

RUTHERFORD LABORATORY BULLETIN NO. 30

for the week commencing Monday, 8th May, 1961

VISITORS

✓ Mr. R. A. Mack of U.C.R.L., Berkeley, California, will visit Mr. F. H. Wells, Building R.12, Electronics Division, A.E.R.E., on 11th and 12th May, to discuss high energy physics instrumentation. Anyone wishing to see Mr. Mack should contact Mr. Wells on Ext. 2927. (See also "External Events" below).

VISITS ABROAD

✓ Dr. W. Galbraith of the Nuclear Physics Group and Dr. R. J. Griffiths of the P.L.A. Group will present papers on "A Solid-State Ionization Chamber" and "Spark Chambers" respectively, at the International Atomic Energy Agency Conference on Nuclear Electronics, to be held at Belgrade on 14th - 15th May. While abroad, Dr. Griffiths will also visit the accelerator groups at Saclay and Orsay, Paris, at Frascati, Rome, and at C.E.R.N., Geneva, for discussions on instrumentation and nuclear physics.

✓ Mr. J. J. Wilkins, Mr. A. G. Egginton and Mr. R. G. Bennett of the Nimrod Magnet Group will visit Saclay, Paris, on 15th May and C.E.R.N., Geneva, on 16th to 18th May, for discussions on machine operation and beam transport problems. Mr. J. H. Swain of the Engineering Design Group will accompany them to Saclay, to discuss associated engineering developments, particularly plunging mechanisms.

P. L. A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
8th - 12th May	Birmingham University	Measurement of Polarization (Double Scattering)

UNCLAIMED MAIL

Letters from Messrs. Renold Chains Ltd., Wythenshawe, Manchester, and Messrs. Twiflex Couplings Ltd., Twickenham, Middlesex, are awaiting collection from Mr. E. Newberry, Building R.1. Both enclose catalogues of couplings and are in reply to enquiries dated 24th April.

INTERNAL EVENTS

Mon. 8th May, 11 a.m., Conf. Rm., Building R.1.	Nimrod Lecture Series	Dr. A. Segar	"Decays of K- Particles"
Mon., 15th May, 11 a.m. Conf. Rm., Building R.1	Nimrod Lecture Series	Dr. T. H. R. Skyrme (A.E.R.E.)	"Decays of Hyperons"

EXTERNAL EVENTS

Mon., 8th May, 5.30 p.m. Savoy Place, London, W.C.2.	I.E.E. Electronics and Communications Section Meeting.		Three papers on Glow-Discharge Reference Tubes
Thurs., 11th May, 2.15., Cockcroft Hall, A.E.R.E.	Electronics Division Lecture (Outside fence)	R. A. Mack Esq., (U.C.R.L., Berkeley, California).	"Electronic Instrumentation for Experiments at Berkeley".
Thurs., 11th May, 7 p.m. Liverpool University.	Inst. Physics and Phys. Soc. Lecture.	Professor J. M. Cassels, F.R.S. (Liverpool Univ.)	"Fundamental Particles".

RUTHERFORD LABORATORY BULLETIN NO. 31

for the week commencing Monday, May 15th, 1961

BOARD MEETING

✓ The next meeting of the Governing Board of the National Institute will be held at the Laboratory on Wednesday, 24th May at 2.30 p.m.

VISITORS

✓ Professor K. G. Emeleus and Dr. A. R. Johnston of the Department of Physics, Queen's University, Belfast, will visit the Director on Friday, 19th May.

VISITS ABROAD

✓ Mr. M. Snowden, Bubble Chamber Group, and Mr. J. Burren, Theoretical Group, will visit C.E.R.N., Geneva, on 15th - 17th May for discussions on particle track - measuring machines.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:

<u>Date</u>	<u>Date</u>	<u>Experiment</u>
15th - 19th May	A.E.R.E. Harwell	Time of flight survey (A (p-d) B)

UNCLAIMED MAIL

The following letters are awaiting collection from Mr. E. Newberry, Building R.1:-

- (i) From Messrs. Browning Electric Co., Ltd., Upton Park, London, E.13., (in reply to letter dated 5th May, and enclosing brochures).
- (ii) From Messrs. Acton Bolt, Ltd., London, N.W.10 (enclosing price lists etc.).
- (iii) From Messrs. Danite Hard Metals Ltd., Doncaster, Yorks., (enclosing brochures and price lists).
- (iv) From Messrs. Vacu-Blast Ltd., Slough, Bucks., (in reply to letter dated 7th May, and enclosing catalogues).
- (v) From Messrs. Charles Richards and Son Ltd., Darlaston, Staffs., (enclosing catalogues).

