



S.R.C. HOUSE JOURNAL. In Bulletin No. 24/67 dated 3 July it was stated that the first issue of "Quest", the new S.R.C. House Journal was due to be published about mid-September. Owing to the resignation of Mr. W. Reed, the recently appointed Editor, this date has been cancelled and the first issue is unlikely to appear before the end of the year.

HYDRAULICS RESEARCH STATION, WALLINGFORD. Open days will be held on the afternoon of Thursday, 21 Sept and all day on Friday, 22 Sept. A limited number of invitations will be available and anyone wishing to attend should inform H.F. Norris, Ext 484 by Friday, 8 Sept.

VISITORS. A party of Science and Maths teachers will visit the Laboratory on Tuesday, 5 Sept.

RADIATION PROTECTION NOTICE. Film period 10 commences Monday, 4 Sept. Colour Strip - YELLOW - for By and fast neutron films. Please change films promptly.

The Director, to the U.S.A., 10 - 16 Sept, to attend the Sixth International Conference on High Energy Accelerators at Cambridge, Mass.

Dr. L.C.W. Hobbis, Mr. N.M. King and Mr. G.H. Rees to the U.S.A., 10 - 30 Sept approx, to attend the above conference and to visit various laboratories.

Dr. G. Shaw to the U.S.A., 3 - 12 Sept, to attend the 1967 International Symposium on Electron and Photon Interactions at High Energy.

Dr. C. Michael to CERN, 11-19 Sept, for discussions and then to Heidelberg to attend the International Conference on Elementary Particles, returning on 28 Sept.

Dr. J.T. Hyman to CERN, 5 Sept., for approx twelve months attachment to the Controls Group, P.S. Division, working on computer control problems.

# **Machine Schedules**

NIMROD Cycle 9 (5.9.67 - 26.9.67) Machine Physics: Setting up of X1. High Energy Physics.

Team	Beam	Experiment
AERE/QMC/RHEL	π4	A study of € beta decay Setting up
Bristol Univ.	π5	n p differential cross-section measurements Data
AERE/RHEL/QMC	K7	€ polarisation measurements Data
Univ Coll London	K8	K'n clockie
RHEL/Universities	К9	Setting up of beam line
P.L.A.		

Date Team Experiment 4 - 6 Sept. Manchester Univ. 7 - 11 Sept. Oxford Univ. (p,t) and (p,He3) Reactions

Elastic and Inelastic Proton Scattering of Ca and Zr Isotopes

# **External Events**

Tues, 5 Sept., 7.30 p.m., Coll of Tech., Reading Social News

I.E.R.E. Branch Meeting

C.C. Richardson

The Impact of C.E.I. on the Education and Training of Electronic

CHRISTIAN FELLOWSHIP. 12.30 p.m., Friday, 8 Sept., P.L.A. Conf.Rm., R.12. Prayer Meeting. All are welcome. Please note permanent change of day for meeting. This change has been made for the convenience of the majority of members.

H.F. Norris, Ext. 484 Scientific Admin. Group, Building R.20.

Rutherford Laboratory





FOUND. A sum of money in Bldg. R.25. Would the owner please contact the Local Administration Office, Bldg. R.25.

ADMIN. NOTICE. Stores Delivery Service. Some of the delivery points used are unmanned and clearly unsuitable for valuable

In future Stores Section will retain such items when they are destined for unmanned delivery points and arrange with the demanding officer for direct delivery or collection.

RADIATION PROTECTION NOTICE. It is now Period 10. Colour Strip - YELLOW - for  $\beta\gamma$  and fast neutron films. Please check that you are wearing the correct films and return all old films as soon as possible.

VISITORS. A party of Engineering Lecturers attending a P.G.E.C. course at AERE Harwell will visit the Laboratory on Wednesday, 13 September.

