

A New Start in Britain

*Science in Exile: Imperial College and the Refugees from Nazism—A Case Study**

BY CHARMIAN BRINSON

Following on from the Law on the Reconstruction of the Civil Service of 7 April 1933, which was passed within weeks of Adolf Hitler's accession to power and which applied to the German universities as state institutions, large numbers of "non-Aryan" and "politically unreliable" academics began to be dismissed from their posts. Though exact figures are notoriously hard to establish, it has been estimated that over 1,200 academics had already been dismissed between 1933 and 1935,¹ around half of whom then proceeded to emigrate from Germany,² including half a dozen Nobel prize-winners and many other scientists of international reputation. The promulgation of the Nuremberg Laws in 1935, the Nazi annexation of Austria in March 1938 and the "Crystal Night" Pogrom of November 1938 all added extra urgency to the exodus of the scholars. Thus, by the summer of 1939, the total numbers of German-speaking émigré academics had reached around 2000.³

So serious did the situation for German science appear, in fact, that Max Planck, the Nobel prize-winning physicist and president of the Kaiser-Wilhelm-Gesellschaft, petitioned Hitler to call a halt to the dismissal of scientists. According to Planck's own later account of their interview, Hitler replied that he had nothing against the Jews, only against the Communists—but that all Jews were Communists—and then flew into such a rage, that Planck was unable to proceed further.⁴

*This article is based on the inaugural lecture delivered by the author on 15 December 2004 at Imperial College London. Grateful thanks for access to archive material as well as for information and assistance are due to the Imperial College Archives, the college's archivist Anne Barrett, and Catherine Harpham; the Bodleian Library, Oxford; the Council for Assisting Refugee Academics (formerly Society for the Protection of Science and Learning); the British Association for the Advancement of Science; the Imperial War Museum and the heirs of Sir Henry Tizard; the Politisches Archiv des Auswärtigen Amtes, Berlin; Professor Igor Alexander; Mrs Magda Czigany; Professor Walter Hayman; Professor Boguslaw Zegarliniski; Professor Charles Rees; Professor and Mrs Stanley Nyburg; and Ms. Sue Irwin.

¹For example, see Gerhard Hirschfeld, 'Die Emigration deutscher Wissenschaftler nach Großbritannien', in Gottfried Niedhart (ed.), *Großbritannien als Gast- und Exilland für Deutsche im 19. und 20. Jahrhundert*, Bochum 1985, p. 118.

²See Norman Bentwich, *The Rescue and Achievement of Refugee Scholars: The Story of Displaced Scholars and Scientists 1933–1952*, The Hague 1953, p. 3.

³See Walter Adams, 'The Assistance of Academic Refugees', in *The Scientific Worker*, vol. 11, no. 2 (1939), pp. 43–48, which gives the numbers currently on the SPSL register as 1370 from Germany, 463 from Austria, 107 from Czechoslovakia, 194 from Italy, 78 from Spain and 14 from Hungary.

⁴Max Planck, 'Mein Besuch bei Adolf Hitler', in *Physikalische Blätter*, vol. 3 (1947), p. 143.

Britain served as an initial destination, at least for around half the displaced academics during the years 1933 to 1935. Moreover, the British university response to the crisis was swift: Sir William Beveridge and Professor Lionel Robbins of the London School of Economics, on holiday in Vienna in the spring of 1933, were shocked to read the first list of dismissals from the German universities; gravely concerned, they returned home to set up an Academic Freedom Fund within the London School of Economics to which staff were invited to contribute a percentage of their income. Since, however, it was clear that action by one institution alone would not be sufficient, Lord Rutherford, former president of the Royal Society and the director of the Cambridge Cavendish Laboratory, agreed to serve as the figurehead of a nationwide aid organisation, the Academic Assistance Council or AAC.⁵ On 22 May 1933 the new Council issued its founding press statement, signed by forty-one leading academics and public figures, which announced its intention “to raise a fund, to be used primarily ... in providing maintenance for displaced teachers and investigators, and finding them the chance of work in universities and scientific institutions”.⁶ From the list of illustrious signatories it was clear that there was particular support to be found for the exiled scholars at the Universities of Oxford and Cambridge, at University College London and, of course, at Beveridge’s own London School of Economics.⁷

Imperial College was not represented in this list (the closest it came to being so was, in fact, the inclusion of the Cambridge physicist J.J. Thomson, the father of Imperial College’s own Professor of Physics, G.P. Thomson). The College had been founded in 1907 from the amalgamation of three constituent colleges⁸ as a specialist institution for science and technology, along the lines of the continental and North American technical universities (such as the renowned *Technische Hochschule* in Charlottenburg, Berlin). Since then, rather uneasily, Imperial College had become a part of the federal University of London, while occupying by virtue of its scientific and technical specialism a rather exceptional position both within the University and in the British educational landscape of the day.⁹ Already an institution of some growing international repute by 1933, there were plentiful pre-existing links between

⁵On this, see Lord Beveridge’s ‘Introductory Note’ to Bentwich, pp. ix–x.

⁶See “‘The Security of Learning’: Displaced German Professors: An Assistance Council’, in *The Times*, 24 May 1933, p. 10.

⁷For accounts of the reception of refugee scholars at Oxford University and at University College London, see for example Jack Morrell, *Science at Oxford 1914–1939: Transforming an Arts University*, Oxford 1997 (esp. chapter 9), and H. Kalmus, ‘50 Years of Exiles Working at University College London’, lecture delivered at University College London on 21 March 1984.

⁸Two of these were the Royal School of Mines and the Royal College of Science. The third, the Central Technical College of the City and Guilds of London Institute, was renamed the City and Guilds College in 1907 but in fact not incorporated until 1910.