EXTERNAL COURSES

- ✓ (a) The French National Institute of Nuclear Science and Technology are holding a series of five meetings, in English, on the Theory of Particle Accelerators, from June 12th to 16th inclusive, at Gif-sur-Yvette, Seine-et-Oise.
- (b) The Physics Department of the Battersea College of Technology, London, S.W.11., are holding courses of post-graduate standard on Radiation Protection and Radiological Protection, commencing in October, 1961, and leading to a Certificate or Diploma.

(Details of the above courses are given on the main Notice-Board, Building R.1.)

INTERNAL EVENTS

Wed., 17th May, 9.30 a.m., Conf. Room, Bldg. R.1.	Lecture	Dr. K. L. Brown (Stanford University, California, U.S.A.)	"Current Accelerator Work at Stanford".
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(Cont'd over)

INTERNAL EVENTS (Continued)

Wed., 17th May, 2 p.m., Conf. Room, Bldg. R.1.	P.L.A. Group Seminar	Mr. A. P. Banford	"A Superconducting P.L.A.: Its Feasi- bility and Ad- vantages".
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EXTERNAL EVENTS

Wed., 17th May, 2 p.m., Conf. Room, Bldg. 8.9, A.E.R.E.	Theoretical Physics Seminar	Mr. A. E. Glennie (A.W.R.E.) Aldermaston)	"BABEL - A Universal Compiler System".
Wed., 17th May, 4 p.m., 47 Belgrave Sq., London, S.W.1.	Inst. Physics and Phys. Soc. Lecture.	Mr. M. Zvegintzov (N.R.D.C.)	"Very Low Temperature Engineering".
Wed., 17th May, 4.15 p.m., Physics Dept., Univ. of Birmingham.	Gamma Ray Group Colloquia	Dr. N. A. Dyson Dr. V. Knapp	"The Electric Dipole Moment of Photons". "The Velocity of Light in a Mag- netic Field".

(Anyone wishing to attend the above meeting should contact B. E. Kingdon, Bldg. R.20)

Thurs., 18th May, 2.30 p.m., Physics Dept., University of Manchester	Nuclear Physics Seminar	Mr. G. C. Morrison (A.E.R.E.)	"Some Aspects of Lithium-Induced Nuclear Reactions".
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NEWS FROM U.S.A.

(i) The 30 BeV Alternating Gradient Synchrotron at the Brookhaven National Laboratory, New York, has recently been commissioned and is now being used in a programme of high energy experiments. An output current of 6×10^{10} protons per pulse has been achieved, with a pulse every 2.4 seconds at full power. The maximum energy attained is 34 BeV.

(ii) Scientists at U.C.R.L., Berkeley, California, claim to have discovered Element 103 by a bombardment process carried out in a heavy ion linear accelerator. The element is believed to have an atomic weight of 257 and a half-life of 8 seconds. It is proposed that it be named Lawrencium (chemical symbol LW), after Dr. E. O. Lawrence, inventor of the cyclotron and founder of the Laboratory.

B. E. Kingdon
Scientific Administration

15th May, 1961

RUTHERFORD LABORATORY BULLETIN NO. 32

for the week commencing Monday, 22nd May, 1961.

VISITORS

✓ Professor Vasily S. Emelyanov, Chairman of the State Committee of the Council of Ministers of the U.S.S.R. for the Utilisation of Atomic Energy, and a party of Russian scientists visited the Laboratory on Wednesday, 17th May.

VISITS ABROAD

✓ The Director, with Mr. L. B. Mullett, Mr. W. Walkinshaw and Dr. G.H. Stafford will visit Saclay, Paris, on 29th-31st May, to attend a meeting of the European Accelerator Study Group.

✓ Dr. M. A. R. Kemp of the Nimrod Nuclear Physics Group left for Brookhaven National Laboratory, New York, U.S.A., on 17th May, for a period of attachment of approximately one year.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
24th May (from 4 p.m.) - 26th May	King's College, London.	Elastic and Inelastic Proton Scattering with Scintillation Counters.