BULLETIN MATERIAL. Contributors of information for publication in the Rutherford Laboratory Bulletin are reminded that information for a particular week should be with the Editor by mid-day on the preceding Wednesday. Stop press information can be included if received by 9 a.m. on Thursdays. Whenever possible contributions should be in writing and should be sent to H.F. Norris, Room 21, Bldg. R.20.

LECTURE THEATRE BOOKINGS. Staff are reminded that all bookings for the Lecture Theatre should be made through H.F. Norris, Bldg. R.20, Ext. 484. Requests should preferably be made in writing giving as much notice as possible and stating the facilities required, i.e. tape recording, cine and still projection, etc.

# **Machine Schedules**

NIMROD Cycle 9 (5.9.67 - 26.9.67)
Machine Physics: Setting up of XI
High Energy Physics (π4, π5, K7, K8 and K9)
Full details of Cycle 9 were given in Bulletin No. 32/67.

P.L.A.

Date

12 - 13 Sept. 14 - 19 Sept.

Team

QMC and Queen's Univ. Belfast

#### Experiment

Maintenance Measurement of "D" Parameter in (p-d) Scattering at 50 MeV

# **Internal Events**

ll - 15 Sept. Lecture Theatre. High Field Bubble Chamber Working Party. The week is devoted to a study of the design details of the High Field Bubble Chamber by physicists of the Rutherford Laboratory and members of University groups already engaged in Bubble Chamber research.

Wed, 13 Sept. 11 a.m. Conf.

Rm. Bldg. R.1.

HEP Discussion Group

Mr. C.R. Cox Dr. R.J.N. Phillips

K p Polarization Results. / Regge Parameters & Superconvergence.

### **External Events**

EXHIBITION. Tickets for the 1967 Engineering Materials and Design Exhibition, 11 - 15 September, at Olympia are still available from H.F. Norris, Bldg. R.20, Ext. 484.

Tues, 12 Sept., 2 p.m. Theor.Pr Conf.Rm., Bldg. 8.9 Seminar

Theor. Phys. Div.

Prof. S.F. Edwards

(Univ. of Manchester)

Thurs, 14 Sept., 2 p.m. Conf.Rm., Bldg. 8.9

Joint Applied Maths. Group Seminar

Mr. M.J.D. Powell

Thurs, 14 Sept., 3.30 p.m. Nuclear Phys.Div. Colloq.

Dr. G. Dearnaley

The Statistical Mechanics of Very Long Molecules or the Application of Quantum Field Theory to Topological Problems.

An Algorithm for Automatic Curve Fitting

A New Model of Electronic Conduction through Oxide Layer Structures.

#### Conf.Rm., H.8 Social News

# RECREATIONAL SOCIETY NEWS.

CRICKET CLUB DANCE - 15 Sept.1967. Your last chance of a ticket - only a few left. Transport has been arranged at 3/per head for a return ticket from the Didcot and Wallingford area. Please contact Mr. R. Hecken, Ext. 258 for dance and
transport tickets, as soon as possible. A bar extension up to 1.30 a.m. has been obtained.

CHESS. A lunch-time knock out competition has been proposed, open to everyone at the Atlas and Rutherford Laboratories. Anyone who is interested in taking part should contact D.R. Culliford or P. Craske, Ext. 225, by Friday, 29 September. If there is sufficient response to this proposal a Challenge Cup will be donated by the Society, which will be played for annually. To re-iterate, this competition would be open to everyone and not confined to members of the Society.

CHRISTIAN FELLOWSHIP. 12.30 p.m., Friday, 8 Sept. Conf.Rm., R.12. Please note change of programme. Talk "The Call of God" by John Savage, Ph.D., of M.R.C.

12.30 p.m. Friday, 15 Sept. Conf.Rm., R.12. "The PAROUSIA", Part 1. Studies in the Biblical Doctrines of Christ's Return.

All are very welcome to attend both these meetings.

H.F. Norris, Ext. 484 Scientific Administration Group, Building R.20.

