



Foreign and Commonwealth Office

London SW1A 2AH

9 July 1990

Dear Charles,

Kapitza Foundation *Elap*

Thank you for your letter of 26 June.

We agree that the Kapitza Foundation, though still embryonic, looks as if it may become a sensible and worthwhile project. The Russians have approached the Prime Minister before formulating a precise proposal in order to gain political support to help to get the project off the ground.

The enclosed copy of Kapitza's entry in the Dictionary of National Biography explains his connections with this country. The Russian aim seems to be to endow a number of scholarships through a Trust to be set up at Cambridge University, to facilitate "scientific and industrial cooperation". The house in Cambridge where Academician Kapitza lived would be part of the Soviet contribution to the endowment.

Academician Kapitza's son has been in touch with George Guise in the No 10 Policy Unit. There have also been contacts between the Soviet Academy of Science and the Royal Society and Cambridge University. However, the wholehearted support of Cambridge University cannot be taken for granted; when we spoke to the Professor of Physics (who is also a fellow of Churchill) he was unsighted. His first reaction was that a new scheme might not offer much that was not provided by existing exchange programmes.

If the scheme gets off the ground it will bring perhaps ten graduates a year from Soviet Universities to this country. In areas such as economics and management, where the Soviet Union has long been cut off from Western thinking, they could be valuable. We therefore recommend that the Prime Minister should give the proposal her general support. But it would be important to avoid the impression that the Government might be ready to offer funding, and to make it clear that the organisation of the trust is for the Russians and the academic community.

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It might be giving the idea too much prominence to make an announcement out of the blue. If you agree we could let the Russians know that the Prime Minister welcomes the idea and that when they are ready to announce something, she will be happy to make her support public. We would make sure that the Russians understood that there was no prospect of Government money.

I am copying this letter to Steven Crowne (DES) and to Sonia Phippard (Cabinet Office).

Yours ever,

Richard Gozney

(R H T Gozney)
Private Secretary

C D Powell Esq
10 Downing Street

KAPITZA, PIOTR LEONIDOVICH (1894-1984), physicist and Nobel prize-winner, was born in Kronstadt (near St Petersburg) 9 July 1894, the younger son of General Leonid Petrovich Kapitza, a military engineer, and his wife, Olga Ieronimovna, daughter of General Ieronim Ivanovich Stebnitski. His mother was a specialist in children's literature and folklore. He was educated at the local 'Realschule' from which he graduated with honours in 1912. He then entered the electrotechnical faculty of the St Petersburg Polytechnical Institute where he was appointed to a staff position after graduating in 1918. In spite of the difficult conditions of World War I, the revolution, and the civil war, he took an active part in the research activity initiated by his teacher A. F. Joffé and soon acquired a reputation for his skill and originality. In December 1919 he lost his father and his young son and in January 1920 his wife and newly born daughter in the prevailing epidemics and, partly in order to take his mind off this devastating blow, Joffé arranged for him to take part in a Soviet mission to renew scientific contacts with western Europe. He and Joffé went to Cambridge in 1921 and Sir Ernest Rutherford (later Lord Rutherford of Nelson, q.v.) agreed to have Kapitza stay in the Cavendish Laboratory for a winter to gain research experience. Rutherford was much impressed by Kapitza's success in tackling his first problem and a very cordial relationship was soon established between them. As a result Kapitza stayed in Cambridge for thirteen years rather than just for a winter as originally intended.

Some of his work on alpha particles required the use of high magnetic fields and Kapitza developed special techniques for producing such fields only momentarily, lasting long enough to measure what was needed, but not long enough to overheat the magnet coil. But once the equipment for producing these fields had been developed, Kapitza's interest shifted from nuclear physics to the study of magnetic phenomena in the new range of high fields available. Such properties become more interesting at very low temperatures and Kapitza developed ingenious methods of liquefying hydrogen and helium to cool specimens to temperatures close to the absolute zero. To house all this new activity more space was needed and Rutherford persuaded the Royal Society to provide £15,000 from the Ludwig Mond bequest for building what came to be known as the Royal Society Mond laboratory in the courtyard of the Cavendish Laboratory. The new laboratory was opened in 1933.

Kapitza rose rapidly in the scientific es-

tablishment. He gained his Ph.D. in 1923; in 1925 he was appointed assistant director of magnetic research and was elected to a fellowship at Trinity College (honorary fellow, 1966). In 1929 he was elected FRS and also a corresponding member of the Soviet Academy of Sciences (he became a full member in 1939) and in 1931 he was appointed Royal Society Messel professor. However, he had little opportunity to exploit the facilities of his new laboratory, for in the summer of 1934, following a routine holiday visit to the Soviet Union, he was refused permission to return to Cambridge. In spite of many appeals, the Soviet authorities would not reconsider their refusal and eventually he agreed to become director of a new Institute for Physical Problems in Moscow, built specially to his requirements. During his thirteen years in Cambridge Kapitza became somewhat of a legend, not only for the originality of his scientific achievements, in which he brought his early engineering training to bear on problems of physics, but also for his ebullient and sometimes eccentric personality and for the stimulating scientific discussions at his personal seminar, which was known as the Kapitza Club. He can be said to have laid the foundations of a new school of low temperature and solid state physics in Cambridge, which has continued ever since.