⁹Relatively little has been written about Imperial College (and nothing on the present topic), though for brief general accounts see A. Rupert Hall, *Science for Industry: A Short History of the Imperial College of Science and Technology and its Antecedents*, London 1982; Richard Williams and Anne Barrett, *Imperial College: A Pictorial History*, London 1988; *Centenary of the Imperial College of Science and Technology: A Short History of the Imperial College*, n.pl. [London], n.d. [1945]; *The Royal Charter of the Imperial College of Science and Technology: Jubilee 1907–1957*, n.pl., n.d. [1957]. A history of the college to mark its centenary in 2007 is currently in preparation.

individual Imperial staff and their counterparts at German universities, including some of the academics then under threat there; yet Imperial College's corporate response to the refugee crisis was initially insular and muted in comparison with the rather more generous response exhibited in some (though by no means all) other educational institutions.

The Academic Assistance Council called its first meeting on 1 June 1933. Walter Adams, then a young lecturer in history at University College London—later in his career, in the 1960s, to become well known for the student revolt he faced as director of the LSE—served as the AAC's full-time general secretary. The council, a kind of specialised employment exchange that acted as an intermediary between refugees and potential employers, set about the task of raising money with which to support the displaced academics. This support was offered in the form of short-term maintenance grants, set at the barest subsistence level—£250 p.a. for a married academic, £182 for a single man or woman (worth around £10,000 or £7,250 in today's terms). Nevertheless it was hoped that these grants would enable the foreign scholars to continue at least temporarily in academic work until more permanent employment, in Britain or in one of the other countries of emigration, could be obtained.¹⁰

It should be noted that the AAC, though a major player here, was by no means the sole body in Britain to respond to the plight of the exiled scholars. The Jewish community, having agreed to underwrite the costs of the refugee influx, set up several relief organisations, including the Jewish Academic—later Professional—Committee, which like the AAC gave grants to refugee academics. At government level, on 12 April 1933, the cabinet discussed the refugee crisis and expressed an interest in trying to secure for Britain “prominent Jews who were being expelled from Germany and who had achieved distinction whether in pure science, applied science, such as medicine or technical industry, music or art. This would not only obtain for this country the advantage of their knowledge and experience but would also create a very favourable impression in the world, particularly if our hospitality were offered with some warmth”.¹¹ It was, however, to be understood that no refugee, no matter how eminent, was to become a charge on the British taxpayer.¹²

If this was an opportunistic or at any rate less than generous response, it has to be seen against the background of the economic depression prevailing in Britain at the time. Rutherford and his AAC colleagues might deem it appropriate to base their appeals for refugee aid on the ideals of scientific internationalism; yet not long before the arrival of the refugee academics, British universities had seen their staff reduced, salaries cut and promotions postponed. The refugee physicist Rudolf Peierls, who would be successful in re-establishing himself in Britain (in 1937 he obtained a professorship at Birmingham University) recalled later that it had been

¹⁰For the work of the Academic Assistance Council, see for example Walter Adams's own account, ‘The Refugee Scholars of the 1930s’, in *The Political Quarterly*, vol. 39, no. 1 (1968), pp. 7–14. See also Bentwich, Hirschfeld, William Beveridge, *A Defence of Free Learning*, London 1959; R.M. Cooper (ed.), *Refugee Scholars: Conversations with Tess Simpson*, Leeds 1992.

¹¹Public Record Office, Cabinet 27 (33), Conclusion 8, 12 April 1933.

¹²For a detailed discussion of British government policy at this time, see Louise London, *Whitehall and the Jews 1933–1948: British Immigration Policy and the Holocaust*, Cambridge 2000.

a time when “it was hard to get support for new schemes. The universities, at least in Britain, were static and there were very few new posts, so that vacancies occurred [almost] only through resignations, retirement or death”.¹³ In these circumstances, it is hardly surprising that the incoming refugee scholars were perceived as a threat in many quarters. Moreover, as an additional factor, antisemitism was rife in all sectors of British society in the 1930s, the university world being no exception (around ninety per cent of the exiled academics had been dismissed from their posts on racial grounds).

This, then, was the situation in which, in June 1933, the Academic Assistance Council sent out an appeal to the vice-chancellors of all British universities, asking them to accommodate refugee scholars, and with some success: the Council’s first annual report of 1 May 1934 records that 178 scholars had already been placed, if largely in temporary research posts: of these, Oxford and Cambridge had taken seventeen and thirty-one respectively, seventeen had been accommodated at University College London, nine at the LSE—and three at Imperial College.

Imperial College’s unremarkable corporate response—although there were, notably, on a sub-corporate level, individual staff members who went out of their way to support the refugees, as will be discussed below—was probably due as much as anything to the apparent lack of interest in the matter displayed during the early years of the refugee crisis by the then Rector, Henry Tizard.¹⁴ Tizard was, of course, a very busy man who during the 1930s, in addition to his college duties, was increasingly caught up in matters of Britain’s air defence. Moreover, to give Tizard his due here, it should be borne in mind that the assistance of refugee scientists was a costly matter, altogether more costly in terms of facilities than that of arts scholars would have been. In any case, to the AAC’s initial appeal, Tizard had responded that “apart from affording laboratory facilities here to men of outstanding distinction so placed, this College is unfortunately not in a position to contemplate giving any financial help”. The only scholar to have been assisted thus far, in fact, was Professor Fritz Paneth from Königsberg University who had, so Tizard continued, “been given the hospitality of the College Laboratories for the continuance of his work”.¹⁵

The distinguished Austrian-born chemist Fritz Paneth had by chance been on a lecture tour in Britain when the National Socialists came to power in Germany and, part-Jewish as well as a pronounced anti-Nazi, he had elected to remain here. In point of fact, Paneth was funded to continue his work at Imperial College by a grant not from the AAC but from Imperial Chemical Industries (ICI), as part of a programme set up to finance some of the most eminent refugee scientists, though chiefly at Oxford University. The ICI scheme had been initiated by Professor

¹³Rudolf Peierls, as given in Paul K. Hoch, ‘Some Contributions to Physics by German-Jewish Emigrés in Britain and Elsewhere’, in Werner E. Mosse (ed.), *Second Chance: Two Centuries of German-speaking Jews in the United Kingdom*, Tübingen 1991 (Schriftenreihe wissenschaftlicher Abhandlungen des Leo Baeck Instituts 48), p. 235.

¹⁴On Tizard, see for example Ronald W. Clark, *Tizard*, London 1965. For Tizard’s later change of heart on this subject, see below.

