CLRC Notices

The Enterprise Forum

15 June 10.30am, DL

David Hall How to treat them so they keep coming back, Delighting our customers

RAL Notices

RAL lectures

at 3pm. All lectures are held in the Pickavance Lecture Theatre

Dr Fransisco Diego, University College London

The magic of total solar eclipses

24 June

The lecture describes the importance of the Sun along history and the terrifying feelings of those who have take place and the best ways to observe them. Then a deals with the nature of the Sun and what we think is seen the Sun disappear in the middle of the day. It also demonstrations are used to explain how solar eclipses powering it deep below its surface. Some practical

Missing equipment

so closely connected with our environment on earth importance of knowing more about the solar activity, total solar eclipses is also presented to explain the totality. Some of the science behind the observation of appearance of the last 'diamond ring' at the end of day of the eclipse, which culminate with the vivid description of the events that take place on the

5084026. Anyone with any information please contact R65 7 April 1999, box markings include Famis receipt A Psion Series 5 8mb Palm Top computer. Delivered to Andy Napper ext. 6663



The Snowman

children aged 4 and upwards. tickets cost £12.50 each (instead of the normal £27.50). RAL Rec Soc have reserved 52 tickets for the 7pm performance of The Snowman on 27 November. The The dance/ballet oriented production is suitable for

<katie.hopgood@rl.ac.uk> - pick up times to be confirmed. If you are interested please contact Katie Hopgood on ext. 5552 A coach will be arranged from RAL to London return

DL Notices

DL lectures

at 2pm. All lectures are held in the Merrison Lecture Theatre

Genetically Modified food

Manchester Metropolitan University Professor Richard Moody, asers in science and industry

DL public lecture

Oxford University

Professor Colin Webb, Clarendon Laboratory,

Liverpool John Moores University Dr Tim O'Brien, Total eclipse of the Sun

Articles, ideas and letters are very welcome!

Articles to the Editor or Correspondent by 15th of the month

Rutherford Appleton Laboratory, Chilton DIDCOT Oxon OX11 OQX Tel: (01235) 445484 Fax: (01235) 446665

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A Monthly Newsletter for Council Staff

INSIDE THIS ISSUE

Jumping for Joy BaBar Newsreader visit Surface science success INSPEC and Library stack opened New Arrivals Research Systems Edwin Divall HP Visits Wild West Retirements Golf Noticeboard Snippets Jack Howlett

Engineers of

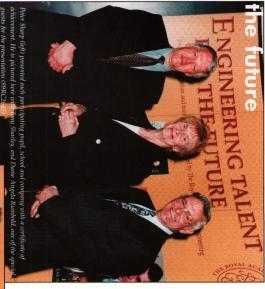
for the past six months to assessors. the projects they have been working on Engineering Education Scheme (EES) for a scheme operated by the the presentation and assessment day Southeast recently. They were part of The students presented the results of and colleges across the AL hosted twenty-six teams of lower sixth form students from schools

engineering is fundamentally concerned with problem solving," said Tony Sharley, choice on whether they would like to see what engineering involves and this scheme offers them an opportunity to decided to do engineering, but the the regional director of the scheme. enable them to appreciate that maths and other suitable subjects and bright students who are studying A-leve to solve a real problem. "We target pupils working with a local company enter this profession," he continued. will help them make a considered "These students haven't necessarily The projects provided a range of The scheme involves a team of four

engineering challenges and included production of a device which can

- investigation of the source of recording imperfections for EMI measure a round top road hump,
- design of a new auditorium facility within an existing listed boathouse in Music Services,
- development of a secure, economic and practical solution for securing ladders to scaffolding.

