

Twenty Fourth

London International Youth Science Fortnight

1982

London International Youth Science Fortnight

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Originator

Philip S. Green, MBE

Director

George McGowan

The aim of the Science Fortnight is to give a deeper insight into science and its applications for the benefit of mankind and to develop a greater understanding between young people of all nations.

London International Youth Science Fortnight 1959-1982

The concept of the London International Youth Science Fortnight was that of its originator Philip S. Green, MBE who based his ideas on the belief that "... the strongest friendships grow from like interests." At the time he was Director of the international youth exchange organisation, Worldfriends International Service for Youth (subsequently the Council for International Contact). Early Fortnights were jointly organised by Worldfriends in conjunction with the British Association for the Advancement of Science, an informal link which has remained throughout the years.

The early Fortnights bore little resemblance to the meetings taking place in the 1980's. The project was limited to half a dozen London Schools which were linked with their counterparts in six European countries. The participants who came to London lived in the homes of their London partners and travelled into the centre of London for the main programme events which took place firstly at the Royal Geographic Society and from 1962 at the Institution of Electrical Engineers (which has been the "home base" of the Science Fortnight for twenty years).

After the first couple of Fortnights interest developed in many areas of Britain and in 1961 participants were housed in Halls of Residence of London University as well as in London homes. Overseas recruitment moved outwards from Europe to embrace more distant countries. By 1965 the format of participants living in London homes was eclipsed by the demand for residential places. This change enabled the programme to be extended to encompass evening events and less structured and formalised discussions.

Over the years the Fortnight remained a London based meeting and became established as the largest international meeting annually organised for young people in Britain, attracting each year some twenty five to thirty nationalities and about three hundred and fifty participants. In 1967 it was associated with a special International Youth Science Week within the concept of Expo '67 at Montreal to mark the Canadian Centennial; and in 1976 in conjunction with the Junior High School Science Symposium of the United States it co-ordinated international representation at the Bicentennial of American Science.

In recent years the programme of the Fortnight has increasingly been determined by a programme working group drawn from the highly skilled ranks of the Consultative Council which advised the organisers on content and representation, and in particular has included past participants and members of staff. By 1980 the working group was almost wholly made up of ex-participants and in addition to planning the programme assisted in the selection of staff from the participants of preceding Fortnights. Effectively the content of each year's programme became determined by scientists who had themselves experienced the Fortnight at first hand.

As it looks towards completing its first quarter century, the Science Fortnight has accepted an invitation to co-operate with associates in the Philippines in planning its first Asian joint project in 1984 and beyond that to continuing to play an important role in influencing the career choices and attitudes of more generations of scientists.

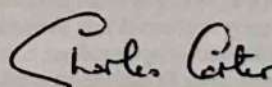
The participants of early Fortnights are now entering their middle years in a wide range of professions. Many keep in touch with the organisation and it is not unusual to record links which are more than ten years long (indeed one participant of the Third Fortnight in 1961 is still actively involved!). Amongst those who have maintained contact are airline pilots, doctors, dentists, engineers and nationally elected representatives. Apart from those there are scattered throughout the world many thousands of scientists whom it is hoped gained that deeper insight into science and its applications for the benefit of mankind combined with a greater tolerance and international understanding which the Fortnight aims to give all who are associated with it.

Greetings from
The British Association
for the Advancement of Science

I am delighted to be able to welcome you to the London International Youth Science Fortnight. It is a unique occasion, and one I am sure you will enjoy.

There is no shortage of problems in the world. And many we can solve only through real international cooperation. Within Science, people from all over the world are able to work together in pursuit of common goals. So let science be our guide.

During this Fortnight, young people from all parts of the world will come to London to share their enthusiasm for science. I hope you will not only find your enthusiasm enhanced, but will learn from the contacts across nations and cultures which the Fortnight provides.



Sir Charles Carter
President
British Association for the
Advancement of Science

Consultative Council of the London International Youth Science Fortnight

B.G. Atwood, BSc
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*Members of the working group which
plans the Science Fortnight pro-
gramme.