¹⁵Imperial College Secretary to Prof C.S. Gibson, Honorary Secretary Academic Assistance Council [AAC], 11 July 1933, conveying a message from Tizard, Imperial College London Archives (subsequently IC), ASW/1/1.

Frederick Lindemann¹⁶ (later Lord Cherwell) at Oxford, largely benefitting his own Clarendon Laboratory there.

Fritz Paneth was, in fact, the one truly prominent refugee scientist to be offered accommodation at Imperial College during the pre-war years. It is perhaps of some interest to compare the Imperial record here with that of Oxford University. With great foresight and much activity, Lindemann succeeded, at least temporarily, in securing Albert Einstein for Oxford as well as Erwin Schrödinger, Franz (Francis) Simon, Nicholas Kurti, Heinrich Kuhn and Kurt Mendelssohn. This he achieved, certainly in part, by travelling to Germany on the lookout for scientists expelled from their posts; and, in obtaining their services, he literally transformed the study of physics at Oxford. Lindemann was, so it has often been contended, in a particularly strong position to act in this way: he was familiar with the German scientific establishment, having himself studied under Walther Nernst in Berlin. What should not be overlooked, however, is that Henry Tizard had also been a student of Nernst's for a time, and that, had he seen fit to do so, he might similarly have exploited his German connections for the benefit of Imperial College.

As it was, Imperial College's initially protectionist attitude towards the refugee scientists is reflected in the correspondence it conducted with the Academic Assistance Council (and its successor organisation from 1936, the Society for the Protection of Science and Learning or SPSL). When, for example, in November 1933, the AAC invited the College to recommend émigré academics to give extra-mural lectures—a scheme designed to boost the refugees' incomes and professional visibility, without posing a threat to British academics—the college declined to submit any names.¹⁷

Tizard's own initial attitude can perhaps be discerned in October 1934 in correspondence with G.P. Thomson (who in 1937 would become the College's first Nobel Laureate), in which the latter attempted to promote the case of Dr. Gertrud Kornfeld, a physicist from Berlin, to whom the physics department was intending to offer hospitality. Would the Rector agree to Kornfeld's bench fee being waived, Thomson asked; if so, the College should also submit an application to the AAC on Kornfeld's behalf for the continuation of her maintenance grant. Although Tizard did not object to waiving the fee for one year, he replied, he was "bound to limit the time because I think it is possible the Governing Body in a year's time would like to reconsider the policy we have adopted". As for the matter of Kornfeld's grant, Tizard advised Thomson that "if you like to use your personal influence there would of course not be the least objection. I think, however, it would be a mistake for the College to take any action".¹⁸ And Tizard's or, at any rate, Imperial College's corporate stance comes across still more clearly in a letter he addressed in October 1935 to one of the AAC's vice-presidents, the Nobel Prize-winning physiologist A.V. Hill: "I want you, and the right man at the Academic Assistance Council ... to know

¹⁶On Lindemann, see for example Adrian Fort, *Prof: The Life of Frederick Lindemann*, London 2003; Earl of Birkenhead, *The Prof in Two Worlds: The Official Life of Professor F.A. Lindemann, Viscount Cherwell*, London 1961.

¹⁷Correspondence dated 13 and 14 November 1933, IC ASW/1/1.

¹⁸Correspondence dated 23 and 24 October 1934, IC Kornfeld file, B5500.

privately that a good many members of our Governing Body think we have done quite enough for displaced scientists already; in fact they were a little restive last time I provided accommodation for someone.”¹⁹

This, then, would appear to represent the general climate of opinion at the College at the time when the refugee physicist Leo Szilard attempted to involve G.P. Thomson in his plan to start “research work on a certain type of nuclear interaction”²⁰ in Imperial College’s laboratories. As things worked out, the opportunity to attract Szilard to the College was lost: Thomson, for all his support of refugees in a number of other instances, reportedly showed little interest in Szilard’s proposal insisting, moreover, that results from any research carried out in his laboratories would have to be made available for publication. To this, Szilard, who was anxious to prevent the Germans from profiting from his work, would not agree. However, to give Thomson his due here, it should be noted that Professor Patrick Blackett, then at Birkbeck College (University of London) and a champion of numerous refugees, also failed to recognise the potential in Szilard’s work, reportedly informing him as follows: “You will have no luck with such fantastic ideas in England. Yes, perhaps in Russia. If a Russian physicist went to the government and says, ‘We must make a chain reaction’ they would give him all the money and facilities which he would need. But you won’t get it in England.”²¹

In the event, Szilard found a home for his research at Oxford’s Clarendon Laboratory until moving to the United States in 1938, his groundbreaking work thus being lost both to Imperial and to Birkbeck College. And even Fritz Paneth would leave Imperial College within a relatively short space of time for, despite being given a Readership in Atomic Chemistry in 1938, he had to look to the University of Durham for a chair. He took with him not only his research but also his very able assistant, Eugen Glückauf, a refugee from the Technische Hochschule in Berlin, who would later, like Paneth himself, be elected a fellow of the Royal Society.

Eugen Glückauf, who had left Germany in April 1933, had become Paneth’s assistant at Imperial College in 1934, initially without pay, though later with the aid of a small grant of £120 from the AAC. On the strength of this, he married a fellow exile who had followed him to England, and set up home; many years later he recalled that

I was sure that there was going to be a war or something worse, but I was sure that whatever was ahead, we would get through it better together than alone. And this certainly proved to be true. The first year required the most strenuous economies: 15/- for a furnished room with a cooking annex in Richmond, 15/- for food (I still do not know how my wife did it), 5/- for fares during the winter (during the summer months I cycled to South Kensington) but it was fair to say that as we were very happy, we did not notice any deprivation.²²

¹⁹Tizard to Hill, 31 October 1935, IC ASW/1/1. The strong representation on the College’s Governing Body of Whitehall on the one hand, and the British Dominions and Empire on the other should be noted here.

²⁰See Szilard to Adams, AAC, 23 July 1934, in Archive of the Society for the Protection of Science and Learning, Bodleian Library, Oxford (subsequently SPSL), 167/2.