Rutherford Laboratory 8.9.67.





VISIT OF SECRETARY OF STATE. The Secretary of State for Education and Science, the Rt.Hon. Patrick Gordon Walker will pay a short visit to the Rutherford and Atlas Laboratories on Tuesday, 19 September. He will be accompanied by the Chairman of the Science Research Council. The party is expected to arrive at the Rutherford Laboratory at about 11 a.m. and after a discussion in the Director's Office will tour the Nimrod machine and Experimental Hall 1 including the Hydrogen Bubble (Chamber from 11.30 - 12.10. The tour will continue with a visit to the Film Scanning and Measuring Machines and the IEM 360/75 computer, followed at 12.45 by a buffet lunch in Rl Conference Room. The visit will end with a tour of the Atlas Laboratory from 13.30 - 14.30.

RADIATION PROTECTION NOTICE. Film Badge Issue. It is now Period 10. Colour Strip - YELLOW for βγ and fast neutron films. Please check that you are wearing the current films and return all old films immediately.

ACKNOWLEDGEMENT. Mrs. Colclough wishes to thank all colleagues and friends for the floral tributes and messages of sympathy during her recent bereavement.

MISSING EQUIPMENT. The following item of equipment has been reported missing from Lab. 7, Bldg. R.34:

Pye Portable Wheatstone Bridge,  $0.001\Omega$  - 10 M $\Omega$ 

Will the person who borrowed this item or anyone with information on its present whereabouts please contact F. Cullen, Bldg. R.12, Ext. 441.

OVERSEAS VISITS. The Director, Dr. G.H. Stafford, Dr. G. Manning, Dr. N.H. Lipman, Dr. T.G. Walker, Dr. J.R. Smith, Dr. W.R. Holley, Dr. A. Astbury and Dr. D.P. Jones to Heidelberg, Germany, 19 - 27 Sept., to attend the International Conference on Elementary Particles.

**Machine Schedules** 

Extended to 3 Gd NIMROD Cycle 9 (5.9.67 - 26.9.67)

Machine Physics: Setting up to X1.

High Energy Physics (π4, π5, K7, K8 and K9)

Full details of Cycle 9 were given in Bulletin No. 32/67.

P.L.A.

Date

Team

QMC & Queen's Univ. Belfast

18 - 19 Sept. 20 - 26 Sept.

Birmingham U.

Measurement of "D" Parameter in (p-d) scattering at 50 MeV (p,p and (p,p) polarization studies.

**External Events** 

Wed, 18 Sept. 9.30 a.m., Savoy Place, W.C.2.

I.E.E. Electronics Division

Colloquium on Photoemission

EVENT AT A.E.R.E.

Tues, 19 Sept., 2 p.m., Theor.Phys.Div. Seminar Conf.Rm., Bldg. 8.9

Dr. A. Herzenberg (U. of Manchester) Electronic Compound States of

Molecules

Social News

FIIM SOCIETY. Tickets and programmes for the 1967-68 season are now available from P.W. Simpson, R.1 and from I.C.G. Sewter, R.20. A ticket for the full season is £1. Omnibus Scheme members may join at 5/- (single) or 10/- (double) Tickets for individual shows cost 4/- and must be obtained in advance.

CHESS CLUB. A lunch-time knock-out competition has been proposed, open to <u>everyone</u> at the Atlas and Rutherford Laboratories. Anyone who is interested in taking part should contact D.R. Culliford or P. Craske, Ext. 225, by Friday, 29 September. If there is sufficient response to this proposal a Challenge Cup will be donated by the Recreational Society which will be played for annually. To reiterate, this competition would be open to everyone and not confined to members of the Society.

CHRISTIAN FELLOWSHIP. 12.30 p.m., Friday, 22 Sept., Conf.Rm., R.12. "The PAROUSIA", Part 2. Studies in the Biblical Doctrines of Christ's Return. All are welcome.