An Introduction to the 1982 Science Fortnight

For participants the two weeks lying ahead represent the unknown and no matter how much effort is put into describing the content and impact of the Science Fortnight no words seem to convey the magnetic effect of living together with one's peers in an international community. Experience has shown it to be a period of mental stimulation, perhaps even of an awareness for the first time of mental frustration.

It has been my lot to write a foreword to the Fortnight on too many occasions for originality to come readily. As stimulus I looked back at the foreword produced in 1963, which said:

"... we hope you will do your utmost to ensure that these two weeks are but a beginning of a more worthwhile and lasting basis of understanding and respect."

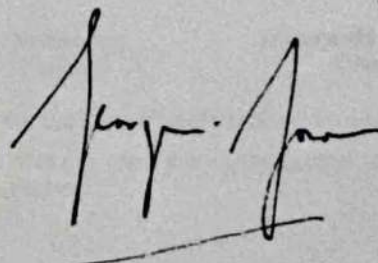
Today these words seem oddly patronising and very dated. Ten years later in 1972, a more philosophic foreword noted:

"At most times in history a cross roads can be detected and with the benefit of hindsight it is possible to decide that mankind took a step away from the brink of catastrophe."

The words seem less dated and the thought expressed in them lies a little less easily than we might wish.

In 1982 these two thoughts from the past can offer a background to your meeting. I have learned that it really is your meeting and that each Fortnight can bring a fresh viewpoint to a seemingly perennial dilemma, posed by the Fortnight's Founder Patron, HRH The Duke of Edinburgh some years ago

"... for what use is Science if mankind does not survive?"



George McGowan
Director
London International Youth Science Fortnight

DAILY PROGRAMME

Wednesday 28 July	20 00	Arrivals Orientation and Briefing in Halls of Residence
Thursday 29 July	11 00 14 30 20 00	*Opening Ceremony *Lecture/Demonstration: " <i>Colour is Fun</i> " Welcome Dance at the Empire Rooms
Friday 30 July	20 00	Half-day visits to industrial and research establishments and to university departments Students' Topics
Saturday 31 July	14 15	Changing the Guard at Buckingham Palace Optional tour of London Optional theatre visits
Sunday 1 August	20 00	Optional excursion to Stonehenge and Salisbury Students' Topics
Monday 2 August	10 00 14 15 20 00	Workshops *Question Time : With Members of Parliament Topics for Tonight
Tuesday 3 August	10 00 14 15	*Lecture: " <i>Test Tube Babies - The Clinical Dilemma</i> " *Lecture: " <i>The Information Explosion - A Blessing or a Curse?</i> "
Wednesday 4 August	20 00	Full Day Visit to Science Museums *Lecture: " <i>Physics and Music</i> "

Thursday 5 August	20 00	Day Visits to Research & Industrial Establishments Student Topics
Friday 6 August	10 00 14 15 20 00	University Lectures *Lecture: " <i>Rubik's Cube and Other Mathematical Recreations</i> " International Evening at Manning Hall University of London Union
Saturday 7 August	10 00	*Lecture: " <i>Darwin Now</i> "
Sunday 8 August	20 00 20 00	Optional Excursion to Stratford-upon-Avon Feature Film " <i>2001 - a Space Odyssey</i> " Student Topics
Monday 9 August	10 00 14 15	*Lecture: " <i>Tools for Living</i> " *Participants' Forum I
Tuesday 10 August	10 00 15 00 20 00	*Participants' Forum II Closing Address Farewell Dance at the Empire Rooms
Wednesday 11 August		Departures

*at the Institution of Electrical Engineers Savoy, Place, London WC2

With the exception of the Lecture on 4 August events taking place after 18 00 are optional

