



Rutherford
Laboratory

R(12), NDT(60,3), ISW(3500), ANGLE(60), YINT(60), DUMMY(84),
(6,3), NACHT(48), XCEN(12), YCEN(12), IPCHART(12),
MMON/CFID/MFX(20,3), MFY(20,3), NFDX(10,3), NFX(3), NFD(3), I
B(2,20,3), NX(100,4), NY(100,4), XN(2), YN(8), IB(100,2), IDY(1
DY(100,2), JDX(4), JDY(4), IHS(4), IOV(2), IUN(2), IDEL(2), I
CF(16), IFS, NFS, FX, FY, JK, PIC, KPIC, NCOUNT, NBIN, MAXOV, MA
AXN, CTA, CTB, MX, MY, JA, JB, JC, JD, JE, JF, XF(20,3), YF(20,3)
MMON/CJACK/NSY(20,30), NMS(20), NDR(20), NSI(20), XA(160), A
(20), BX(20), NST1(20), NST2(20), INER(20), NCTED(30), AWT(30)

8-15 January 1973

bulletin 1

NEW YEAR HONOURS 1973

We should like to offer our congratulations to past and present members of the Science Research Council and to a past and present Director of AERE Harwell who were awarded Honours in the New Years List:

Knights Bachelor Dr Eric Eastwood, FRS, Director of Research, General Electric Company Ltd and Chairman of the Astronomy, Space and Radio Board, SRC.

Dr Francis Arthur Vick, President and Vice Chancellor, Queen's University Belfast, ex Director of AERE Harwell.

K.C.B. (Order of the Bath) Professor Hermann Bondi, FRS, Chief Scientific Advisor, Ministry of Defence and SRC Assessor.

C.B.E. (Order of the British Empire) Professor N Kurti, FRS, Professor of Physics, Clarendon Laboratory, University of Oxford and former member of Physics Committee SRC.

Dr W C Marshall, FRS, member of United Kingdom Atomic Energy Authority and Director of Research Group.

M.B.E. Mr C L Roberts, Atlas Computer Laboratory, SRC.

IMPROVED COPYING FACILITY IN LIBRARY

The Library takes delivery on Friday 5 January of the new Xerox 4000. This machine has several unique features, notably the ability to print on both sides of the paper and, an angled platen to cope with tightly bound volumes. There is no warm up period and the machine produces 45 copies a minute (static free) which is over six times faster than the old machine. One special feature is that light originals (pale blue for instance) can be reproduced clearer than the original. Owing to these new features users are advised to consult the Library Staff when first using the machine.

1972 - ANOTHER RECORD YEAR FOR NIMROD

The amount of good beam time supplied to experimental teams in 1972 rose again to a new high of 5398 hours, as did the efficiency factor, 90.5% of HEP Research Scheduled Operating Time. The number of protons accelerated, another new record, was in excess of 22×10^{18} . To put this in perspective, this figure is nine times of that for 1965, three times for 1968 and very nearly twice the figure for 1970 and is a measure of the many improvements introduced on Nimrod over the years. Not stated, but just as certain is the improvements brought about by the increased efficiency of the Nimrod operators so the congratulations should be shared by both machine improvers and operators.

ROAD WORKS - FERMI AVENUE

Between 6 and 16 January road works will be carried out to erect bollards at the ends of the hatched areas outside the main gate and one near the entrance to the Atlas car park. At least half the width of the road will be given to traffic at all times, but drivers should proceed with caution.

TO THOSE WHO TRAVEL BY TWO WHEELS

This is an appeal to staff who use bicycles between R1 and Hall 3 (R55). Bicycles represent an enormous saving of time for staff commuting between their offices and labs in R1 and the experimental areas. However people are borrowing bicycles to go to other parts of the Laboratory and often leaving them at their destination resulting in weeks going by before these are located. There is no objection to people borrowing bicycles but PLEASE, when you do, return them either to the north-east entrance of R1 or, the north-east entrance of Hall 3. (One wonders if the culprits are those who come to work by car and go home by bus!! - Ed.)

CERN FELLOWSHIPS 1973

The Personnel Group has received information on opportunities for Fellows and Research Associates at CERN during 1973. The papers are with Mr D Williams Room 68, R20 and can be seen on request.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 8 January
11.30
Lecture Theatre

π K Phenomenology Below 1 GeV

Dr G Oades/University of Aarhus

HEP DISCUSSION GROUP

Wednesday 10 January
11.00
Conference Room, Building R1

The 2 - Pomeron Cut and the Gribov-Migdal Bound

T L Trueman/Brookhaven National Laboratory and Oxford University

FILM SHOW

Wednesday 10 January
13.15
Thursday 11 January
12.40
Lecture Theatre

William Shakespeare - a 25 minute colour film.

The film traces the life of Shakespeare from his boyhood in Stratford to his productive years as a playwright and actor in London. A vivid impression is given of the Elizabethan stage, and there are performances on the stage of the Globe Theatre. The film includes excerpts from Romeo and Juliet, Henry V, Julius Caesar, Hamlet and Macbeth.