²¹William Lanouette with Bela Silard, *Genius in the Shadows: A Biography of Leo Szilard*, New York 1992, pp. 137ff.

²²As cited in *Biographical Memoirs of Fellows of the Royal Society*, vol. 30 (1984), p. 196.

With Fritz Paneth as his patron, Glückauf was more fortunate than many other refugee academics, for indeed by 1936 Paneth was himself donating a supplementary grant for the Glückaufs' upkeep.²³ The mineralogist Dr Günther Nagelschmidt from Rostock, who in 1933 also took refuge in the Imperial College laboratories, was granted a free place in the geology department, certainly, but did not receive any financial support. This was despite the strong recommendation from the head of department, Professor Percy Boswell, to the AAC praising Nagelschmidt's work on the mineral composition of clays and adding on a personal note: "I found in him the only investigator I have yet met who could discuss the problem with me."²⁴ With no income, Nagelschmidt was forced to give up his work at the college (he did find alternative employment at the Rothamsted Experimental Station at Harpenden).

A further free place was granted in late 1933 to Otto Kantorowicz, who had fled from Berlin to Imperial College to continue his research on the resistance of pulverised metals. However, he too was unsuccessful in obtaining any sort of maintenance grant, despite supporting statements to the AAC on his behalf both from G.P. Thomson and A.J.C. Pollard, Professor of Instrument Design.²⁵ By September 1934, even Otto Kantorowicz's father Hermann, the eminent professor of law, who himself had found refuge in Cambridge, was in contact with the AAC on his son's behalf, but all to no avail.²⁶ Compelled to seek paid employment, Kantorowicz succeeded in finding a position at the Science Museum as a designer of scientific exhibits for the 1936 Exhibition of Very Low Temperatures; but given the economic climate this too could only be temporary, as the AAC explained to a concerned Franz Simon: "Although the Science Museum appreciates Kantorowicz's work and obviously are [*sic*] quite keen to get his services, they are terrified of employing foreigners so that even if he does work there for another 6 or 9 months, he does not stand a chance of being appointed on the staff."²⁷

Yet another refugee to be granted a free place at Imperial College was Charlotte (Lotte) Kellner though she, unlike the others, was successful—despite numerous trials and tribulations—in remaining at the College up until and throughout the war, and indeed into the postwar period. A friend of Rudolf Peierls from their joint student days in Berlin, Kellner arrived at Imperial College towards the end of 1933 to continue her work on infrared spectroscopy, thanks to a series of small grants from such bodies as the Jewish Professional Committee and the AAC. She was supported at the College by Professors Herbert Dingle and G.P. Thomson, though a recommendation sent by the latter to the AAC would not have made for very encouraging reading: "Dr Kellner's work is of high quality and she is making substantial progress. As regards the question of a post, we do not consider it probable that she would get a University post in this country, nor indeed would it be especially desirable in view of the number of British subjects capable of filling such posts."²⁸

²³See SPSL 213/5.

²⁴Boswell to AAC, 21 July 1933, SPSL 220/7.

²⁵See Thomson to AAC, 18 September 1934, and Pollard to AAC, 6 November 1934, SPSL 331/7.

²⁶Hermann Kantorowicz to AAC, 2 September 1934, SPSL 331/7.

²⁷AAC to Franz Simon, 28 April 1936, SPSL 331/7.

²⁸Thomson to AAC, 18 December 1934, SPSL 332/2.

Indeed by 1936, when it looked as though Kellner had exhausted the possibilities for further funding, the AAC was urging her to give up her academic aspirations and take a job as a translator, a career change from which she was spared by a Rockefeller Foundation Grant, obtained by Herbert Dingle, and, from 1938, by employment as a demonstrator within the physics department.²⁹

While it would take Charlotte Kellner until 1945 to secure a lectureship at Imperial College, Gottfried Fraenkel from the University of Frankfurt proved more fortunate: in 1935, thanks to the support of Professor J.W. Munro and some funding from the Agricultural Research Council, Fraenkel obtained a research assistantship in insect physiology in the department of zoology and applied entomology, and in 1938, again thanks to Munro, he was given a lectureship. It should be noted, however, that this was by no means straightforward: the matter of the research assistantship dragged on from April to December 1935 before Tizard and the college's board of governors were satisfied that Fraenkel was the right man for the job; Fraenkel, who had a wife and small child to support, had no choice but to take a loan of £37:10s. from the AAC to tide himself over.³⁰ The AAC/SPSL archives contain a letter thanking Fraenkel for his prompt repayment of the loan; it concludes on a telling personal note: "I hope you have now bought your piano."³¹

While this represents a success story, certainly, it remains true that Imperial College's powers that be did not go out of their way to assist the refugees, for most of the pre-war period at least, and not merely for the economic reasons detailed above, but for political reasons as well. A minute from a meeting of the college's executive committee of 7 December 1934, during which the case of Alexander Weinstein, a would-be honorary research assistant in the mathematics department, was discussed, reads thus: "Members of the Committee suggested that when such facilities were afforded to foreign visitors, they should be asked to give an undertaking that they would not take advantage of the opportunities offered by the College, for indulging in political propaganda either within the College or outside."³² The same line was taken at a slightly later meeting of the Governing Body, in January 1935, at which the chairman referred to a case in which "a refugee, a well-known Professor of Science, has indulged in political activities", and expressed the opinion that "College should guard itself against such eventualities".³³

It is possible that these comments relate to the activities of Albert Einstein, who the previous year had addressed a packed meeting at the Albert Hall—just around the corner from the College—to raise money for the refugees. Einstein, though refraining from mentioning Germany directly, had nonetheless come out strongly against the threat currently posed to world peace. In what was to be his first public speech in English, Einstein had appealed to his 10,000-strong audience, "as a man,

²⁹See SPSL 332/2.

³⁰See SPSL 198/3.

³¹AAC to Fraenkel, 8 May 1936, SPSL 198/3.

³²*Minutes of the Proceedings of the 203rd Meeting of the Executive Committee of the Imperial College of Science and Technology*, 7 December 1934, 114, 'Mathematics Department: German Scientist'.

