Department.
- B.10 Papers and correspondence for preliminary meeting of university representatives "to agree on what issues they would like to raise", Bristol, 7 March.
- B.11 Papers for Regional Conference.
- B.12 1976. Chiefly material "For Presentation to A.F. Devonshire" on his retirement. Includes manuscript notes on Devonshire's career and 3pp typescript copy of Frank's tribute to Devonshire, given 2 July.
- B.13 1977, 1978. 1977 material is chiefly re 50th anniversary of the official opening of the H.H. Wills Physics Laboratory. Includes 14pp manuscript copy of Frank's "reminiscences" of the laboratory from 1946, delivered 11 July.
- B.14 1985, 1986.
- B.15 Nd. Includes "Of responsibility and the delegation of duties [of a head of department]", 3pp manuscript (by Frank); "University places for students of physics" by N. Thompson, 10pp duplicated typescript plus 1p graphs; "The Growing Wastage of University Physics Students" by R.G. Chambers, 8pp duplicated typescript; letter from A. Keller [?1973] re history of polymer physics group.

Steering Committee

1964-76

B.16-B.24 Papers for committee meetings.

9 folders.

B.16	1964, 1965	B.21	1971, 1972
B.17	1966	B.22	1973
B.18	1967, 1968	B.23	1974
B.19	1969	B.24	1975, 1976
B.20	1970		

Staff meetings

1968-75

B.25-B.28 Papers for staff meetings.

4 folders.

B.25	1968-71	B.27	1973
B.26	1972	B.28	1974, 1975

Personnel

1956-76

A chronological sequence of papers and correspondence re staff appointments, promotions, etc.

13 folders.

B.29	1956, 1958	B.36	1969 (4)
B.30	1963, 1964	B.37	1969 (5)
B.31	1965-67	B.38	1970
B.32	1968	B.39	1971
B.33	1969 (1)	B.40	1972-74
B.34	1969 (2)	B.41	1975, 1976, nd.
B.35	1969 (3)		

Research

B.42-B.52 Funding
B.53-B.56 Colloquia and Schools

Funding

1954-78

The material chiefly relates to the funding of research in the Physics Department by the Science Research Council and to the financial support of the Department's Solid State Physics Fund, principally by De Beers.

At B.52 is a report on a consultancy carried out by the Department for the Ministry of Supply.

- B.42-B.47 Correspondence and papers re Science Research Council (SRC) funding of research.
- B.42 1968, 1969. Includes material re SRC support for polymer research.
- B.43 1970. Includes enquiries from universities seeking likely candidates for SRC studentships, and related correspondence with B.H. Flowers, SRC chairman, re Cooperative Awards in Pure Science (CAPS).
- B.44 1971. Includes correspondence with C.E.H. Bawn (Polymer Committee) re SRC support for polymer research.
- B.45 1972. Includes correspondence re visit of SRC Physics Committee to Bristol University, February, with copy of their report.
- B.46 1973. Includes correspondence with Flowers re postdoctoral fellowships and CAPS, and photocopied manuscript proposal from G.P. Tonkin for "A Gravimeter Development", 17 September.
- B.47 1974, 1975. 1975 correspondence is chiefly re proposal for exploratory research on poly-SN.

B.48-B.51 Correspondence and papers re Solid State Physics Fund.

Frank took over responsibility for this departmental fund from M.H.L. Pryce in 1964. It received contributions principally from De Beers' subsidiary Industrial Distributors (Sales) Ltd. (later De Beers Industrial Diamond Division Ltd.) for research into the physical properties of diamond.

The material consists chiefly of covering letters from De Beers accompanying payment of funds, and correspondence to the university authorities authorising payments from the fund. The covering letters from De Beers to Pryce and his successor, Frank, also refer to the simultaneous payment of consultancy and Diamond Research Committee fees. Material relating to Frank's work as a consultant and committee member may be found at G.24-G.27 and G.56-G.75 respectively.

B.48 General correspondence re administration of the fund, various dates, 1954-75.

B.49, B.50 Correspondence re payments to the fund, 1962-78.

2 folders.

B.49 1962-67, 1971

B.50 1974-78

B.51 Correspondence re expenditure from the fund, 1961-67.

B.52 "Report on Extra-Mural work carried out in the Department of Physics, University of Bristol, for the Ministry of Supply ... February to July, 1954." With Frank's manuscript notes headed "Cinnabar HgS".

Colloquia and Schools

1946-78

B.53 Summer School on the quantum theory of crystalline solids with particular reference to semi-conductors, 1946.

Duplicated typescript outline of the course prepared for "other members of the [Telecommunications Research] Establishment who ... could not attend". With miscellaneous manuscript notes and graphs found with it.