UNCLAIMED MAIL

The following letters are awaiting collection from Mr. E. Newberry, Building R.1:-

- (i) From Messrs. Murex Limited, Powder Metallurgy Division, Rainham, Essex, (in reply to enquiry dated 3rd May, from Building R.1, concerning Niobium).
- (ii) From Messrs. Metachemical Processes Limited, Crawley, Sussex, (in reply to enquiry dated 4th May, concerning electrochemical techniques, and enclosing catalogues).

EXHIBITION

An exhibition by Hunts (Oxford) Ltd., of General Office Equipment will be held from 10 a.m. till 4.30 p.m. on Wednesday, 24th May, in Rooms 48, 53 and 54, Building R.20.

INTERNAL EVENTS

Mon., 29th May, 11 a.m., Conf. Rm., Building R.1	Nimrod Lecture Series	Prof. J. Hamilton (University Coll., London).	"Dispersion Relations - I"
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EXTERNAL EVENTS

Tues., 23rd May, 5 p.m., University of Southampton	Physics Department Colloquium	Dr. D.E. Davies (University Coll. of North Staffs.)	"Surface Effects in Low Pressure Gas Discharges"
Wed., 24th May, 4.15 p.m., University of Birmingham	Physics Department Colloquium	Dr. M.F.A. Harrison (A.E.R.E., Harwell)	"Measurement of Ionisation Cross-sections of Ions"

(Anyone wishing to attend the above meeting should contact B. E. Kingdon, Building R.20).

EXTERNAL EVENTS (contd.) / ...

EXTERNAL EVENTS (contd.)

Wed., 24th May, 4.30 p.m., Cockcroft Hall, A.E.R.E.	Harwell Lecture	Sir John Cockcroft	"The Work of the CENTO Scientific Council"
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(Tickets obtainable from Mr. E. Newberry, Building R.1. The Lecture will be preceded at 4 p.m. by two related talks, given by Dr. M. L. Smith and Dr. J. Banks).

Wed., 24th May, 4.30 p.m., University of Liverpool	Physics Department Colloquium	Dr. R.A. Smith, (R.R.E., Malvern).	"Lasers and Masers"
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Thurs., 25th May, 2.30 p.m., University of Manchester	Physics Department Colloquium	Dr. N.W. Tanner (Clarendon Laboratory)	"Excitation of Collective Nuclei"
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30th May - 2nd June, inclusive, at Olympia, London: Radio and Electronic Component Show. (Tickets obtainable from B. E. Kingdon, Building R.20).

B. E. Kingdon
Scientific Administration

18th May, 1961.

MSG.

RUTHERFORD LABORATORY BULLETIN No. 33

for the week commencing Monday, 29th May, 1961

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
29th - 30th May	Mr. D. J. Warner (N.I.R.N.S.)	Time-of-Flight Tests
X 31st - 1st June	Clarendon Laboratory (Oxford)	Measurement of Capture Gamma-Rays
2nd June	Dr. C. J. Batty and Dr. R. J. Griffiths (N.I.R.N.S.)	Range of Protons in Silicon and Aluminium.

UNCLAIMED MAIL

The following letters are awaiting collection from Mr. E. Newberry, Building R.1:-

- (i) From Messrs. Laddercraft Ltd., Thornaby-on-Tees, Yorks.
(In reply to letter dated 14th May, and enclosing catalogue).
- (ii) From Joseph Sankey and Sons Ltd., Wolverhampton, Staffs.
(In reply to letter dated 16th May, re. steel sheet forwarded from English Electric Co. Ltd., Stafford).

VACANCIES AT C.E.R.N.

A further list of vacancies at C.E.R.N., Geneva, has been received; a large range of posts is covered, and details may be obtained from Mrs. E. Williams, Personnel Section, Room 51, Building R.20.

