

Rutherford Laboratory Bulletin

No. 25/65 5 July 65

General News

VISITOR Professor U. Pellegrini, Director of Laben Laboratories, Milan, will visit the Laboratory on Friday, 9 July for discussions. Anyone wishing to see him should contact Dr. L.J. Herbst or Mr. D. Jones, Bldg. R.12, Ext. 466.

POST GRADUATE EDUCATION CENTRE. It is proposed, if the demand justifies it, to hold another "Physics Course for Engineers" in the early Autumn. Anyone who is interested in attending this course should contact Mr. M.J. Marchbanks, Rm. 2.71, Bldg. R.1, Ext. 472 before 21 July.

MISSING EQUIPMENT. The following items of equipment have been reported missing:-

Tachometer. S/No. F 2560, NIRNS 1069

Will anyone with information on this item please contact Mr. J. Jones, Bldg. R.18, Ext. 571

Avometer, Model 8, 106717 - C - 460

Will anyone with information on this item please contact Mr. R.L. Redgrave, Lab. 5, Bldg. R.1, Ext. 318.

| Electric Drill, A.E.R.E. | No. | 6726 | Avometer | A.E.R.E. | No. | 82018 |
|--------------------------|------|----------|-------------|------------|-----|---------|
| Galvanometer, Spot, " | 11 | L 302654 | Pyrometer | | 11 | A 7978 |
| Serviscope " | # | 4960 | Watt Meter | Portable " | # | 1347992 |
| Thermocouple Pot. " | . 11 | 5909 | 11 11 | 11 11 | 11 | 1347993 |
| Reg. Power Unit " | Ħ | 53133 | Motor Serve | 0 " | # | LH 1116 |
| Solartron Oscilloscope | " " | 54092 | Electric Fa | an " | Ħ | 4919 |
| Dustette, Hoover " | 11 | 5559 | | | | |

Anyone with information on the whereabouts of any of the above items are asked to contact Mr. F. Harden, Bldg. R.1, Ext. 6114.

OVERSEAS VISITS. Dr. G.H. Stafford, to C.E.R.N., 6-7 July, to attend meeting of the C.E.R.N. Nuclear Physics Research Committee.

Dr. L.J. Herbst, to D.E.S.Y. Hamburg, 5-8 July for discussions.

Machine Schedules

P.L.A.

Schedule not available at time of going to press.

Internal Events

There will be no lecture in the Nimrod series on 5 July.

Wed., 7 July 2 p.m, Conf. Rm., R.12 P.L.A. Div. Seminar Mr. A.G. Hardacre (A.E.R.E.)

Use of an Acoustic Spark Chamber with the n = ½ Magnet Wed., 7 July, 2.15 p.m, Lecture Theatre NINA Lecture (No. 3) Dr. D.J. Thompson (D.N.P.L.)

Synchrotron R.F.

A lecture series on "Weak Interactions" will be given by Dr. N. Dombey (Univ. of Sussex), daily from Tuesday, 6 July to Friday, 9 July inclusive, from 11 a.m to 12.30 p.m in the Lecture Theatre. (This series is intended for experimenters and theorists, and will cover the subject from the beginning to the present state).

The Use of Compressed Gases. A lecture by the British Oxygen Company will be given in R.12 Conf. Rm., at 10.30 a.m on Wednesday, 7 July; Thursday, 8 July and Friday, 9 July. The lecture will cover the safe use of compressed gases and gas equipment, brazing, welding and flame cutting operations. It is intended for a "technical" audience and will last about 90 minutes including a short film.

Social News

RECORD PROGRAMME. Tuesday, 6 July at 12.30 p.m., Lecture Theatre

Sibelius Symphony No. 5. Continuing the series of Sibelius' symphonies, we come to the No. 5 which, apart from Symphony No. 2, is the most popular of the major Sibelius works. In this symphony for the first time he took a major step in the construction of the symphony towards his idea of integrating all the four movements.

The third and fourth movements have been merged into one movement which has two distinct parts built around the same thematic material. The themes are among the finest Sibelius wrote and the orchestration returns to rich colouring after the stark contruction of Symphony No. 4.