- B.54 Departmental colloquia, 1948-50.
- Invitations to give colloquia and correspondence arising. Those agreeing include G.I. Finch, H.A. Jahn, A.C.B. (later Sir Bernard) Lovell (1948), G.V. Raynor (1949) and A.F. Brown (1950).
- ICI-Bristol University Theoretical Physics Discussion on Crystal Growth, 18 February 1948.
- Correspondence re arrangements.
- B.55 Summer School on the Theory of Crystal Growth, 19-24 September 1949. Frank gave three lectures, "A general account of the growth of crystal", "The geometry of dislocations" and "The role of dislocations in crystal growth".
- Correspondence re arrangements; notice; lecture notes.
- Letter from H.A. Fairbank re colloquium on "Second sound in liquid helium II", 10 April 1954.
- B.56 Vacation School on Dislocations in Metals and Inorganic Crystals, 24-29 March 1958. Frank lectured on "The theory of dislocation networks", "Dislocations and diffusion processes" and "The theory of etching processes".
- Programme only.
- Mott School on Crystal Growth, 6-10 April 1970. Frank welcomed the School and spoke on "Theories of crystal growth mechanisms".
- Programme; lecture syllabuses.
- Notices for Physics Department colloquia, 1977, 1978 and nd.

Teaching

B.57-B.67	Undergraduate
B.68-B.72	Postgraduate
B.73-B.76	Miscellaneous

Undergraduate

- B.57, B.58 Syllabuses, lecture timetables, course outlines and course notes for undergraduate teaching.
- | | | | |
|------|---------------|------|---------|
| B.57 | 1950, 1965-69 | B.58 | 1974-76 |
|------|---------------|------|---------|
- B.59 Syllabus for stage III Special Honours Lectures on Solid State Physics, 1955-56. With manuscript notes for lectures.
- B.60 B.Sc. examination papers, 1953, 1955, 1956.
- B.61 Exercise book, used 1960-67, containing Frank's manuscript notes on undergraduates and their work.
- B.62 Physics problem sheets, 1971-72 and nd.
- B.63, B.64 Material re stage III physics courses 1973-74. Chiefly Frank's manuscript notes and questions on geophysics.
- 2 folders.
- B.65 "Stage III Projects 1977-78". Contents of folder so inscribed.
- B.66 Miscellaneous correspondence and papers re undergraduate courses, various dates 1949-72.
- B.67 Duplicated typescript copies of 16 lectures on geophysics, nd.

Postgraduate

- B.68 Correspondence and notes re postgraduates, various dates 1949-74 and nd.
- B.69-B.71 M.Sc. course in Physics of Materials.
This course was initiated by Frank.
- B.69 Material found in folder with attached note from N. Thompson inscribed "This folder contains papers relating to the M.Sc. course including the detailed exam results, and the correspondence with [A.J.] Kennedy." Kennedy was external examiner for the newly established course 1965-66.
- B.70 Papers re course 1969-71.
- B.71 Papers re course 1975-76, nd.
- B.72 Miscellaneous papers and correspondence re M.Sc. courses.

Miscellaneous

- B.73 "Regular and Irregular Motion", photocopy of manuscript text of "An informal series of talks by M.V. Berry", 1976.
- B.74 "An Introduction to Algebraic Topology", typescript notes of lectures given by B.R. Pollard, 1976-77.
- B.75 Student essays.
- B.76 "Physics since 1910" syllabus, 1961; "Introduction" by Frank beginning "The extension by flow of polymer chain molecules ...", 6pp photocopied manuscript; "Stress functions: a mechanical analogue", Project Assessment by P. Gosshy, 12pp photocopied manuscript; etc.

UNIVERSITY**General correspondence and papers**

- B.77 1956, 1963, 1964. 1963 letter expresses the wish of the Deans of the Faculties (including Frank) to honour Sir Alfred Pugsley for his services as Acting Vice-Chancellor.
- B.78 1965, 1966.
- B.79, B.80 1968. Correspondence and papers re presentations for honorary degrees, 9 July, at which Frank was a public orator. Includes copies of Frank's orations.
- 2 folders.
- B.81 1969 February. Chiefly material re Bristol University Peace Group forum "What Research? And What For?" at which Frank spoke on behalf of the Vice-Chancellor. With 7pp manuscript draft of Frank's contribution.
- B.82 1969. Includes draft of Frank's "Address for Senate, 16th June 1969, on the retirement of C.F. Powell".
- B.83 1970.
- B.84 1971. Includes Frank's letter of 31 December suggesting candidates for honorary degrees.
- B.85 1972.
- B.86 1973, 1974. Chiefly material re visit of University Grants Committee (UGC), 27 November 1974.