Speakers at the Institution of Electrical Engineers

Thursday 29 July	11 00	Opening Ceremony Sir Charles Carter, FBA President, British Association for the Advancement of Science Richard Luce, MP
	14 30	Lecture/Demonstration: " <i>Colour is Fun</i> " Dr. A.W.S. Tarrant, BSc, PhD Senior Lecturer in Engineering University of Surrey
Monday 2 August	14 15	Question time with Members of Parliament Andrew Bowden, MBE, MP W.E. Garrett, MP
Tuesday 3 August	10 00	Lecture: " <i>Test Tube Babies - The Clinical Dilemma</i> " Professor I.L. Craft, FRCS, MRCOG Professor of Obstetrics and Gynaecology Medical School of the Royal Free Hospital
	14 15	Lecture: " <i>The Information Explosion - A Blessing or a Curse?</i> " Dr. A.M. Leakey, BSc(Eng), PhD, FCGI, DIC, FEng, FIEE Technical Director, GEC Telecommunications Ltd
Wednesday 4 August	20 00	Lecture/Demonstration: " <i>Physics and Music</i> " Dr. H.R. Allan, MA, PhD, FRAS Reader in Physics Imperial College of Science and Technology
Friday 6 August	14 15	Lecture: " <i>Rubik's Cube and Other Mathematical Recreations</i> " Dr. D. Singmaster, BA, MA PhD Senior Lecturer in Mathematics Polytechnic of the South Bank, London
Saturday 7 August	10 00	Lecture: " <i>Darwin Now</i> " Professor J. Maynard Smith, BA, BSc, FRS Professor of Biology University of Sussex
Monday 9 August	10 00	Lecture: " <i>Tools for Living</i> " H.S. Wolff, BSc Director, Bioengineering Division Medican Research Council's Clinical Research Centre
	14 15	Participants' Forum: I Theme " <i>For What Use is Science if Mankind Does Not Survive?</i> "
Tuesday 10 August	10 00	Participants' Forum: II (continuation)
	15 00	Closing Ceremony

Workshops

Participants are allocated to workshops in accordance with their expressed scientific interests. A summary of each workshop subject and details of meetings places are supplied individually.

Monday 2 August	10 00	Workshop A ✓ " <i>A Different Sort of Applied Maths</i> " G.W. Goodall, BSc, FRS
		Workshop B " <i>Computers Plus Robots Equals Unemployment?</i> " P. Redstone, M.A.
		Workshop C ✓ " <i>Nuclear Energy: Today's Power for Tomorrow's Generation</i> " H.A. Cole, CEng MIERE
		Workshop D ✓ " <i>The 3-Dimensional Atomic Structure of Biological Molecules - Determination & Analysis</i> " Dr. W.D. Mercer, BSc, PhD
		Workshop E ✓ " <i>Creating New Food Products</i> " Dr. D.P. Richardson, BSc, MSc, PhD
		Workshop F " <i>New Drugs from Plants</i> " Professor P.J. Hylands, B.Pharm, PhD, CChem, MRSC
		Workshop G " <i>Recent Concepts in the Treatment of Sports Injuries</i> " D.S. Muckle, MS, FRCS

University Lectures

Friday	10 00	Group 1 " <i>Modern Medicines - Are They Effective? Are They Safe?</i> " Professor D.R. Laurence, MD, FRCP Department of Clinical Pharmacology University College, London
		Group 2 " <i>Chemistry, Energy & Pollution in the Nuclear Age</i> " Dr. D.B. Hibbert, PhD, CChem, MRSC Department of Chemistry Bedford College, London
		Group 3 " <i>Journey to Halley's Comet</i> " Dr. A.D. Johnstone, BA, MSc, PhD Department of Physics & Astronomy University College, London

Half Day Visits to Research and Industrial Establishments and to University Departments

Friday, 30 July

British Airways, Computer Centre

- Chelsea College, London
Department of Pharmacy

- City University
Department of Aeronautical Engineering

- General Electric Co Ltd
Hirst Research Centre, Wembley

Institute of Cancer Research
Chester Beatty Research Institute

Imperial College of Science & Technology
Department of Chemical Engineering &
Chemical Technology

King's College, London
Department of Biophysics

- Queen Mary College, London
Department of Physics

The Royal Free Hospital

Royal Naval College, Greenwich
Department of Nuclear Science and
Technology

- J. Sainsbury plc
Laboratories

- St. Thomas' Hospital
Department of Clinical Chemistry

- University College London
Department of Electronic &
Electrical Engineering

- The Zoological Society of London
Institute of Zoology

Day Visits to Industrial and Research Establishments

Thursday, 5 August

- Atomic Energy Research Establishment,
Harwell

- British Petroleum Co Ltd
BP Research Centre, Sunbury on Thames

- Brunel University, Uxbridge
Computing Unit

- Central Electricity Generating Board
Dungeness 'A' Nuclear Power Station
Dungeness 400 kV Substation