SEMINAR IN COMPUTING

Friday 12 January
11.00
Conference Room, Building R12

Computational Aspects of Quantum Chemistry

V R Saunders/Atlas Laboratory

The computational problems faced by theoretical chemists will be described, and the program systems ATMOL, IBMOL and POLYATOM discussed to illustrate the techniques used to solve these problems. The scientific aims of theoretical chemistry will be briefly discussed.

NIMROD SCHEDULES

CYCLE 17 2 1 73 - 23 1 73

MACHINE PHYSICS

HIGH ENERGY PHYSICS

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	<u>State</u>
BRISTOL UNIVERSITY/ SOUTHAMPTON UNIVERSITY/ RHEL	K15	$\pi^{\pm}p$ Differential Cross-Sections	Data
GLASGOW UNIVERSITY/ RHEL	π^9	π^-p Differential Cross-Sections	Data
IMPERIAL COLLEGE/ SOUTHAMPTON UNIVERSITY	π^7	Studies of η ω and A_2	Data
CHURCHILL HOSPITAL/ BART'S MEDICAL COLLEGE/ RHEL	π^{11}	Radiobiological Experiments	Data

EXTERNAL EVENTS

IEE OXFORD DISTRICT MEETING

Wednesday 10 January
19.00
Lecture Theatre, Oxford
Polytechnic Headington

Mechanising the Mails

N C C de Jong and J Piggott.

EVENTS AT AERE

THEORETICAL PHYSICS SEMINAR

Monday 8 January
14.00
Conference Room Building 8.9

Two Magnon Processes in Anti-Ferromagnets

Dr J Ranninger/Institut Max von Laue-Paul Langevin, Grenoble.

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for
Insertions

GENERAL & SOCIAL NEWS

Tuesday 1600

INTERNAL & EXTERNAL EVENTS

Wednesday 1200

Room 42 Building R20
Rutherford Laboratory
Chilton Didcot Berks
Abingdon 1900 Ext 484

AN EARLY SPRING CLEAN IN THE PICKLING SHOP?

The R18 Pickling Shop will be closed from 8 January for decorating and general cleaning reopening on 22 January. Anyone who wants work acid cleaned during this period should contact Mr G R Fallon on Ext 315 who will arrange for the work to be done outside.

YOURS SINCERELY,
RON HECKEN

"I am writing to you all to convey the thanks of my wife and myself for your good wishes for the future extended to me. I was completely overwhelmed by your generous gift to me for my premature retirement. I shall miss you all but do hope that I shall be able to visit occasionally so as to keep in touch. What more can I say except once again "Thanks" and to wish you all a Very Happy and Healthy New Year."

OVERSEAS VISITS

Mr K H Souten, to CERN, 7 - 19 January for installation and commissioning of equipment for the ISR experiment.

Mr J D Milne, to CERN, 8 - 9 January for discussions about quadrupoles for 70 MeV Injector.

Dr L C W Hobbs, to Grenoble, 8 - 11 January for discussions on provisions of new instruments.

Mr P Mackay and Mr W G A Russett, to CERN, 8 - 19 January to work on ISR muon detector gas rigs.

Dr M M Curtis, to Copenhagen, 10 - 12 January for consultations and SEAS OS Committee meeting.

Mr G S Grossart and Mr R J Elsey, to the Netherlands and West Germany, 10 - 12 January for discussions with firms.

Mr L Phillips and Mr E Towndrow, to CERN, 14 - 26 January, for installation of equipment for muon experiment.

SOCIAL NEWS

CHESSTOURNAMENT

Five rounds completed and the sixth is now under way and guess who is in the lead. YES - Bill Turner with 5 points. However as at about the same round last year, Bill's lead is only $\frac{1}{2}$ point and right on his heels are Peter Craske and Jim Riddle each with $4\frac{1}{2}$ points. In the sixth round Bill plays Peter and Jim plays Alan Gilby so once again an interesting situation has developed.

RECORD SOCIETY

Tuesday 1 January, 12.40 p.m. in the Lecture Theatre.

Grieg's Piano Concerto in A Minor - Solomon with the Philharmonica Orchestra conducted by Herbert Mayas.

Much too well known to need any programme notes. Record Society concerts are open for everyone to attend. The Society is only a small group of music lovers who meet to select items and to provide someone to present the records being played.

MODEL RAILWAY CLUB

The next meeting of this recently formed club is at 12.45 on Monday 8 January in the Music Room of the Recreational Society's Hut. New members are welcome and further information can be obtained from Ray Roberts on Ext 254. This week's subject - Current Proprietary Model Railway Equipment.

HORTICULTURAL SOCIETY EVENING LECTURE

The Society has engaged Miss M G Hodgman, the Oxford Horticultural Adviser to lecture on "Photography in the Garden", a subject of interest both to the gardener and the photographer. The lecture will commence at 19.30 on Tuesday, 9 January in the Lecture Theatre. Tickets at 15p (including refreshments) are obtainable from Roy Brabben, R20, Valerie Goodwin, R1, or the Editor. All are welcome to attend.

CHRISTIAN FELLOWSHIP

All welcome to join us for a half-hour of Christian Fellowship at 12.30 on Friday 5 January in the Conference Room, R12.