- B.87 1975, 1976. 1976 material is re Interim Report of the Joint Working Party of the Committee of Vice-Chancellors and Principals and the UGC on Tuition Fees. (Frank received the material as a member of Senate). With 3pp manuscript draft letter to the Vice-Chancellor on "Fees".
- B.88 1976, 1977. Correspondence and papers re "Presentation of Sir Alan Hodgkin for the Degree of D.Sc.". Frank was public orator. Includes draft of Frank's oration, and letter of thanks from Hodgkin.
- B.89 1979-82, 1984, nd. Includes *University Newsletter* 12 June 1980 with letter from Frank re military research, and correspondence arising.

Committees

Arts Lectures Committee 1976-87

This committee arranged series of lectures on the arts. Frank was a member of the committee for the period covered by the material.

B.90-B.93 Papers for committee meetings and brief related correspondence. Includes copies of Frank's introductions to Arts Lectures, 17 February and 9 November 1976.

4 folders.

B.90	1976-79	B.92	1983-85
B.91	1980-82	B.93	1986, 1987

Board of Extra-Mural Studies 1965-67

Frank was appointed to the Board 1 January 1965. See also H.67-H.71.

B.94-B.99 Papers for Board meetings.

6 folders.

B.94	1965 January, May	B.97	1966 October
B.95	1965 November	B.98	1967 January, May
B.96	1966 January, May	B.99	1967 October

Committee on Departmental Organisation 1963-64

Frank chaired this committee, established in May 1963 "to consider the arrangements for consultation and discussion within Departments of the University". It reported the following May.

B.100 Copy of letter requesting information "regarding present practice" and views on general principles, Frank's manuscript notes on responses and manuscript draft of Committee Report etc.

Committee on Ordinances and Regulations for Higher Degrees 1966, 1967

Following a Government request that workers in industrial and government laboratories be given opportunities to gain higher degrees, Frank and A.R. Collar were asked by the committee to put forward ideas for liberalising the regulations surrounding the award of higher degrees.

Much of the material relates to Frank's suggestion that a "Mature Ph.D." degree be instituted to allow worthy candidates whose work did not merit a D.Sc. nevertheless to be awarded a doctorate.

B.101 Correspondence with university authorities, C.F. Powell and Collar, 1966.

B.102 Papers for committee meetings, including suggested amendments to university regulations.

Committee on Technical Staff 1975

B.103 One letter only, 29 January.

ICI Research Fellowships Committee 1975

B.104 Report on ICI postdoctoral fellowships scheme.

Joint Committee on Tutorial Classes 1965-68

This was a joint committee of representatives of the Department of Extra-Mural Studies, the Workers Educational Association and Local Education Authorities. Frank attended as a member of the Board of Extra-Mural Studies (B.94-B.99).

B.105-B.108 Papers for committee meetings, 1965-68.

4 folders.

B.105 1965

B.106 1966

B.107 1967 February, May

B.108 1967 November, 1968

Knowlson Trust Fund Committee

1963-67

This committee was appointed in April 1963 to allocate funds from the bequest of J.M. Knowlson, engineer, for travel grants to students and junior staff. Frank was a committee member from its establishment.

B.109-B.111 Papers for committee meetings and Frank's manuscript comments on reports provided by recipients of grants upon their return.

3 folders.

B.109 1963

B.111 1966, 1967

B.110 1964, 1965

Laboratory Assistants Committee

1954

B.112 Minutes of meeting, 3 November.

"Sub-Committee of Senate which was asked to make a report on the history of events which culminated in the sit-in [occupation of Senate House by students, December 1968] ... "

The sit-in occurred over the issue of reciprocal membership of the Bristol University Students' Union with students' unions at other institutions of further and higher education in the area. A number of students, feeling the university authorities were procrastinating, occupied Senate House.

The senate sub-committee, comprising Frank, C.F. Powell, P.J. Randle and W.D. Howarth, supported the actions of the Vice-Chancellor, A.R. Collar, in securing the eviction of the occupying students.

B.113, B.114 Material re the sit-in, chiefly statements by the sit-in "Action Committee" (and sympathisers) and the university authorities. Also includes typescript draft and final copy of the sub-committee's report, 11 December, and typescript draft and final copy of "Letter to all members of the University" drafted by the sub-committee for the Vice-Chancellor, 9 January 1969.

2 folders.

B.115 Background papers on reciprocal membership issue.

B.116 News-sheets produced by the Informal Information Office established in the Physics Department, December 1968, February-June 1969.

B.117 Miscellaneous material.

Societies and Organisations

An alphabetical sequence of other university bodies.