Portsmouth historic dockyard,





CERT

CUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNC

Surface science success



(University of Nottingham). Both are major users of DL's facilities (DL99/32/10) Council Medal from Professor Mike Chesters Warwick) receives the British Vacuum

or three years, sponsored by the conferences has been held every two RUSTI, and CCP3. The ISSC series of attended by 120 delegates, moved to DL where they toured the SRS, MEIS, For one day the entire conference, March to 1 April, provided an Laboratory's surface science facilities excellent showcase for Daresbury he 12th Interdisciplinary Chester College 29 Conference, held at Surface Science

Institute of Physics' Thin Films and

organising committee by Karen Richardson and the by David Norman and very capably Surfaces Group, to feature the and secretary, who were ably assisted Whittington, the conference treasurer organised by Tracy Turner and Jane Europe. The conference was chaired from the USA and continental breadth and depth of British surface science, with a few invited speakers



Hollington (right) (99RC2279) Anne (centre) with Sarah Corderoy (left) and Rita

Newsreader

can't be frightened for 36 hours! being tied to the mast while on watch in Serious stuff that sailing - she described three years sailing around the world. through an exciting few years where she television, Anne took the audience to her present high profile job in university and a first job on a newspaper inspiring talk about her career. From a storm and said it taught her that you and her career break when she spent worked for no salary just to get into tv, Central TV, gave a most interesting and on 14 April Anne Dawson, journalist and newsreader for t the RAL secretaries' meeting

described eminent people she had live on tv. had covered and talked a little about the interviewed and important stories she secretaries had been waiting to ask. She technical' side of reading of the news Anne answered all the questions the

giving talks like this one!) around her family and her home in North Anne now fits her career (including

systems, to name a few. This particular who came. and was greatly enjoyed by everyone 'Successful Women and their Careers' talk was the first in a series entitled every two months and cover a wide work of CCLRC, training, and electronic range of topics; various areas of the The secretaries' meetings take place

First collisions in BaBar

antimatter in the Universe?" there an excess of matter over ims to answer the question, "Why is Accelerator Centre in California, which experiment at the Stanford Linear reported from BaBar, a new in the particle physics when the first collisions community on 26 May

leaving only bursts of pure energy -but mysteriously a bit of matter was left over. This eventually made the antimatter meet they annihilate, each antimatter. When matter and contained equal amounts of matter and after the 'Big Bang', should have The early Universe, microseconds

Universe. Until today we haven't been able to create enough B-particles to see differences in behaviour between this effect, nor were detectors able to explain the huge imbalance in the matter and antimatter which will (B-bars) we hope to see the tiny particles and their anti-particles planets, gasses and stars of the Universe Ken Peach explained 'By studying B-

here was great excitement physicists, including a our Universe" About 70 UK particle

work tuning the May when, after hard rewarded at 5am on 26 scientists' efforts were of each particle. The particle detector, BaBar, will track the behaviou this B-factory the particles and their antiproduce millions of Bparticle B-bars. Inside been upgraded to particle accelerator has

first collision was seen colliding beams and the detector, the step forward in our understanding of a fantastic opportunity to take a huge record sufficient detail. BaBar offers us

where an existing Centre in California BaBar collaboration. It is in the international group from RAL, work Linear Accelerator noused at the Stanford



the detector that was build in the UK

umping for joy

U

the John Radcliffe hospital of one of the buildings at do for a long time. that Linda had wanted to in Oxford - was something foot abseil - down the side sponsored abseil. The 110-Campaign by doing a the Cancer Research raised over £600 for She said "I'm thrilled

even better" money for a good cause at wanted to do, and raising something I've always to raise that much. It's received; I never expected with the support I



INSPEC launched and Library stack opened

database for physics,
electronics and computing,
became available via the
world wide web, and CLRC took
advantage of this to extend the enduser service to customers' desktops.
Staff can now search INSPEC using a
web browser from their own computer.
To officially lamph this engine the

To officially launch this service the Library and Information Services invited Ray Lewis, Marketing Officer from the Institution of Electrical Engineers (IEE), to introduce INSPEC and demonstrate some or its useful facilities, Ray's talk included explanations of the content and structure of INSPEC, the bibliographic fields used and the specialist indexing fields.