- IBM United Kingdom, Ltd
Croydon

- Independent Broadcasting Authority
Crawley Court

Institute of Naval Medicine,
Alverstoke

London Hospital Medical College
Department of Forensic Medicine

- National Institute for Medical Research
Mill Hill

National Physical Laboratory
Teddington

Roche Products Ltd
Welwyn Garden City

- Royal Botanic Gardens
Kew

Royal Marsden Hospital
Sutton

Shell Research Ltd
Sittingbourne Research Centre

Standard Telecommunications Laboratories
Harlow

- SEGAS (South Eastern Gas)

Topics for Tonight

These informal discussions are open to any participant. The speaker introduces the topic outlines which is then discussed.

Monday
2 August

20 00 University of London Union, Malet Street, London WC1
"When is a Scientist not a Scientist?"
introduced by Roger Mulberge, BSc

20 00 University of London Union, Malet Street, London WC1
"The Communications Explosion"
introduced by John D. Needle

Social Programme

Thursday
29 July

20 00 Welcome Dance
Empire Rooms, Tottenham Court Road, London W1

Friday
6 August

20 00 International Evening
Manning Hall, University of London Union, Malet Street, London WC1

Tuesday
10 August

20 00 Farewell Dance
Empire Rooms, Tottenham Court Road, London W1

Tickets will be available for Promenade Concerts and Theatres on Saturday evenings.

Details of Sunday activities will be circulated during the Fortnight.

Residential Staff of the London International Youth Science Fortnight

	Astor College Charlotte Street London W1P 1LD	Ramsey Hall 20 Maple Street London W1P 5GB
Chief of Staff	Colin Hardwick	
Deputy to the Director		Roger Mulberge
Host	Miguel Forte	Richard O'Kennedy
Deputy Host	Audrey Mallinson	Deborah Vaughn
Special Duties	Gareth McKinley	Andrew Milne
Counsellors	Imelda M. Bennett Miguel Antonio Gomes	Philip Challis Jitesh Patel Ann Sudell John O'Dea

Acknowledgements

The Science Fortnight expresses grateful thanks to all who have given help in the organisation of the Twenty Fourth meeting, and in particular to

The Speakers, lecturers, chairmen and discussion group leaders, whose contributions of time and expertise is invaluable.

The Consultative Council for its advice and members of the Working Group for assistance with programme planning.

The Council and Staff of the Institution of Electrical Engineers for providing premises and facilities for lectures and meetings.

The many industrial companies, research establishments, university departments, museums etc who welcome participants for visits and lectures.

The British Association for the Advancement of Science, for advice on programme planning, through Miss Joan H. Dring.

The wardens, bursars and staff of the Halls of Residence who provide accommodation and meals; the University of London Union for use of premises

The United Kingdom local education authorities, schools and colleges who have met the whole or part of the fees of students from Britain.

Those who grant scholarships to make possible the participation of students from overseas, including the British Council, the United Kingdom National Commission for Unesco, Barclays Bank International Ltd, and many others.

The Science Fortnight particularly acknowledges with deep gratitude the magnificent contribution made to the preparation of the programme by Miss Betty Hyams.

Industrial, Commercial & Other Sponsors

Special thanks are due to the following who have helped to make possible the attendance of students from the United Kingdom:

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KEY TO MAP

- A Ramsey Hall
- B Astor College
- C University of London Union
- D Mary Ward Centre
- E Empire Rooms
- F Bloomsbury Centre Hotel
- G St Pancras Station
- H Euston Station
- I Euston Square Station
- J Warren Street Station
- K Goodge Street Station
- L Tottenham Ct Road Station
- M Russell Square Station



**The TWENTY FIFTH London International Youth Science Fortnight
will take place from 27 July to 10 August, 1983**

**The London International Youth Science Fortnight
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