³³*Minutes of the Proceedings of the 128th Meeting of the Governing Body of the Imperial College of Science and Technology*, 18 January 1935, XIX (c), 'Foreign Visitors'.

a good European and as a Jew”, with an urgency that some considered unwise.³⁴ Prominent British participants at the Albert Hall meeting had included such leading lights of the British academic establishment as Lord Rutherford and Sir William Beveridge, though once again there was apparently no Imperial College representation at the event.

Yet if there was a disregard for politics to be found in the upper echelons of the college, so too there was evidently a marked lack of political interest within the Imperial student population. Unlike the case at most other British universities at the time, there were, for instance, no political societies affiliated to the student union—a state of affairs expressly approved by the Imperial student magazine *The Phoenix*³⁵—and little in the way of student political activity. As to just why such a determinedly apolitical stance should have been adopted at Imperial College at a time when students elsewhere were becoming increasingly politicised, one can merely speculate: it may, perhaps, have been related to the almost exclusively scientific mindset of the institution or to its peculiarly male culture. Be that as it may, the radical national student journal *The Student Vanguard* found cause in May 1933 to rail against “this most Imperial College” which “the reactionaries have long been entitled to claim ... as their exclusive preserve”—though in the same issue it did approve of the fact that the College’s International Society had enjoyed a successful season.³⁶ This society, at least, provided students with a forum for discussion on topics such as fascism, and as such it also enjoyed the support of two members of the academic staff, both from the mathematics department, who were publicly anti-fascist and also played an active role in refugee aid: Professor Sydney Chapman,³⁷ who would become president of the International Society, and Professor Hyman Levy³⁸—later dubbed the “Red Dean” by the students on account of his Communist Party membership—who was a regular speaker on political topics inside and outside the college.

As well as the International Society, there was also a Literary and Debating Society, one of whose events, according to the Society’s annual report for 1933–1934, had been a “motion against Fascism”, proposed by a Dr C.A. Smith and opposed by a Mr Joyce.³⁹ While the former was very probably a spokesman of this same name from the Independent Labour Party, the latter, interestingly enough, was almost certainly William Joyce, the later “Lord Haw-Haw”, who at the time in question was the West London administrative officer of the British Union of Fascists and was soon to be promoted to that organisation’s Director of Propaganda.

³⁴On this, and on the Albert Hall meeting of 3 October 1933, see Ronald Clark, *Einstein: The Life and Times*, London, 1973, pp. 471ff. The text of Einstein’s speech is held in SPSL 1/9.

³⁵See ‘Politics’ (editorial) in *The Phoenix*, December 1933, p. 3.

³⁶‘Student Activities’, in *The Student Vanguard*, vol. 1, no. 5 (1933), p. 25.

³⁷On Chapman, see Syun-Ichi Akasofu, Benson Fogle and Bernhard Hanowitz, eds., *Sydney Chapman, Eighty, from his friends*, private publ. 1967; see also, *Biographical Memoirs of Fellows of the Royal Society*, vol. 17 (1971), pp. 53–74.

³⁸For Levy’s own account of his early political development, see his *Social Thinking*, London 1945. See also Gary Werskey, *The Visible College: A Collective Biography of British Scientists and Socialists of the 1930s*, London 1988.

³⁹IC SG 3/1.

In general, however, throughout most of the 1930s, both the Imperial staff and student body appear to have remained remarkably unconcerned at the dangers posed by Nazism, despite the presence of the refugees in their midst. More than that, the college evidently saw no reason not to maintain cordial “official” relations with the new Germany. It continued, for example, to participate in the Anglo-German student exchange scheme, with the Imperial students—as late as June 1938—offering German exchange students in Britain the use of their student union for a concert and dance, to be attended jointly by German and British students. “We have always liked the Germans as a people”, wrote *The Phoenix* unselfconsciously on this occasion, while also noting that Imperial College was the only London college taking part in the exchange.⁴⁰ The tone of this report is still very much in keeping with one that had appeared in *The Phoenix* the previous year, in March 1937, under the heading “The I.C. and the Anglo-German Gliding Club”. Twenty Imperial students, so it was recorded, had joined forces in Germany with twenty young Germans, the whole group being led by a representative of the Nazi “foreign youth contacts” department; the party had been “nobly entertained for three days by ‘Hitler Youth’”; and the event had been deemed a great success.⁴¹

However, *The Phoenix* was not the sole mouthpiece of student opinion within the college. There was also *The Muckrake*, subtitled *A Paper of Independent Student Thought*; while noting in an article of 7 February 1939 that “for some obscure reason the word ‘politics’ is taboo here”, *The Muckrake* maintained, particularly after the Munich crisis of September 1938, that it was “inconceivable that some 1,200 students should take no interest in the affairs that determine their whole lives”.⁴² By the beginning of 1939, the international situation was in any case growing too acute to ignore. Refugees were continuing to stream into Britain, augmenting the student population as well as that of the academic staff—indeed by 1940, *The Phoenix* was being edited by a refugee student, Heinz Peter Koch, a scholarship holder in the chemistry department. The establishing of the Refugees Committee in 1939 is perhaps indicative of the change in the climate of opinion within the college. Concerning the committee, Emlyn Lloyd, president of the Royal College of Science Union, made the following observations:

The very existence of such a committee was an achievement. The fact that it was able to raise more than £40 in the College is something tremendous. Apparently, in view of the changing world situation, students here are beginning to react as normally as they do elsewhere. The old idea that everything concerned with life, with society in general, with anything beyond the Prince Consort Rd is “political”, and therefore anathema, is at last disappearing.⁴³

Moreover, at the top too, Henry (from 1937 Sir Henry) Tizard had undergone something of a change of heart, which came about in the following manner: by late

⁴⁰‘This Concerns You’, in *The Phoenix*, June 1938, p. 23.

⁴¹*The Phoenix*, March 1937, pp. 14–15.

⁴²‘A South Kensington Note-Book’, in *The Muckrake*, New Series, vol. 1, no. 4 (1939), p. 8.

⁴³Emlyn Lloyd, ‘A Review’, in *The Phoenix*, June 1939, p. 20.