The INSPEC launch coincided with the official opening of the new rolling stack at RAL. State of the art mobile shelving now glides smoothly along, providing easy access to the stock providing easy access to the stock andy Kurzfeld cut the ribbon and the guests took advantage of a delicious cake made to mark the occasion.

The events were well attended, and have resulted in an increase in registrations for INSPEC. For those unable to attend the talk, the Libraries have information packs containing the slides from Ray's presentation, and there is also a video of the presentation available for loan. If you would like any more information about INSPEC

or how to register, please contact the enquiry desks:
DL ext. 3397 library@dl.ac.uk> and
RAL ext. 5384 <lilbrary@rl.ac.uk>
The Library would like to thank all
the people who helped with the

Debbie Franks and Christine Ellis

arrangements for the event.



Andy Kurzfeld cuts the ribbon (99RC1839)



and Su Lockley cuts the cake (99RC1843)

Research Systems technical days 11 and 14 June, RAL

the latest software developments in the fields of data visualisation, meterology, medical imaging, physics, astronomy and acoustics.

The very latest releases of IDL (Data Analysis and Visualisation Environment), ENVI (Remote Sensing Image Processing Software) and ION (Web enabled IDL

wo new seminars at RAL will show

for the Internet) will also be on show.

The seminar day also includes user presentations, poster sessions, product demonstrations and a buffet lunch. If you would like to attend one of the seminar days please contact Research Systems International on 0.1344 760400 or email cutsales@rsinc.com>
or Jenny Beer at RAL on ext. 5618

A day in the life of Edwin Dival

every move, Edwin however has by having someone shadowing their little difficulty coping with being in the his star performance in the CLRC laser. Some people would be put off to Astra, CLRC's newest high power went armed with a notebook and pen Sprite, Titania and now Astra. So off I past six years, has been involved on a Edwin, who has worked at RAL for the spending the day with Edwin Divall given the opportunity to find out by wonderful experiments are going on inside those windowless labs! I was corporate video. I am sure he found already experienced fame at RAL for variety of projects associated with signs and wondered what weird and I have always been

quite early in order to turn on and all of these adjustments by hand in and timing of the beam pulses also marked on a monitor. The frequency up the beam with the aid of a cross sensitive to infrared light to help line laboratory uses CCTV cameras laser and focusing the beam involves laser along with lots of mirrors, lenses was a huge table with thousands of infrared light. Inside the laboratory overshoes along with goggles which first had to don clean-coats and first thing in the morning is to fire it up laser. Today is his turn to operate the equipment which powers the main spotlight once again. amazed how efficiently Edwin made required some fine tuning. I was so the beam lines up on the irises. Th adjusting the angles of these mirrors and alignment irises. Lining up the holes, upon which was mounted the protected us from the powerful and adjust the beam. To do this we laser, therefore one of his main tasks warm up some of the small laser As for many staff, Edwin's day starts

such a complex array of equipment.
Edwin has to ensure that he laser is
ready for when the users arrive. The
set up went smoothly until a switch
broke on the Pockels cell driver, a piece
of equipment linked to a high voltage

power switching system. This system is an amazing piece of kit as it precisely opens an optical gate, letting through just one laser pulse, the gaps through just one laser pulse, the gaps between pulses being just 3 metres. This is very little, as one pulse could travel round the entire world seven it mes in the space of a second. After spending time dismantling the equipment and putting it back together the again the problem was solved and the laser fired up once again.