INTERNAL EVENTS

Mon., 29th May, 11 a.m. Conf. Room, Building R.1.	Nimrod Lecture Series	Professor J. Hamilton, (University Coll., London)	"Dispersion Relations - I"
X Wed., 31st May, 2 p.m. Conf. Room, Building R.1.	P.L.A. Group Seminar	Dr. J. P. Scanlon (A.E.R.E.)	"Review of Time- of-Flight Work on the Harwell Cyclotron".
Mon., 5th June, 11 a.m. Conf. Room, Building R.1.	Nimrod Lecture Series	Dr. W. Galbraith	(Title to be announced)

EXTERNAL EVENTS

Tues., 30th May - Thurs., 1st June, inclusive, 10.30 a.m. - 4.30 p.m., Games Room, Social Club, A.E.R.E.: Display of Instruments by the Rotameter Manufacturing Co., Croyden, Surrey.

X Tues., 30th May - Fri., 2nd June, inclusive, at Olympia, London: Radio and Electronic Component Show. (Tickets obtainable from B. E. Kingdon, Building R.1)

Thurs. 1st June, 2.30 p.m. University of Manchester	Physics Department Colloquium	Mr. J. M. Dickson (N.I.R.N.S.)	"A Polarised Deuteron Ion-Source".
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B. E. Kingdon
Scientific Administration

26th May, 1961

RUTHERFORD LABORATORY BULLETIN NO. 34
for the week commencing Monday, 5th June, 1961.

VISITING COMMITTEE

✓ The next meeting of the Visiting Committee of the National Institute will be held at the Laboratory on Friday, 9th June.

VISITORS

✓ Monsieur Pierre Huet, Director of the European Nuclear Energy Agency of the O.E.E.C., and Professor L. P. Nicolaidis, Chairman of the Steering Committee of the E.N.E.A., will visit the Laboratory on Tuesday, 6th June.

HYDROGEN BUBBLE CHAMBER

✓ The stainless steel vacuum tank for the British National Hydrogen Bubble Chamber was delivered to the Laboratory on Thursday, 25th May, from the manufacturers, Messrs. Vickers-Armstrong Limited, Elswick Works, Newcastle-on-Tyne. The tank, which provides thermal insulation of the liquid hydrogen chamber, is now in the annexe to the Nimrod Experimental Area. Its overall dimensions are 12ft. 3 ins. x 10ft. 1 in. x 9ft. 6 ins., and its three sections have a total weight of 20 tons.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
5th-9th June	Dr. R. J. Griffiths (N.I.R.,N.S.)	Investigation of the p-d reactions by fast coincidence techniques.

VISITS ABROAD

✓ Mr. T. R. Walsh of the Nimrod Injector Group leaves for Saclay, Paris, on 10th June to attend a Conference on Particle Accelerator Theory, held by the French National Institute of Nuclear Science and Technology.

FELLOWSHIPS

A small number of Post Doctoral Fellowships tenable in Australia are available under the sponsorship of the Australian Institute of Nuclear Science and Engineering, (a body set up jointly by the Australian Universities and the Australian Atomic Energy Commission). Further details may be seen on the Library notice-board, Building R.1.

LIBRARY NOTICE

✓ The following reference books are missing from the Library, Building R.1:-

- (i) Kelly's Directory of Merchants, Manufacturers and Shippers,
- (ii) Standard Handbook for Electrical Engineers (A. E. Knowlton).

Would the borrowers please return them.

INTERNAL EVENTS

Mon., 5th June, 11 a.m., Conf. Room, Bldg. R.1	Nimrod Lecture Series	Dr. W. Galbraith	"High Energy Interactions"
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INTERNAL EVENTS (continued)

Thurs., 8th June, 2 p.m., Conf. Room, Bldg. R.1.	Nimrod Lecture Series	Prof. J. M. Cassels, F.R.S. (Liverpool University).	(Title to be announced).
Mon., 12th June, 11 a.m., Conf. Room, Bldg. R.1.	Nimrod Lecture Series	Prof. J. Hamilton (University College, London)	"Dispersion Relations - II"

EXTERNAL EVENTS

Wed., 7th June, 4.30 p.m. Univ. of Liverpool	Nuclear Physics Colloquium	Dr. A. Segar (N.I.R.N.S.)	"Neutrons from Muon Capture"
Wed., 7th June, 4.15 p.m. Univ. of Birmingham	Physics Department Colloquium	Dr. J. Fremlin, Mr. N. Kudahl (Birmingham Univ.)	"Applications of Nuclear Physics to Dental Research."