1938, faced with a fresh influx of refugees from Austria, Italy and Czechoslovakia, the SPSL mounted a fresh fundraising campaign and invited Tizard to join its National Appeal Committee. This Tizard initially refused to do on the grounds that "I am not altogether happy about the activities of the Society". By return of post, a letter then arrived from A.V. Hill in an attempt to win Tizard over. "I hear that there is some trouble you have about supporting the SPL", Hill indicated. "Please tell me what it is and we will try to correct it. Are you mixing us up with some Communist organisation?" Consultations followed between Tizard and Hill as well as between Tizard and the SPSL's general secretary, and with an interesting outcome: by 24 November Tizard was able to inform the SPSL that since "you cleared up a number of doubts that I had, ... I shall be glad now to become a member of your Appeal Committee if you think it would help". The factors that had evidently convinced him were the society's chief objective, "to salvage first class work and first class workers", together with the essentially short-term nature of the help that was to be offered⁴⁴ (as well as the reassurance Hill appears to have offered as to the SPSL's non-political nature).

Tizard's late conversion to the aims and purpose of the SPSL seems to have encouraged his staff to follow suit; for Tizard's letter of 24 November also reported that "a very large proportion of the principal members of the staff of the College are anxious to support the Society". Indeed the strength of support within the College was soon made evident by the response to the SPSL's invitation to senior staff to the public meeting in February 1939 designed to launch the new appeal. At this event, Tizard, who was by now a member of the SPSL's General Council, was allocated a seat on the platform, while tickets in the auditorium were requested by a further thirteen senior staff members. A second seat on the platform was reserved for Assistant Professor R.J. Tabor from the Imperial College botany department, who was for many years the honorary treasurer of the Association of University Teachers, on the national level, as well as the AUT representative on the SPSL's Council.

During the 1930s, the AUT as a whole displayed a rather ambivalent attitude towards the refugee academics, early on issuing a statement in support of academic freedom, on the one hand, while viewing the refugees as a possible threat to employment and promotion prospects on the other hand.⁴⁵ In this situation, Tabor made himself invaluable to the AAC/SPSL in his capacity as go-between. In November 1934, in a letter of thanks to the AUT for its assistance in response to the German crisis, the AAC singled out for special mention "the great practical help which the AUT's representative on our executive, Professor Tabor, has given us".⁴⁶ Year by year, Tabor would speak out on behalf of the AAC at the AUT's national conferences, and successfully so: by May 1935, for instance, Walter Adams was able to inform Tabor that, largely due to AUT help, sufficient funds had been raised for the council to continue its work for a further twelve months.⁴⁷

⁴⁴SPSL to Tizard, 29 October 1938; Tizard to SPSL, 31 October 1938; Hill to Tizard, 1 November 1938; Tizard to SPSL, 24 November 1938; Tizard memorandum, 24 November 1938, IC ASW/1/2.

⁴⁵See AUT Resolution passed at its Exeter council meeting on 26 May 1933, reproduced in AUT statement of 14 June 1933, SPSL 92/16.

⁴⁶AAC to R. Douglas Laurie, AUT, 1 November 1934, SPSL 92/16.

⁴⁷AAC (Adams) to AUT (Tabor), 30 May 1935, SPSL 92/16.

Tabor was also one of a number of Imperial College staff to offer his services to the AAC in interviewing refugee academics from his own subject area on whose qualifications the Council wished to have a report. His colleague in the botany department, Professor V.H. Blackman, volunteered to do likewise, as did George Finch, Professor of Applied Physical Chemistry in the department of chemical technology as well as the above mentioned Hyman Levy of mathematics. Concerning Levy, numerous instances of him advising and supporting refugees at the AAC's behest have in fact been recorded.⁴⁸

As for Levy's fellow mathematician Sydney Chapman, it is reported that he "did what he could to help refugee scientists, receiving a number into his home for short periods on their first arriving in England, and scouting round to find posts or research grants for them".⁴⁹ Nor did Chapman confine his interventions to scientists and engineers. In the files of the German foreign ministry in Berlin, there is a letter from Chapman, described there as "the well known and respected professor at the Imperial College of Science and Technology", dated 25 May 1935, which he sent to the German Ambassador in Britain concerning the case of Paul Heinrichsdorff.⁵⁰ Heinrichsdorff, previously a German *Lektor* (German teaching assistant) at University College, Southampton, had, in spite of his Jewish origins and radical politics, decided for personal reasons to return to Berlin where he had been arrested. Chapman had written to protest in the following terms: "I write as one who is, like most Englishmen, anxious for political friendship and goodwill between Germany and England ... [Herr Hitler's] internal policy, however, has put a strain on our goodwill, and must continue to do so as long as incidents of the kind which forms the subject of this letter continue."⁵¹

With the outbreak of war, of course, in September 1939, the stream of refugees into Britain was reduced to a trickle. All Germans and Austrians in Britain, now regarded as "enemy aliens", were required to appear in front of an Aliens Tribunal to be classified "A", "B", or "C" according to their degree of perceived security risk. While the "C" category was intended to embrace genuine refugees from Nazi oppression such as those discussed in the present paper, numerous mistakes in categorisation occurred that could take many months to rectify.

Following categorisation, "B" and "C" aliens were, to a large extent, permitted to continue with their normal activities until, by the middle of 1940, the war took a more serious turn. With the invasion of Britain apparently imminent, the Home Office was pressured—or panicked—into ordering a large-scale internment of enemy aliens, affecting most of the male and some of the female refugees. This was carried out in May and June 1940.

⁴⁸For Tabor and Blackman, see SPSP 27/6; for Finch, see SPSP 242/10; for Levy, see, for example, SPSP 281/1 and SPSP 286/1.

⁴⁹*Biographical Memoirs of Fellows of the Royal Society*, vol. 17 (1971), p. 57.

⁵⁰On Paul Heinrichsdorff and his wife Ruth, see Charmian Brinson, 'Ruth Heinrichsdorff: An SAP Activist in British Exile', in Charmian Brinson, Richard Dove, et al., *'Keine Klage über England?': Deutsche und österreichische Exilerfahrungen in Großbritannien 1933–1945*, Munich 1998, pp. 157–174.