the time of my visit, one target area was in use by researchers from the carrying out experiments into the basic equipment that was needed for a 3rd to carry out some design work for new okay, we went back to the control room Edwin was sure that his users were merely to characterise the beam in they had already carried out had been the protons repel. Much of the work This creates a Coulomb explosion as electrons to leave two positive nuclei laser pulse. The laser strips away the disassociate when hit by an intense physics of how hydrogen molecules the latter target area. They were Edwin was responsible for supporting Belfast and University College London. experimenters from the University of University of Reading, the other by eadiness for the experiment. Once Astra supports two target areas. At

beam. Edwin and his colleagues are one point to adjust the power of the effect the alignment of the beam. We also monitor the beam stability, a bank of CCTV monitors. He could a close eye on what was happening via amplifier. Although we were out of sight of both the target areas, and the the area via computer. currently developing a system to did have to re-enter the laser area at disturbance in the laser area that can forth between rooms, it prevents position and intensity from here. Not control much of the laser from outside only does this save walking back and laser room area, Edwin could still keep

After a very busy morning, things quietened down a little in the afternoon. Edwin checked on work to develop new warning lights for the third amplifier. We also checked on progress with Edwin's users and became involved in a debate over some of the results they had acquired. Edwin gets to spend time with a number of different user groups working on different experiments on a regular basis. I enjoyed my day with Edwin a great deal. It's refreshing to find out more about what is happening on this huge site with all its closed doors and dark rooms.

Mark Jackson





New appointments

Stuart Hopley, Finance Director



as the new Finance Director. Stuart Birmingham in 1970 with a merce in Economics and Accountancy, graduated from the University of

to work in consultancy, focusing on business in finance, throughout the Corporation, held a number of posts of increasing seniority subscription television and IT. He left in 1997 broadcast engineering and research, working in television and radio production, process re-engineering and systems Engineering Cost Accountant in 1979 where he After a series of posts he joined the BBC as

cricket. He is married with one daughter, 19. antiques, the Times crossword and Lancashire Outside work his interests include history

Paul Hartley, Human Resources

Daresbury and I'm looking forward to velcome by everyone at RAL and at nterests. "Twe been made to feel very vatching and bell-ringing among his iged daughters and lists music, birdmainly rusty'. He has three schoolanguages, which he claims are now cademic background is in modern pent several years at Dounreay. His ingineering business, and previously from AEA Technology at Harwell, where he was HR Manager for their Nuclear aul Hartley joins CCLRC

on managing personnel matters in a overall objectives. Watch this space! way which supports an organisation's 50, what's the difference? Human now be known as 'Human Resources vorking with you", he said. With Paul's arrival, 'Personnel' will



Retirements

Sylvia Fones

Moira Henderson

31 March marked the last day of a 35-year career for Personnel Officer. Sylvia who, for the last five years, was CCLRC's Chief

along with the rest of ready to house the Personnel team R71 - a new, modern building - was building's destruction. By this time, heralded the first move in the chance to drive the bulldozer which Sylvia was jubilant when she had the hot, rabbit warren so undoubtedly those who worked there as a dark, demolished. It has been described by situated in R20 which has since been that time the Personnel Division was career in Personnel, and for much of Officer in 1993. She spent her entire her final role as Chief Personnel her way through many positions to to the present Band 8 - and worked SLaboratory as an AA – equivalent

Laboratory and the Rutherford amalgamation of the Appleton NIRNS and progressing through the her, starting in the early days of five Chief Personnel Officers precede Over the years, Sylvia saw at least

> She is an avid golfer. many years and supported the contribution to the Laboratory's Laboratory to form RAL and in more Council on numerous golfing events successful Industrial Relations for later, CCLRC. She made a major recent times becoming SERC and

all her friends and colleagues. helped so many. She will be people and during her time she the Laboratory. She knew many remembered with great warmth by Sylvia was a fundamental part of

hopes to work, on a part-time voluntary basis, for the Macmillan never been able to swim, she has also intends to travel more, and received her 10-metre badge! She taken lessons and has already watercolour painting. As she has Since retiring, Sylvia has taken up

to those I had no chance to see day so memorable and to say goodbye leaving gift, to those who made my last those people who contributed to my arrangement Moira says "I would like to thank all

for Milletts garden centre and a plant RAL Safety Officer Martin Evans to say goodbye and to wish her well. Colleagues past and present gathered with the Health and Safety Group. Moira Henderson retired at the lend of April after nine years

presented Moira with some vouchers



from H&S who joined Moira for her leaving do Beaton and Alan Hodges – all ex-colleagues From left to right: Eric Hartley, Norman