CHRISTIAN FELLOWSHIP. Members are reminded that the United Fellowship A.G.M. will be continued at 12.50 p.m. on Wednesday, 7 July, in the Social Club Chapel, A.E.R.E., when the programme for the coming year will be discussed. Further details may be obtained from B.E. Kingdon, R. 20, Ext. 6297.

Rutherford Laboratory
2 July 1965

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



Rutherford Laboratory Bulletin

No.26/65 12 July 65

General News

OBITUARY NOTICE. We deeply regret to announce the death of Mr. E.C. Powell on Tuesday, 6 July. Ted Powell who was aged 64 had been on the site for over 10 years. He will be sadly missed by his colleagues. Our deepest sympathy is extended to his wife and family.

MISSING EQUIPMENT. The following item of equipment has been reported missing:-

Avometer, Model 8, No. 78858-858

Will anyone with information on this item please contact Mr. P. Gill, Lab 1.6, Bldg R.1, Ext 383

OVERSEAS VISITS. Mr. A.J. Egginton and Mr. N.M. King, to the U.S.A., 11-19 July for discussions at the Lawrence Radiation Laboratory, Berkeley on beam planning.

Dr. L.C.W. Hobbis, to Poland, 12-16 July at the invitation of the Institute for Nuclear Research Swierk, for discussions on proton linear accelerator systems.

Mr. M. Snowden and Mr. D. Potter, to Oslo, Norway, 12-13 July to discuss manufacture of scanning tables with Kongsberg Co.

Mr. M.R. Jane, to CERN, 13-20 July to prepare an experiment on the CERN protonsynchrotron.

Machine Schedules

P.L.A.

| Date | Team | Experiment |
|------------|---|---|
| 12-15 July | Oxford Univ. | Measurements of (p,d) Polarization Asymmetries on Si and Mg Isotopes |
| 16-21 July | Queens Univ. Belfast, and Westfield College | Measurement of Polarization in (p,d) Elastic Scattering |

NIMROD 2 GeV operation - Cycle 4 (10.7.65-16.7.65.)

Machine Physics High Energy Physics

| Team | Beam | Experiment | |
|---------------------------------|------|---|------------|
| Bubble Chamber Collaboration | K1 | p-d scattering | Data |
| Imperial College | Ø1 | A study of the Ø→e+ + e decay | Setting up |
| AERE/Southampton/ UCL | P3 | Study of the $\pi + p \rightarrow \begin{pmatrix} n + x \\ p + x \end{pmatrix}$ processes | Setting up |

Internal Events

Mon., 12 July 11.15 a.m., Lecture Theatre

Nimrod Lecture Series

Dr. P. Iredale (AERE)

Measurement of Particle Velocities and Directions by Observation of the Cherenkov Ring Image by Image Intensifiers.

Compressed and Liquefied Gases: A lecture, directed to a professional audience, will be given by the British Oxygen Co. Ltd., in the R.12 Conference Room at 11.00 a.m. on Tuesday, 13 July. The lecture will cover the safe application and use of compressed and liquefied gases and associated equipment. A short safety film will also be shown.

Mon., 19 July 11.15 a.m., Lecture Theatre

Nimrod Lecture Series

(CERN)

Dr. C. Franzinetti Recent Results on Experiments

with High Energy Neutrinos

Social News

CHRISTIAN FELLOWSHIP. The last in the present series of talks on the Holy Trinity: "The Personal Significance of the Creed", will be given by the Rev. Alfred Waller of Tilehurst Free Church on Wednesday, 14 July, at 1 p.m. in the P.L.A. Conference R.12. All are welcome. Further details may be obtained from B.E. Kingdon, R.20, Ext 6297.

RECORD PROGRAMME. Tuesday, 13 July at 12.30 p.m., Lecture Theatre.

"Scheherazade" by Rimsky-Korsakov. This work by one of the worlds acknowledged masters in orchestration, is founded on the "Arabian Nights", although only by implication.

The Sultan Schahriar, convinced that all women are fickle, has sworn to put to death each of his wives after the first night. But the Sultana Scheherazade so interested him by the tales she told for a thousand and one nights that her death was first postponed and then abandoned. The rich and colourful atmosphere evoked in this work has a magical quality about it which requires both brilliant solo and orchestral interpretation.