(Anyone wishing to attend the above meeting should contact B. E. Kingdon,
Building R.20)

Thurs., 8th June, 2 p.m., Conf. Room Bldg. 8,9, A.E.R.E.	Theoretical Physics Seminar	Dr. M.H. MacGregor (U.C.R.L. Livermore, California, U.S.A.)	"The Two- Nucleon Problem."
Thurs., 8th June, 2.30 p.m. Univ. of Manchester	Nuclear Physics Colloquium	Mr. J. O. Newton (Manchester Univ.)	"Vibrational Levels of Nuclei."
Fri., 9th June, 2.30 p.m., Univ. of Manchester	Nuclear Physics Colloquium	Mr. J. M. Dickson (N.I.R.N.S.)	"The Polarised Proton Source of the 50 MeV P.L.A. at R.H.E.L."

(Postponed from 1st June, and title changed)

Fri., 9th June, 4.15 p.m., Clarendon Lab., Oxford.	Nuclear Physics Colloquium	Dr. K. W. Allen (A.W.R.E., Aldermaston.)	"Fast Neutron Physics Research at Aldermaston."
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Monday, 12th - Friday, 16th June, inclusive, at Savoy Place, London, W.C.2. :-
I.E.E. International Conference on Components and Materials used
in Electronic Engineering.

B. E. Kingdon
Scientific Administration

2nd June, 1961.

MSG.

RUTHERFORD LABORATORY BULLETIN NO. 35

for the week commencing Monday, 12th June, 1961

VISITS ABROAD

Dr. R. H. Thomas of the Bubble Chamber Group left on 8th June for C.E.R.N., Geneva, where he will be taking part in shielding experiments around the 25 GeV Proton Synchrotron.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
12th - 14th June	University College, London, and N.I.R.N.S.	Measurement of Spin Correlation in p-p Scattering.
15th - 16th June	Birmingham University	Measurement of Polarisation (Double-Scattering).

INTERNAL EVENTS

Wed., 14th June, 2 p.m., Conf. Room, Building R.1	P.L.A. Group Seminar	Mr. W. B. Powell (Birmingham University)	"The Birmingham Radial Ridge Cyclotron."
Mon., 19th June, 2 p.m. Conf. Room Building R.1	Nimrod Lecture Series	Dr. R. C. Hanna (A.E.R.E./N.I.R.N.S.)	"Review of α -p Interactions".

EXTERNAL EVENTS

Wed., 14th June, 4.15 p.m. Univ. of Birmingham	Physics Department Colloquium	Mr. G. R. Isaak (Birmingham University)	"A High Resolution Optical Spectro- meter using Atomic Beams".
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(Anyone wishing to attend the above meeting should contact B. E. Kingdon Bldg. R.20

Mon., 19th June, 9.30 a.m., Cockcroft Hall, A.E.R.E: Report on the Nuclear Electronics Conference held in Belgrade, May, 1961, by the Harwell delegates.

Mon., 19th - Thurs., 22nd June, at the Royal Horticultural Society's New Hall, Westminster, London: Laboratory Apparatus and Materials Exhibition.

Wed., 21st June - Sat., 1st July, at Olympia, London: International Plastics Exhibition and Convention. (Tickets for the Exhibition may be obtained from B.E. Kingdon, Building R.

B. E. Kingdon
Scientific Administration

9th June, 1961

RUTHERFORD LABORATORY BULLETIN No. 36

for the week commencing Monday, 19th June, 1961

VISITORS

✓ A party of 21 students from the Royal Holloway College, Englefield Green, Surrey, will visit the Laboratory on Wednesday, 21st June.

✓ Dr. A. Achermann, Head of the Mechanical Engineering Group at C.E.R.N., will visit the Laboratory on 3rd - 14th July to discuss various engineering problems.

VISITS ABROAD

✓ Mr. W. Walkinshaw of the Theoretical Group will be in the U.S.A. for approximately 10 weeks, commencing 1st July, where he will attend Study Groups on High Energy Physics at U.C.R.L., Berkeley, California, and Brookhaven National Laboratory, New York.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
19th-20th June	Birmingham University	Measurement of Polarisation (Double-Scattering).
21st June	Dr. A. Segar	Spark-Chamber Tests.
22nd-23rd June	King's College, London	Total Reaction Cross-Sections for Protons.

UNCLAIMED MAIL

A letter from the English Steel Forge and Engineering Corporation Ltd., Sheffield, containing quotations in respect of material for a spectrometer magnet, is awaiting collection from Mr. E. Newberry, Building R.1.