Roger Evans

the long-serving Infrared Ultraviolet and decorate the house - I'm hoping to Explorer satellite. In 1977 he moved to moving in 1974 to the Appleton spent the last 12 years in computing. and made it clear that Roger has only make the presentation to Roger Evans Brian Davies came out of retirement to change directions back to science". Central Laser Department where he Laboratory in Slough working on IUE Laboratory doing astrophysics before Before that Roger worked at Culham I'm not retiring to do the gardening Roger' but, as Roger himself put it, The banner in the conference room proclaimed 'Happy Retirement



I'll miss you all". "I'll do my academy award speech now and thank everyone", he said, "I have computing in 1987, where he worked spent 10 years before moving to really enjoyed my time at the Lab and a bouquet of flowers and, together, Roger's wife Janet was presented with predominantly on the Cray computer lanet and Roger unwrapped the TV. (hence the crayfish jokes!).

bouquet (99RC2415) Roger and his wife, Janet, pose with Janet's

visit by a group of students from Vrie University, Amsterdam: Daresbury Laboratory recently hosted a

then onto the confocal microscope at an overview of the control systems and Control Room where John Balmer gave where she is manager of this group healthy cell tissue are being studied. station 13.1, where both cancerous and student. She then took them into the SR University whilst she was a post-doc visitors as she spent a short time at Vrie Anna felt quite at home with the which provides support for research the Structural Biology Laboratory, Anna Lawless took her party to the beamlines in two introductory talk, the students toured some of

> detectors are set up Dr Mirozlav Papiz on station 9.6 and,

explained how

The students tour the SRS (DL99/44/8)

his own station where X-ray diffraction by Dr Steve Bennett, toured station 3.1 hands-on exhibits. The other party, led into the Daresbury the visitors went after visiting one o chemistry. Steve also took them to see wavelengths in the study of atmospheric which are used to select the right where they looked at the gratings Science Centre to sample some of the two other stations,

thanks to all the staff who willingly Marg Jacks would like to add her making their visit so worthwhile. Heijna, thanked everyone involved in The organiser of the trip, Maurits

UK study tour. Microstructure Facility as part of an Central Laser facility and the Central Morso Gymnasium toured the foreign students. The 28 Danes from RAL also hosted a visit from some



the students (99RC1975)

Protessor Brian Fender visits RAL

is used to study atoms on surfaces.

S(E)RC's Science Board, Brian has played an important role in realising the funding for ISIS. His involvement role as the chief executive of HEFCE (the Higher Educ with ISIS was renewed in his present 1970s and subsequently Chairman of Planning Committee in the late s chairman of the SNS Science



and upgrades including OSIRIS, TOSCA, MAPS, and PRISMA, as well university researchers, overseas collaborative ventures between have been funded through JREI by the slow muon facility and the three years ago. Several instruments the OST, launched the very successful National High Field NMR Laboratory Joint Research Equipment Initiative

and the NMR Laboratory, and to renew old friendships. He clearly admired the It was therefore very appropriate to welcome Brian to RAL for a tour of ISIS the facility discussed future plans for developments made to ISIS and

partners and ISIS staff.