⁵¹Chapman to German Embassy London, 25 May 1935, enclosure in Bericht Botschaft London, 6 June 1935, Politisches Archiv des Auswärtigen Amtes, Berlin, Inland A/B, 83–65, R99536.

Back in September 1938, at the time of the Munich crisis, Sir Henry Tizard had let it be known that, in the event of war, all aliens would be given the “usual notice”.⁵² As things turned out, though, apart from the compilation of lists of enemy and non-enemy aliens, Imperial College did not proceed against its German-speaking refugees during the period of the “phoney war”. On 25 May 1940, however, following a decision by the College’s Governing Body, all heads of department were sent a list of the enemy aliens within their own departments, each of whom was to be interviewed by the Deputy Rector, Professor J. C. Philip. The questions to be put to them concerned, *inter alia*, their reasons for coming to Britain, their relations still living in enemy countries, the means by which they communicated with these, and their future plans. Answers to the last of these questions make for instructive reading: “Would like to help this country in civilian effort”, for instance; “Anxious to join army”; or “Has joined Pioneer Corps. Calling up postponed until after exams”.⁵³

There were, in all, eighty-eight enemy alien undergraduate and postgraduate students (from Italy, Hungary and the free port of Danzig, as well as from Germany and Austria), and a number of staff to be interviewed, the latter including the physicist Charlotte Kellner.⁵⁴ She had submitted an application for British citizenship before the war but, with the outbreak of hostilities, naturalisation proceedings had in her case, as in that of most others, ground to a halt. The entomologist Gottfried Fraenkel, on the other hand, whose name appears, like Kellner’s, under “Staff: List of possible aliens” in the Imperial College records, was already a naturalised British citizen (and was thus one of the few German and Austrian refugees who managed to achieve naturalisation by September 1939). The last group to be listed in the records were staff who “have queer names but appear to be British” (this list reads, intriguingly, “Roth, Schubert, Korn, Mer, Guggenheim, Ehrenberg”).⁵⁵

The letter received by Professor Cecil Lander in mechanical engineering concerning the enemy aliens in his department listed five students;⁵⁶ one of them, Carl Theodor Marx, categorised as “B”, had already been interned on 16 May 1940. Most male category “C” aliens, like the chemistry student Heinz Peter Koch, the editor of *The Phoenix*, were interned towards the end of the following month.

By early June 1940, however, within the College, matters had already taken a very serious turn, eighteen alien students and staff having been barred from entering any part of the establishment. The theoretical physicist Nicholas Kemmer, later to hold the Tait Chair of Natural Philosophy at Edinburgh, was one of these. A former Beit Fellow, Kemmer had been employed as a demonstrator in the mathematics department until his exclusion from the college.⁵⁷ Another was Charlotte Kellner,

⁵²See note in College Secretary G.L. Lowry’s hand, dated 29 September 1938, appended to Dingle to Lowry, 28 September 1938, IC GXH/1.

⁵³Held in IC GXH/2.

⁵⁴*ibid.*

⁵⁵*ibid.*

⁵⁶Lowry to Lander, 25 May 1940, IC GXH/1.

⁵⁷See SPSL 509/4.

still employed in the physics department, who, like the others, received the following notice from the college secretary: "I have to inform you that, acting on the instructions of H. M. Government, the College authorities must request you to leave the College forthwith, and I am to add that none of the College buildings, including the Union, may be utilised by you until further notice."⁵⁸

Desperate at the loss of her livelihood, Kellner turned to the SPSL for help, asking them to intervene with the Imperial College authorities in order that she be permitted to use the library facilities at least: "I have been asked by the Editor of the *Science Abstracts* to abstract about a hundred German papers for them but I am afraid that I shall lose this chance of earning some money too because these papers are only available at the Science Library, and it seems I am not allowed to go there either."⁵⁹ The SPSL, which had not previously encountered this particular situation, was extremely concerned, not only for Kellner but also for the other refugee scientists under its aegis. It wrote immediately for clarification to the Deputy Rector, and was then informed that official instructions had been issued prohibiting enemy aliens from entering buildings in which government work was undertaken.⁶⁰ These instructions, which were as it turned out not specific to Imperial College, were modified later in the year, to exclude aliens from "all rooms, laboratories or workshops in which Government work of a highly confidential nature is being carried on", though not from the college as a whole.⁶¹ Thus, Charlotte Kellner, among others, was allowed to return; in fact later in her career this incident, which appeared so serious to her at the time, was dismissed merely as "a short interruption in 1940".⁶² She was employed in the physics department throughout the rest of the war, securing a permanent lectureship in October 1945 and British citizenship the following year.⁶³

With a number of its refugee students and staff in the alien internment camps, the college then set about trying to secure their release. The procedure was made rather easier in July 1940, in some cases at least, by the publication of a white paper setting out eighteen different categories under which release could be applied for, including "scientists, research workers and persons of academic distinction for whom work of importance in their special field is available".⁶⁴ The Deputy Rector, in particular, was involved in extensive correspondence with bodies such as the Home Office and the SPSL on behalf of the internees. A letter from him to the Home Office of 22 October 1940, for instance, was accompanied by applications for the release of four interned students of the college, Heinz Peter Koch, Carl Theodor Marx, H.H. Jellinek from chemistry and Konrad Freund from mining, as well as of a further

⁵⁸Dated 3 June 1940, IC GXH/2.

⁵⁹Kellner to Esther Simpson (SPSL), 4 June 1940, SPSL 332/2.

⁶⁰SPSL to Philip (IC), 5 June 1940; Philip to Adams (SPSL), 7 June 1940, SPSL 332/2.

⁶¹*Minutes of Proceedings at a Meeting of the Board of Studies of the Imperial College of Science and Technology*, 26 September 1940, 4714, 'Alien Students'.

⁶²SPSL statement in support of naturalisation, n.d., SPSL 332/2.

⁶³As well as her work as an infrared spectroscopist, Kellner was also interested in the history of science, publishing a biography of Alexander von Humboldt in 1963.