ESSAY COMPETITION

✓ Details of the ninth Essay Competition for the Waverley Gold Medal and money prizes, sponsored by the journal "Research", can be seen in the Library, Building R.1, and on notice-boards around the Laboratory. The closing date for entries is 31st July. Entry forms can be obtained from B. E. Kingdon, Building R.20.

EXTERNAL COURSES

✓ A Summer School in Health Physics (Radiation Protection) will be held in the Department of Chemical Engineering and Chemical Technology, Imperial College, South Kensington, London, S.W.7., from 3rd - 14th July, 1961. The fee is 25 gns. Applications should be made to the Registrar, from whom further information can be obtained.

✓ The Liverpool College of Technology's Programme of Post-Graduate Courses and Research for 1961-62 may be seen on the Library Notice-Board, Building R.1. Courses on Radiation Safety and Health Physics are included.

INTERNAL EVENTS

Mon., 19th June, 11 a.m., Conf. Room, Building R.1	Nimrod Lecture Series.	Dr. R. C. Hanna	"Review of π -p Interactions".
Mon., 26th June, 11 a.m., Conf Room, Building R.1.	Nimrod Lecture Series	Prof. J. Hamilton (University Coll., London).	"Dispersion Relations - III".

EXTERNAL EVENTS

Mon. 19th June,
5 p.m. Univ. of
Reading.

Physics
Department
Colloquium

Dr. R. C. Newman,
(A.E.I. Research Lab.
Aldermaston).

"The Diffusion
and Precipitation
of Impurities in
Silicon".

Mon., 19th - Thurs., 22nd June, at the Royal Horticultural Society's New Hall,
Westminster, London: Laboratory Apparatus and Materials Exhibition. (A few tickets
are available from B. E. Kingdon, Building R.20).

X Wed., 21st June - Sat., 1st July, at Olympia, London: International Plastics Exhibition
and Convention. (Tickets may be obtained from B. E. Kingdon, Building R.20).

Thurs., 22nd June,
2.30 p.m., Univ.
of Manchester

Nuclear
Physics
Colloquium

G. W. Greenlees, Esq.,
(Birmingham Univ.).

"Polarisation
of Protons
Scattered off
Medium Weight,
Nuclei".

B. E. Kingdon
Scientific Administration

19th June, 1961

RUTHERFORD LABORATORY BULLETIN NO. 37
for the week commencing Monday, 26th June, 1961.

VISITORS

✓ Professor Niels Bohr, Chairman of the Danish Atomic Energy Commission, accompanied by Mr. H. H. Koch, visited the Laboratory on Friday, 23rd June.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

X

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
26th-30th June	Clarendon Laboratory (Oxford University)	Measurement of Capture Gamma-Rays

TRAINING AWARD

✓ Mr. E. W. Clark of the Services Group has been awarded a prize, donated by the Southern Electricity Board, Oxford, as Best Student in the O.N.C. S.3 Electrical Engineering course at Oxford College of Technology.

VACANCIES AT C.E.R.N.

A further list of vacancies at C.E.R.N., Geneva, has been received; a large range of posts is covered, and details may be obtained from Mrs. E. Williams, Personnel Section, Room 51, Building R.20

INTERNAL EVENTS

Tuesday, 27th June, 11 a.m., Conference Room, Building R.1:
One-day Symposium on Bubble Chamber Data Reduction.

X

Wed., 28th June, 2 p.m., Conference Room, Building R.1	P.L.A. Group Lecture	Dr. R.J. Griffiths	"Report on the Belgrade Conference on Nuclear Electronics"
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EXTERNAL EVENTS

Monday, 26th June - Saturday, 1st July, at Olympia, London: International
Plastics Exhibition and Convention. (Tickets may be obtained from B. E. Kingdon,
Building R.20).

X

Wednesday, 28th June, 10 a.m. - 4.30 p.m., Games Room, Social Club, A.E.R.E.:
Exhibition of Oscilloscopes and Accessories by Messrs. Telequipment Ltd.

Wed., 28th June, 4.30 p.m., Univ. of Liverpool	Nuclear Physics Colloquium	Dr. R. Blin-Stoyle (Oxford)	"The Decay of Hyper- Fragments"
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B. E. Kingdon
Scientific Administration

26th June, 1961.