In his new Moscow Institute, Kapitza changed the direction of his personal activity from magnetism to study of the strange behaviour of liquid helium at very low temperatures. In the course of a series of ingenious experiments he discovered superfluidity and provided the basis for a fundamental theory of quantum liquids developed by Lev Landau, the Institute's house theoretician. He also made important contributions to the techniques of gas liquefaction and his turbine method of liquefying air became important during World War II because of its relevance to the bulk production of oxygen for the steel industry. Towards the end of the war Kapitza was briefly in charge of the Soviet oxygen industry. In 1946, however, his fortunes again suddenly changed. Probably mainly because of his criticisms of L. P. Beria, the notorious chief of secret police who headed the initial stages of the Soviet atom bomb project, Kapitza was suddenly dismissed from his Institute, allegedly for shortcomings in his oxygen work for which only a few months earlier he had received a high government decoration.

Though dismissed he was not arrested, and for the next seven years lived at his dacha (country house) outside Moscow where he managed

to continue his scientific work, but yet again in a new direction. He set up a laboratory in some outouses of the dacha and his main effort went into developing powerful new microwave sources for the intense heating of plasma. Effectively, he switched from very low to very high temperature physics. After Stalin's death in 1953, Kapitza was reappointed to his Institute and continued this plasma work to the end of his life. His aim was to reach temperatures high enough to produce thermonuclear fusion, but although he made interesting contributions to plasma physics he did not achieve his aim. Thermonuclear fusion has indeed not yet been achieved anywhere, but powerful machines such as the Tokamak seem to offer greater promise. In the course of his fifty years in the USSR, Kapitza became an important figure in the Soviet scientific and cultural establishment and often courageously promoted liberal causes. His work was recognized by many awards and academic honours both in the USSR and in the West, culminating in the Nobel prize in 1978.

In 1916 he married Nadezhda Kyrillovna, daughter of General Kyrill Kyrillovich Chernosvitov but, as already mentioned, she died in 1920. His second marriage in 1927 was to Anna Alekseevna, daughter of Admiral Alexei Nikolaevich Krylov, mathematician and naval architect, and she and their two sons survived him. Kapitza died in Moscow 8 April 1984.

[D. Shoenberg, *Biographical Memoirs of Fellows of the Royal Society*, vol. xxxi, 1985; private information; personal knowledge.]

DAVID SHOENBERG

KAY, (SYDNEY FRANCIS) PATRICK (CHIPPINDALL HEALEY) (1904-1983), ballet dancer. [See DOLIN, SIR ANTON.]

KEATING, THOMAS PATRICK (1917-1984), artist, restorer, and faker, was born 1 March 1917 in Forest Hill, London, the fourth child in the family of four sons and three daughters of Herbert Josiah Patrick O'Brian Keating, a house painter, and his wife, Louisa DeLieu, a charwoman. He attended the local infants' school in Dalmain Road, where he learned to draw, and at the age of seven ran away to stay with his maternal grandmother in Eltham, Kent. There he attended Roper Street School. Three years later he returned to Forest Hill and Dalmain Road School where he won a paintbox for swimming a width of the local baths underwater. Painting and drawing became his obsession.

Leaving school at fourteen Tom Keating took a variety of jobs, including working as a lather-boy and as a lift boy at the Capitol cinema in the Haymarket, before joining his father as a

decorator. It was there he learned decorative skills and how to mix paint. In the evenings he attended art school in Croydon and Camberwell.

During World War II Keating served as a stoker in the Royal Navy and saw service in the Far East and on Russian and Atlantic convoys. After his ship was torpedoed he was invalided out of the navy and, at the age of thirty, he became a full-time art student at Goldsmiths' College, south London, on an ex-serviceman's grant. He failed his exams twice. He had wanted to teach and without a diploma that career was closed to him. It was the start of his bitterness towards an establishment he always viewed as hostile.

He joined a restoration studio in London and while there was asked to make copies of a number of paintings. He was later horrified to discover them being sold as genuine. It was then that he decided to flood the market with fakes (or Sexton Blakes as he called them in his own variant of cockney rhyming slang) as a way of striking a blow for impoverished artists against rich dealers and collectors and of getting back at a world which he felt was both shunning and using him.

During the next twenty-five years he worked as a free-lance restorer, his most important commission being the two years he spent restoring the Laguerre murals at Marlborough House. But all the time he was painting both in his own style and in that of other artists including Rembrandt, Constable, Kreighoff, Degas, Renoir, and Turner. He later admitted to putting more than 2,000 fakes in the style of more than 130 artists into circulation. He released them on to the market gradually either by giving them away, selling them to recover the cost of his materials, or putting them into small auctions where they would not arouse suspicion.

Keating's faking became public knowledge in 1976 when it was revealed that thirteen water-colours attributed to Samuel Palmer [q.v.] were not by Palmer. Keating wrote to *The Times* and admitted he had done them. The newspaper hunt to find him (he was touring the West Country on his motor cycle) and subsequent revelations turned him into a folk hero. His trial at the Old Bailey in 1979 was stopped because of his ill health, and he returned home to Dedham to continue painting. It was important, he said, that his faking should be discovered in order that the 'joke' should become public knowledge. 'If I had wanted to be a real faker', he later said, 'you would never have heard of me.' He also said that fooling the experts was his greatest joy in life; the thought of it made him helpless with laughter. Keating's object was never to make money. He was generous to a fault and remained poor throughout his life.

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10 DOWNING STREET
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From the Private Secretary

12 July 1990

Dear Richard,

KAPITZA FOUNDATION

Thank you for your letter of 9 July about the Kapitza Foundation. I agree that you should speak to the Russians in the sense of the penultimate paragraph of your letter.

I am copying this letter to Stephen Crowne (Department of Education and Science) and to Sonia Phippard (Cabinet Office).

*Yours sincerely,
Charles Powell*

CHARLES POWELL

R H T Gozney Esq
Foreign and Commonwealth Office

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