To quote C.B. Rees, "If there is anyone deaf to this kind of sensuous musical enchantment - and no one pretends that it is cosmically or philosophically profound then indeed he (or she) will never hear the surge of the sea, respond to the magic of the East or fall victim to the sirens' song."

Rinsky-Korsakov, the composer, was an officer in the Imperial Russian Navy and knew nothing about musical theory. However his progress was so remarkable that he resigned his commission in the Navy and was appointed Professor of Composition in the St. Petersburg Conservatoire.

The recording is a stereo version, played by the London Symphony Orchestra, conducted by Sir Eugene Goosens and will be the last programme until the autumn.

Rutherford Laboratory 9 July, 1965

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

No. 27/65 19 July 65



Rutherford Laboratory Bulletin

General News

Vacuum Panel Meeting. The Research Group and Rutherford Laboratory Vacuum Panel are holding their Third Discussion Group in the Large Conference Room, Bldg. 220 on Wednesday 21 July from 09.00-13.00 hrs. Subject: Vacuum Leak Detection. A number of short papers will be presented each followed by a discussion period. Those wishing to attend should contact Mr. J.W. Mark, Ext 2585 or Mr. F.P. Moran, Ext 2723, Bldg 424.

OVERSEAS VISITS. Miss K.M. Knight, to CERN, on 16 July for 2-3 weeks, to assist in setting up of K_2° experiment.

Dr. R. Taylor and Mr. P.A. Denny, to CERN, 20-22 July for discussions on computers.

Mr. D.J. Wagon and Mr. C.J. Collie, to CERN, 21-24 July, for discussions on programming for the CR7 project.

Dr. N.K. Ganguly, to Varenna, Italy on 25 July for three weeks, to attend a course at the Enrico Fermi International School of Physics.

Internal Events

| Mon., 19 July 11.15 a.m. Lecture Theatre | Nimrod Lecture Series | Dr. C. Franzinetti (C.E.R.N.) | Recent Results on Experiments with High Energy Neutrinos. |
|--|-----------------------------|--------------------------------|---|
| Mon., 19 July 14.00 p.m. Lecture | Discussion | Prof. E.H.S. Burhop (UCL) | The CERN Storage Ring |
| Theatres | | | 110,000 |
| Tues., 20 July 11.15 a.m., Lecture | Lecture | Prof. J.S.R. Chisholm (Trinity | Analytic Continuation by Means of Pade Approximants |
| Theatre | • | College Dublin) | of Pade Approximants |

Wed-Fri - 21, 22 and 23 July, at 11.15 a.m., Lecture Theatre "KO Decays". by Dr. P.K. Kabir (RHEL) and Prof. R.R. Lewis (Michigan)

Mon., 26 July, Nimrod Mr. Peter Gray Heavy Hyperon Resonances
11.15 a.m., Lecture Lecture (Oxford)
Theatre Series

(Coffee will be served in the lounge before each of the above events)

Wed., 21 July P.L.A. N. Chant (p,d) Reactions with Polarized 2 p.m., R.12. Division (Oxford) Protons
Conf. Rm. Seminar

Machine Schedules

| P.L.A. | | |
|------------|--|--|
| Date | Team | Experiments |
| 19-21 July | Queens Univ. Belfast and Westfield College | Measurement of Polarization in (p,d) Elastic Scattering |
| 22-23 July | Kings College London | A Measurement of (p,p) Polarization at 50 MeV in Zn64 |
| 24-27 July | | Maintenance. |
| | | |

Social News

Date for your diary: Woodcote Veteran Transport Rally, Saturday 7 August. The Grand Parade will be at 2.30 p.m. at Knights Field Creys Pond, Nr. Woodcote. Proceeds to charity.

CHRISTIAN FELLOWSHIP. The last Bible Study meeting in the present series on the First Epistle of John will be held in the P.L.A. Conference Room, R.12, on Wednesday, 21 July at 1.00 p.m. - 1.30 p.m., when Mr. Ben Kingdon of Scientific Administration Group will lead the discussion on Chapter 5, verses 13-21.

Rutherford Laboratory 16 July 1965 H.F. Norris Ext 484 Scientific Administration Group Building R.20



Rutherford Laboratory Bulletin

No.28/65 26 July 65

General News

EXTERNAL COURSE. The following course will be held at the Borough Polytechnic, London S.E.1.