MSG.

RUTHERFORD LABORATORY BULLETIN NO.38

for the week commencing Monday, 3rd July 1961.

HYDROGEN BUBBLE CHAMBER

✓ The 4 MW magnet for the British National Hydrogen Bubble Chamber, planned for use initially at C.E.R.N. and eventually with Nimrod, has been successfully tested at full power. The magnet will give a horizontal field at right angles to the particle beams entering the Chamber, so causing deflection of the charged particles and allowing their momenta to be calculated from the degree of curvature of their visible tracks. The magnet will operate at up to 8,000 amps at 500 volts, giving field strengths of over 12 kilogauss. The conductors are cooled with demineralised water, using 500 gall./min. at 250 lb./sq.in. on a closed circuit.

P.L.A.

X The programme scheduled for the P.L.A. during the current week is as follows:

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
3rd-7th July	A.E.R.E., Harwell.	Time-of-Flight Survey [A(p-d)B]

UNCLAIMED MAIL

A letter from Messrs. Leeds and Northrup Ltd., Birmingham, in reply to an enquiry dated 26th June, is awaiting collection from Mr. E. Newberry, Building R.1.

EXTERNAL EVENTS

X Tues., 4th-Fri. 7th July, at Kensington Palace Hotel, London, W.8:

International Ophthalmic and Scientific Instrument Exhibition by the British-American Optical Company Limited.

Thurs., 6th July, 4.30 p.m., University College, London.	Physics Department Seminar	Dr. M. J. Pentz (C.E.R.N., Geneva)	"Long-term High- Energy Accelerator Development at C.E.R.N."
Mon., 10th July, 11 a.m., Wantage Radiation Lab.	Lecture	Professor O. R. Frisch, F.R.S., (University of Bristol)	"Fundamental Particles"

(Tickets, limited in number, may be obtained from Mr. E. Newberry, Building R.1)

Mon., 10th-Fri., 14th July, at Imperial College, London, S.W.7: Institute of Physics and Physical Society Conference on Optical Instruments and Techniques.

B. E. Kingdon

Scientific Administration

3rd July, 1961.

MSG.

RUTHERFORD LABORATORY BULLETIN NO. 39

for the week commencing Monday, 10th July, 1961

VISITORS

✓ A party including Mr. C. W. Fogarty of the Treasury, Mr. R. A. Thompson of the Ministry for Science and Mr. M. C. Hudspith of the U.K.A.E.A. London Office will visit the Laboratory on Monday, July 10th for discussions with Dr. Pickavance, Mr. Mullett and Dr. Willis.

✓ Mr. P. G. Afable, Deputy Commissioner of the Phillipine Atomic Energy Commission, visited the Laboratory on Wednesday, 5th July.

✓ A party of members from the Research Association of the Vienna Radium and Nuclear Physics Institute visited the Laboratory on Friday, 7th July.

P.L.A.

The programme scheduled for the P.L.A. during the current week^{is} follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
X 10th-12th July and 14th July.	King's College London.	Total Reaction Cross-Sections for Protons.
13th July	Clarendon Laboratory, Oxford.	p-pn Reactions in Light Nuclei.

EXTERNAL COURSES

✓ A brochure giving details of physics courses and special lectures to be held during the 1961-62 session at some of the principal Colleges of Technology may be seen on the Library notice-board, Building R.1.

BURSARIES

✓ Applications are invited for awards under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme, instituted to encourage short term periods of research or study in other countries of the Commonwealth. Details are given on the Laboratory notice-boards.

UNCLAIMED MAIL

The following letters are awaiting collection from Mr. E. Newberry, Building R.1:

(i) From the Process Control Department, Instrumentation Division, Associated Electrical Industries Ltd., Harlow, Essex, in reply to an enquiry dated 26th June from Building R.1.

(ii) From Messrs. Broom and Wade Ltd., High Wycombe, Bucks, enclosing quotation for Type D22A Compressor spare parts.

(iii) From the Miltoid Sales Division of BX Plastics Limited, London, N.W.1, in reply to an enquiry dated 4th July concerning Polystyrene Sheet and Rod, and enclosing price list and data sheets.

B. E. Kingdon
Scientific Administration

10th July, 1961