Association of Alumni

1977-84

Frank was invited to become Honorary President for the 1977-78 session and was re-elected several times thereafter. As President he also served on the Joint Executive Committee of Convocation and the Association of Alumni.

B.118 Correspondence, chiefly re Presidency, 1977-79, 1982.

B.119, B.120 Papers for meetings of Joint Executive Committee of Convocation and the Association of Alumni.

2 folders.

B.119 1978-80

B.120 1981-84

Association of University Teachers

1973, 1982

B.121 Miscellaneous material.

Bristol Scientific Club

1972-86

Frank was a Past President of the Club.

B.122 Correspondence and papers, including membership lists.

Colston Research Society

1966-86

Frank's connection with the Colston Research Society for the promotion of research in the University of Bristol dates from 1948, when he attended the First Colston Symposium on Cosmic Radiation, organised by N.F. (later Sir Nevill) Mott (see H.2).

In 1966 Frank was invited to sit on the Society's Research Fund Committee which administered a grant from the Society to assist, chiefly, in the publication of research work. Frank was a member of the Council of the Society from 1974, being re-elected in 1978, 1980 and 1984.

In the mid-1970s Frank was associated with two Colston Symposia, as organiser in 1974 and as a chairman in 1976.

- B.123 Colston Research Fund Committee
Correspondence and papers for committee meetings, 1966, 1967.
- B.124 Colston Symposium on The Structure of Bio-polymers, 1-3 April 1974. Frank helped organise the symposium.
Correspondence and papers, 1972, re preliminary organisation. Includes invitation to L.C. Pauling.
- B.125 Colston Symposium on Remote Sensing of the Terrestrial Environment, 5-9 April 1976. Frank was a chairman.
Correspondence and papers, 1974, 1976.
- B.126-B.131 Colston Research Society Council
Papers for Council meetings and AGMs.
6 folders.
- | | | | |
|-------|------------|-------|------------|
| B.126 | 1975, 1976 | B.129 | 1981, 1982 |
| B.127 | 1977, 1978 | B.130 | 1983, 1984 |
| B.128 | 1979, 1980 | B.131 | 1985, 1986 |
- Department of Spanish 1963
- B.132 Brief correspondence only.
- Emeritus Professors' Dining Club 1977-84
- B.133 Correspondence and papers. Includes invitation, 7 October 1983, to Frank to chair the 1983-84 session (accepted).
- Faculty of Science 1963-75, nd.
Frank was Dean of the Faculty of Science 1963.
- B.134 Miscellaneous papers.

Information Office 1973-83

B.135 Correspondence. Includes Frank's note on P.A.M. Dirac compiled for the Information Office on the occasion of Dirac's appointment to the Order of Merit, 1973.

Library 1975-78, nd.

B.136 Correspondence.

Mac Innes Club 1976, 1979

B.137 Papers re meetings.

School for Advanced Urban Studies 1973

B.138 Papers re constitution of the School, with Frank's notes and copy of letter to Vice-Chancellor, 14 March, "Observations on the Constitution of the School for Advanced Urban Studies".

Senior Common Room (SCR) 1965-68, 1976

Frank was chairman of the SCR committee 1966-68, member of the Art committee 1965-67 and convenor of the Dining subcommittee 1967-68.

B.139-B.145 Correspondence and papers.

7 folders.

B.139	1965	B.143	1967 Nov, Dec
B.140	1966	B.144	1968 Jan-May
B.141	1967 Jan-May	B.145	1968 June-Dec, 1976
B.142	1967 June-Oct		

University of Bristol Physical Society 1966-78

B.146 Correspondence and papers. See also B.49 and B.51.

Includes cutting from Bristol paper showing Frank, M.H.L. Pryce, A.M. Tyndall and C.F. Powell at Physical Society dinner c.1954-61.

Tyndall Memorial Lectures

Following his appointment as Director of the H.H. Wills Physics Laboratory in 1969, Frank and his wife endowed a biennial lecture on the physical sciences to commemorate A.M. Tyndall, Professor of Physics at the University 1919-1948. The first was delivered by Sir Bernard Lovell.

- B.147 Correspondence re endowment of Tyndall Memorial Lectures, 1969.
- B.148 Correspondence, 1970, re Lovell's Lecture on "The Astronomer's Universe" 3 December, and Dinner Party following. With typescript draft of Frank's toast to the memory of Tyndall.
- B.149 Correspondence, 1972, re second Lecture, given by Sir George Porter on "Chemistry in Microtime", 7 December.
- B.150 Correspondence, 1974, re third Lecture, given by R.V. Jones on "The Other Way Round", 9 December.
- B.151 Brief correspondence, 1976, 1978, 1980, re later Tyndall Lecturers.