REPORT OF DR. LEE'S PROFESSOR OF CHEMISTRY FOR THE YEAR ENDED

31st JULY 2001

At year=s end, one of the more tangible developments in Chemistry is the rapidly emerging framework of the new Chemical Research Laboratories across the road, for which the ground-breaking took place in September 2000. While the PTCL will only be a minor beneficiary of the new building, nonetheless the prospect of the additional space is most welcome as we enter a new year at record levels of research student numbers and of research funding.

We were delighted to hear of Professor Paul Madden=s election to the Royal Society, which brings to five the number of research-active FRS=s in the PTCL. Professor Gus Hancock was awarded the prestigious 2000 Italgas Prize for Innovation in Science and Technology, while Dr. Colin Bain was honoured with the Royal Society of Chemistry Corday-Morgan Medal and Prize for the year 2000, joining other previous recipients in the Department of this recognition of outstanding younger chemists. We were proud to hear of Professor Graham Richards= appointment as Commander of the British Empire in the Queen=s Birthday Honours. Professor John Simons was selected to give the Royal Society Humphry Davy Lecture 2001, and was also chosen the Burton Memorial Lecturer for 2001 at Kings College London. Among our younger members Angus Gray-Weale was awarded a Junior Research Fellowship at Jesus College, and Nathan Lawrence, who did his Part II and is now working towards a D.Phil. with Professor Richard Compton, was awarded the Royal Society of Chemistry Ronald Belcher Memorial Lectureship, recognising outstanding achievements by graduate students.

On a different note, we were sorry to hear of the death of Mr. Andy Whiting in March 2001. Mr. Whiting joined the Department=s Mechanical Workshop in 1944 and retired a full fifty years later, including some twenty years as its Supervisor. As generations go others come, and we were happy to see Mr. Roger Bowler and Mr. Paul Mitchell take up their duties as Supervisors in the Mechanical Workshop and the Lab Services Unit respectively.

The Department has also seen several prestigious appointments. Professor Peter Atkins was appointed Chairman of the new IUPAC Committee for Chemical Education, which has worldwide responsibilities for coordinating and developing chemical education and the public appreciation of chemistry. Professor Keith McLauchlan was named Eminent Scientist at the Institute of Chemical and Physical Research in Tokyo where he lectured on several occasions over the year. Several PTCL colleagues have left us for positions elsewhere B Dr. James Davis was appointed to a lectureship in electrochemistry and analytical chemistry at the University of Surrey, Dr. E.G. Robertson returned to Australia, having been awarded an Australian Research Council Fellowship as well as a Logan Fellowship at Monash University, Dr. Sarah Wilsey, a Glasstone Research Fellow, was appointed to a lectureship at Kings College London, and Dr. Mark Wilson, a Royal Society University Research Fellow, was appointed to a lectureship at University College London. Dr. Stephen Ashworth, a former D.Phil. student with Professor John Brown, was appointed to a lectureship at the University of East Anglia.

During the year we have been fortunate in hosting several distinguished lecturers. Professor Dennis Evans of the Australian National University, Canberra kicked off with the Boys-Rahman Lecture of the Royal Society of Chemistry, while Dr. Bill Price of the Royal Institute of Technology in Stockholm delivered the Rennie Lecture of the Royal Australian Chemical Institute. We were very happy to host Professor Peter Toennies of the Max Planck Institute for Fluid Dynamics, in the Hilary Term, as our Hinshelwood Lecturer

for the year 2001. His six lectures on *Novel Spectroscopies using Helium Atoms, Clusters, and Droplets* were delivered with humour and perception and drew large crowds right to the very end. A Half-Day Symposium of the Faraday Division of the Royal Society of Chemistry, entitled *Spectroscopy in Action: Molecular Dynamics and Structure*, held in our lecture theatre before a packed audience, was opened by this year=s Faraday Lecturer, Professor Dick Zare (Stanford University), a former Hinshelwood Lecturer who has been a long-standing friend of the Department; he was followed by the Tilden Lecturer, Professor Klaus Müller-Dethlefs (University of York), with supporting lectures by Dr. Helen Fielding (Kings College London) and Dr. Martin Cockett (University of York). In April the new Dr. Lee=s Professor delivered his Inaugural Lecture, *Soft Matter: from Hieroglyphics to Biolubrication*, indicating some of the new directions he intends to pursue.

Research activity has continued unabated. In these days of belt-tightening it is particularly pleasing to note that grants awarded during the year totalled £3.2M, a clear high for the Department; this included grants of £0.45M to Professor Graham Richards, £0.4M to Dr. Colin Bain to set up the new departmental surface characterisation facility (now partly running and being looked after by Dr. Rob Jacobs); and £0.83M to Professor Jacob Klein. At the same time, at £2.3M our research grant income over the year is a full 25% larger than even the previous year=s record levels. In particular, at the year=s end, we looked forward with keen anticipation to welcoming 29 starting graduate students, a new and promising high for the Department.

Once again we have had a distinguished crop of visitors. In addition to our regulars, Professor Ian Beattie (University of Southampton) and Professor Itamar Burak (Tel Aviv University), we were happy to host Professor Zehra Akdeniz (Istanbul) and Professor Paul Brint (University College Cork). From even further afield, we were happy to welcome Professor Walter Balfour (University of Victoria, B.C.), Professor David Chandler from the University of California at Berkeley, and Professor John Lekner from Victoria University, New Zealand, who interacted with many of us during his year here. Other welcome visitors included Professor Tom Dyke (University of Oregon), Professor Peter Harrowell (University of Sydney), Professor Mineo Hiramatsu (Meijo University, Professor S.K. Lai (National University of Taiwan) and Professor Greg Voth (University of Utah), as well as a brief visit by Professor Jacob Israelachvili from the University of California at Santa Barbara.

My first year in the PTCL was marked by a warm welcome and cooperation from all members of the Department, for which I am immensely grateful. I would like to thank in particular Professor Gus Hancock who was Head of Department in the interim period between the two Dr. Lee=s Professors, and who >delivered= the PTCL in such very good shape.

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