Investors in People - results of staff survey

scientists were included. Part-time staff, students and visiting returned and 97 people were Bands and a wide range of posts. from all departments, representing all nterviewed. Interviewees were drawn aple - 667 questionnaires were hank you to everyone part in interviews with questionnaires or took

against the five management processes framework are summarised below: which make up the Investors and not so good news! The results As we expected there is good news

- at the organisation and department make sure that plans are regularly Planning - CCLRC is in the early levels needs to be strengthened. reviewed. The link between planning documents. All areas now need to developed excellent planning others, and some departments have departments are more advanced than plans and training plans. Some stages of pulling together business
- the broad aims of the organisation and how they contribute to them. They are also aware of the training and Communication - Staff understand

and development, this is not always evidence of commitment to training feedback they give staff on their in the quality and frequency of the effectively communicated. performance and, although there is

> employees being encouraged to training courses are available to staff, need to be improved. Many appropriate sound, although some local arrangements

develop themselves. There is good and there are many examples of

preferably more frequently. managers at least once a year and and development needs with their opportunity to discuss their training is essential that all staff have the these discussions are not happening. It needs is variable, and in some areas discussing training and development individuals in all departments but the needs are reviewed for groups and Performance Reviews - Training effectiveness of the APR process for

Management Effectiveness

which is being looked at corporately. key area for improvement and one develop the necessary skills. This is a the support and opportunity to and ensure that managers are given standard of management effectiveness organisation needs to develop a and some very bad ones! The There are some very good managers them. However managers vary greatly development opportunities available to

organisation, although the objectives had a positive impact on the activities with staff after the event. not reviewing training and development always clear and many managers are for training and development are not evidence that the training received has

working towards IiP. Our progress rate in People during the next 6-12 month hard work and commitment, we of comparable size and complexity is not dissimilar to other organisations in the 18 months since we started on. We have made considerable progress cannot become a recognised Investor There is no reason why, with continued who typically take 2-3 years to achieve processes which we now need to work are also weaknesses in some key throughout CCLRC. However there evidence of good management practic management processes in place and To summarise, there are good

Rosie Sherry



Jack Howlett 1912-1999

Jack Howlett, the first and only Director of the Atlas Computer Laboratory died recently aged 86.



that time head of the division. offer came from that well known Physics Division. Incidentally, the job computing section of the Theoretical Atomic Energy Research Establishment's project and led him to take charge, in 1948, of what became the Harwell contribution to the atomic bomb calculations made a valuable calculating engine. The group's then Europe's most powerful analogue machine which was probably mechanical 'differential analyser', an University group which built a was a member of a Manchester and analysis. From 1940 until 1946 he engineers the benefits of computation Scottish Railways - introducing to worked, pre-war, for London Midland he went on to read mathematics at Russian spy, Klaus Fuchs, who was at Manchester University. He then Educated at Stand grammar school

to keep the UK in the computer machine of similar power was needed computer called Stretch. A British embarked on the design of a new powerful computers and IBM design, there was a need for much more Energy Laboratory (RHEL). For reactor both Harwell and the Rutherford High Mercury computer which was used by In 1958 Harwell acquired a Ferranti



the UK universities! needs of Risley, Harwell, Culham and business - the Mercury was a massive planning the Atlas project. The aim Harwell Group were involved in University and Ferranti, Jack and the leap forward. With Manchester

96Kword drums and 18 magnetic tape large trucks and took a month to install - a massive machine for those in the spring of 1964. It came in 19 employee for quite a while. Jack the new laboratory and its only days with 48K words of main memory 1963. The Atlas machine was installed building work started on the current Atlas Centre, which was completed in acquired a piece of land in 1962 and In 1961 Jack became the Director of

groups. About 20 current ITD staff systems and applications programming a large operations group, and both the ground (Paul Bryant and Bob moved across to help get the project of decks! Hopgood are still with us!). There was About 25 of the old Harwell Group

> and Martin Guest). even reached Daresbury (Vic Saunders Others have moved departments, some were members of the Atlas Laboratory

of current computer-based forecasts. application work in finite elements, Meteorological Office led to a weather infancy. Collaboration with the and text analysis which was in its crystallography, time-series analysis orecasting model which forms the basis As well as nuclear physics, there was

an ICL 1906A which ran in parallel was extended to its current size to host engineers who came to see him. The the array of famous scientists and visitors book bears ample witness to employee Jim Hailstone remembers with Atlas for a while). Atlas ran until 1973 (the Atlas Centre privilege". The Atlas Laboratory's been a member of Jack's Atlas Jack, "He was loved and respected, he and overseas visitors. A former Atlas Laboratory attracted a stream of British Laboratory is recognised as a knew everyone by name and to have Under Jack's direction, the

committee on computer networks for consultant to the computer company two years and continued to work as a became chairman of the national ICL, editing its technical journal Rutherford Laboratory. Jack then Atlas Laboratory merged with the On Jack's retirement in 1975, the

he married in 1939, four sons and a daughter. He is survived by his wife Joan, who