"Nucleonic Techniques and Measurements", a part time day and evening class lasting for the full College session of three terms. Students can attend on either Tuesday or Friday. The course will commence on 5 and 8 October respectively.

A full time course of two months' duration, on the same subjects, but with a more intensive coverage, will commence on 25 April, 1966.

Further information may be obtained from Mrs. M.C. Gould, Personnel Group, Building R.20, Ext 575.

CONFERENCES. The Institute of Mathematics and its Applications have announced a National Conference on "Mathematics for Engineers", to be held at Queen Mary College, London E.1, on 30 September and 1 October, 1965. Forms of application may be obtained from:— The Registrar, The Institute of Mathematics and its Applications, c/o Imperial College, South Kensington, London S.W.7 (Tel: Kensington 6838).

Further details of programme from H.F. Norris, Building R.20, Ext 484.

20-24 September, 1965: International Conference on "Thermionic Electrical Power Generation" London. Details and registration forms from, Conference Secretariat, I.E.E., Savoy Place, London W.C.2.

13-17 September, 1965: International Conference on "The Microwave Behaviour of Ferrimagnetics and Plasma", at the I.E.E., London Details and registration forms from the Joint Conference Secretariat, I.E.E., Savoy Place, London W.C.2.

Machine Schedules

P.L.A.

| Date | Team | Experiment |
|---------------|--------------------------------|---|
| 26-27 July | | Maintenance |
| 28 July-1 Aug | RHEL and Queen Mary College | Measurement of the Polarization of Neutrons from the D(p,n)2p Reactions at 50 MeV |

NIMROD 2 GeV operation - Cycle 5 (26.7.65. - 9.8.65.)

Machine Physics External Beam Studies High Energy Physics.

| Team | Beam | | Experiment | |
|-------------------------------|------|-----|---|---------------|
| AERE/QMC/RHEL | P6 | | Proton-proton inelastic scattering | Data |
| Imperial College/ | ø1 | | Study of the $\emptyset \rightarrow e^+ + e^-$ decay | Setting up |
| Oxford Univ./RHEL | K)+ | V | Study of the leptonic decay modes of K+ mesons | Setting up |
| Cambridge/Birmingham/ RFEL | к6 | V . | A measurement of K nucleon total cross-sections between 6.7 and 2.4 GeV/c | Setting up |

Internal Events

Mon., 26 July, 11.15 a.m., Lecture Theatre Nimrod Lecture Series Mr. Peter Gray (Oxford) Heavy Hyperon Resonances

Social News

RECREATIONAL SOCIETY. It is proposed to form a Recreational Society at the Rutherford Laboratory in the very near future. The suggested objects of this society are to promote and encourage both recreational and social activities at the Laboratory and to provide facilities, where possible, for these activities.

Two ingredients essential to the formation of our own Recreational Society, even on a small scale, are, a substantial membership and some basic accommodation. The management has made Building R.14 available - it now requires only a membership to begin operations, and to achieve this every person working at the Rutherford and Atlas Laboratories will receive a form of application for membership. At the same time, copies of a draft constitution will be posted on notice boards in order that intending members may obtain an idea of the type of society that is envisaged.

On Friday, 30 July, there will be a general meeting of all accepting membership at which it is hoped to elect a management committee and officers. The Rutherford Laboratory Recreational Society will then be formally in existence.

The preliminary work has been in the hands of a temporary committee consisting at present of:- R.C. Hazell, R. Hecken, Miss J. Towers, J. Sissons, T. Harper, B. Briscoe, E. Kirby and I. Spencer, who will be pleased to answer any urgent questions.

The success of this venture depends entirely on your support - without this there can be no Recreational Society at the Rutherford Laboratory.

Please remember, General Meeting at 12.30 p.m. on 30 July, Lecture Theatre.

CHRISTIAN FELLOWSHIP. The next meeting of the Group will be on Wednesday, 28 July, 1.00-1.30 p.m. in the P.L.A. Conference Room, R.12, when Dr. Joe Herbst of the HEP Electronics Group will give a talk "On Translating the Bible". All are welcome. Further details from B.E. Kingdon, R.20, Ext 6297.

Rutherford Laboratory 23 July, 1965.

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