H.F. Norris, Ext. 484 Scientific Admin. Group, Building R.20.

Rutherford Laboratory 15.9.67.





VISITORS. 15 students from Oxford University will visit the Laboratory on Wednesday, 27 September. 25 students from the University of Aachen will visit the Laboratory on Thursday, 28 September.

TRAINING AWARDS. Mr. David Evans of the Chemistry Section, Central Engineering Group, has been awarded an Honours Degree in Applied Chemistry after taking a sandwich course at Borough Polytechnic.

Mr. Maurice Barton, formerly of the Nimrod Magnet Group, has been awarded an Honours Degree in Applied Physics after taking a sandwich course at Brighton College of Technology.

Mr. John Morgan of the Chemistry Section, Central Engineering Group, has been awarded a prize by the London Section of the Plastics Institute as a result of the examination in Polymer Chemistry for the Associateship of the Institute.

SUGGESTION AWARDS. At the meeting of the Suggestions Awards Committee on Monday, 11 September the following awards were

£7. 10s. to C.R. Gascoigne - Internal attachment to the tool and cutter machine.
£3 to D.J. Price - Safety suggestion concerning the 8½" Mascot lathe.
£2. 10s. to A. Richards - Rail and gate above the R2 calorifier room.
£1. 10s. to G. Didcock - Cover for the chain near X1/K9 interlock box in Experimental Hall 1.
£1. 10s. to D. Baker - Modification to the film track scanning machine control unit.

Encouragement awards of £1 were made to A.D. Wood and H. Webb.

OVERSEAS VISITS. Mr. R.E. Thomas of the Atlas Laboratory will attend the Association for Computing Machinery Symposium on Operating System Principles, at Gatlinburg, Tennessee, on 1-4 October. He will also visit the University of Illinois, the Carnegie Institute of Technology and M.I.T. before returning on 10 October.

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# **Machine Schedules**

NIMROD Cycle 9 (now extended to 3.10.67)
Machine Physics: Setting up of X1
High Energy Physics (π4, π5, K7, K8 and K9)
Full details of Cycle 9 were given in Bulletin No. 32/67.

P.L.A.

Date

25 - 27 Sept. 28 - 29 Sept. 30 Sept - 2 Oct.

Team

Birmingham Univ. Maintenance Birmingham Univ.

Experiment

(p,p and (p,p) polarization studies.

(As above)

### **Internal Events**

Thurs, 28 Sept., 3.15 p.m., Lecture Theatre

Rutherford Laboratory Lecture

Dr. N. Kurti, F.R.S. (Clarendon Laboratory)

Is Cold Really Necessary?

### **External Events**

Mon, 25 Sept., 7.30 p.m., Oxford Coll. of Tech., Headington

Oxford Productivity Group Meeting

Film and discussion "Approaching Automation" (Speaker: Mr. George Dyke, Min. of Tech.)

26 - 28 September: I.E.E. Conference on Magnetic Materials and their Applications, London. 27 September: British Nuclear Energy Society Symposium on Ionizing Radiations, London.

EVENT AT A.E.R.E.

Tues, 26 Sept., 3.30 p.m., Conf.Room, Bldg. 8.9.

Theoretical Physics Seminar

Dr. A.M. Arthurs (Univ. of York)

Complementary Variational Principles

(Please note the change of time for this meeting)

## Social News

RECORD SOCIETY. It is hoped to recommence weekly programmes early in October. Anyone willing to help choose the programmes for the coming season, or to lend records, is asked to contact B.E. Kingdon, R.20, Ext. 6297.

CHRISTIAN FELLOWSHIP. 12.30 p.m., Friday, 29 Sept., P.L.A. Conference Room, R.12. It is hoped to play a tape-recording which should be of interest to all members. Please watch the notice-boards for further details.

B.E. Kingdon, Ext. 6297 Scientific Admir. Group, Building R.20.

Rutherford Laboratory 22.9.67.