RAL Golf Society Society Day Competition

refreshments all excellent. No Weather, course (nice fairways, fast true greens), company and actually start to play golf! complaints really, until that is you

trophy - boy! has his handicap been cut!) (one of whom walked away with the good, including five new members Seriously though the turnout was

watching the player jump up and down, lean this way and that in a vain line. Been there, got the T-shirt! game, I made a point of taking a attempt to will the ball off its disastrous AGAIN on the same hole and funny about a ball finding the water shouldn't laugh but there's something bad, some indifferent and some funny. I gander at others from various vantage points on the course. Some good, some As well as concentrating on my

Club for taking good care of us. pleasant company and Lyneham Golf support, all the players for their Thanks to the RAL Rec Soc for their

with 76 points

who ended up taking two more shots than Dick, so Dick Carter won the rush things. This happened to Tony

match on the 1st extra hole

the 1st once more. They were kindly and the match was all square, so off to

The 18th wasn't Tony's favorite hole

on the tee, which usually means you allowed to play through by the players

Nearest the pin - Adrian Morris

Hole in 2 - Neal Grafton and Dave

The 1998 Knockout Championship was finally decided on 13 May when

Scotland.

the Inter-Establishment tournament in

year's knockout championship and at handicap has been adjusted by -1. Congratulations to Dick who's Hopefully I'll see some of you in this

11th & 13th, Tony fought back again taking the 15th, 16th & 17th to be 1-up with one to play. Dick again took a lead winning the match at the halfway mark. then Tony won the next 3 to level the 19th hole. Dick was 3-up after 6 holes Dick Carter beat Tony Baker on the

Congratulations to our winners:

Runner up - Derek Howe with 75 the Stableford Trophy - Barry Brett First place and this year's holder of

Longest Drive (by miles!) - Derek

Good golfing



RAL Golf Section Secretary <n.d.grafton@rl.ac.uk> Neal Grafton

of large national PUST projects: round of its scheme for the funding PPARC have announced the 1999 National Awards Scheme for PUS

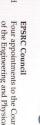
- national relevance; unded science areas and must have promoting or teaching of PPARCprojects must relate to the
- -£10K to £100K per project;
- in the promotion of our science have good links with active PPARC funds must result directly researchers; area, and bidding 'consortia' must anyone can apply, however use of
- communicators. between scientists and teachers or partnerships are encouraged, e.g.

tor support by mid November 10 July. Short-listed applicants will be asked for full business plans Short applications are required by

> go to PPARC's 'Small Awards pilot projects (£250 to £10K) should Applications for small, local or

BBSRC Council

been appointed to serve until 31 March 2002, and Dr John Padfield the Biotechnology and Biological Sciences Research Council have Atkinson and Dr David Shannon have been re-appointed. March 2002. Professor Bernard (University of Manchester) have been announced. Dr Margaret serve from 1 December 1998 to 31 (CE, Chiroscience Group Plc) will and Professor Keith Gull Stanley (University of Cambridge) Five appointments to the Council



of the Engineering and Physical Four appointments to the Council further three years Hall has been re-appointed for a for four years. Professor Wendy John's College at Oxford), will serve appointed to serve for three years Sciences at Bristol), have been Institute in the Mathematical Gunawardena (Basic Research Glasgow) and Dr Jeremy Kocienski FRS (University of been announced. Professor Philip Sciences Research Council have and Professor Keith Burnett (St