⁶⁴'*Civilian Internees of Enemy Nationality: Categories of Persons Eligible for Release from Internment and Procedure to be Followed in Applying for Release*', Cmd. 6223, August 1940.

student, Victor Gold, who had been accepted by the chemistry department but who had not yet been able to start his course.⁶⁵ Of Koch, Professor Philip informed the SPSL that he was “an able and competent man”, so that “we are prepared to find him a place in our Organic Chemistry Department, where he would be engaged on research work of scientific importance”.⁶⁶ All five students were, in fact, at liberty again by the end of January 1941.

Indeed Philip was prepared to extend his support to Fritz Paneth’s son Heinz, who had been studying at Oxford prior to his internment, as well as to Paneth’s interned assistant Eugen Glückauf, even though Paneth and Glückauf were no longer formally connected to Imperial College. Of the latter, for instance, Philip would write:

Dr Glückauf was a visitor to my house on various occasions, and I had an opportunity of judging his personality and general attitude. In every respect he appeared to me entirely friendly to this country and so far as my knowledge of him goes there is not the slightest ground why he should not be free to continue his work ... He is a very industrious and capable scientific worker, and it seems to me a great pity that a man who is entirely loyal to this country should be prevented from using his talents for the prosecution of scientific knowledge in the way that Dr Glückauf has hitherto done.⁶⁷

Eugen Glückauf’s release from internment was approved in September 1940.

Professor Philip was by no means the only member of the Imperial College staff to be concerned with the interned scientists, for others, such as Professor H.V.A. Briscoe, professor of inorganic chemistry, or Professor Alfred Egerton of chemical engineering, were also called upon on a number of occasions to act as referees for individual internees. In fact, Alfred Egerton’s involvement in this area went far beyond the confines of Imperial College for, as joint secretary of the Royal Society, he served on a tribunal of the society that, on the basis of information supplied by the SPSL, was responsible for making the case to the Home Office for the release of interned scientists.

One of the first scholars to be released from internment through the Royal Society’s intervention—release in this case being approved as early as July 1940—was Paul Rosin, an expert on fuel, who had arrived from Berlin in 1936. While quickly building up a number of consultancies for himself, Rosin had also secured an honorary research position at Imperial College in the department of mechanical engineering. So enthusiastic had Professor Cecil Lander been, in fact, about this addition to his staff that he had informed the College Secretary as follows: “If there had been no question of Rosin being a German refugee, and I had heard that he was disengaged and willing, I should have been very keen to invite him to the College to collaborate with me on certain branches of our work ... I can honestly say that I look upon Professor Rosin’s misfortunes as our good fortune.”⁶⁸ Moreover, in June 1939,

⁶⁵Philip to Alien Branch, Home Office, 22 October 1940, IC GXH/4.

⁶⁶Philip to Simpson, 2 October 1940, IC GXH/4. Heinz Peter Koch completed his doctorate at Imperial College and worked for some years at the British Rubber Producers’ Research Association at Welwyn Garden City before being killed in a skiing accident (information from Professor Stanley Nyburg).

⁶⁷Philip to SPSL, 27 July 1940, SPSL 213/5.

⁶⁸Lander to Lowry, 6 November 1936, IC ASW/1/1.

Rosin had been joined at Imperial College by his former collaborator in the field of fuel technology, Hans Fehling.

Rosin and Fehling continued their work at the College during the first months of the war but were unfortunate enough to be arrested in May 1940—before the general extension of internment to Category “C” internees—while spending a weekend in Kent, a “protected area”. Their relatively prompt release from Huyton Camp was helped along, no doubt, by the active intervention of Cecil Lander, who not only communicated with the SPSL on their behalf but also paid a personal visit to the Home Office.⁶⁹ Lander was well aware of the potential value to the British war effort of the refugee scientists; with the help of the SPSL, he is known to have been compiling lists of these scientists early in 1940 “in connection with the National emergency”.⁷⁰ He in fact chaired a committee, the “Lander Committee”, as proposed by Sir Henry Tizard (by now firmly convinced of the contribution the refugee scientists could make to the war effort) which had the aim of tapping the expertise of the émigrés, who themselves constituted a part of the membership.⁷¹ According to the British physicist R.V. Jones, not as much was learned about technical processes in Germany as had been hoped, rather, the foreign members had “turned to suggesting bright ideas by which Britain could win the war”. Jones also recalled that the work of the Committee had been hampered by the loss of two of its members to internment and that “it took us months to get them out again”.⁷²

It may well be that the reference here is to Paul Rosin and Hans Fehling, although this is uncertain. At any rate, by the time Rosin and Fehling returned to Imperial College from internment, a distinct change in climate—locally and nationally—would have been discernible: gone, to a large extent, were both the protectionism of the pre-war period and the general agitation accompanying the mass internment episode of May and June 1940. Instead a more pragmatic attitude was beginning to make itself felt that favoured exploiting refugee skills for the good of the war effort. After the war, Professor Herbert Dingle of the physics department would recall the good use that was made of Charlotte Kellner, for instance, once she was permitted to re-enter the Imperial premises: “Owing to the absence of some members of the staff on Government service and the increased number of students necessary to meet essential war needs, it was a time of great pressure, and Dr Kellner’s services, which were freely and unreservedly given, were indispensable.”⁷³ Similarly, in 1942 in the electrical engineering department, where the same pressured situation obtained, a post of demonstrator was given to a German refugee, Hans Kayser, “who has been specially released from the Army on the intercession of the University Grants Committee”.⁷⁴

⁶⁹See Lander to Simpson, 8 June 1940, SPSL 223/3.

⁷⁰See Lander to Adams, 21 February 1940, SPSL 80/2.

⁷¹For Tizard’s role, see diary references, Sir Henry Tizard Papers, Imperial War Museum, HTT 11/121, 11/129, 11/130, 11/135 (all from November and December 1939) and HTT18/170 (16 July 1941); ‘Committee for Interviewing German Refugee Scientists’, Minute of 11 December 1939, HTT 72; and ‘Report of Committee for the Employment of Scientific and Technical Refugees in the National Effort’, n.d. [early 1940?], HTT 224.

⁷²R.V. Jones, *Most Secret War*, London 1978, pp. 83–83, 114.

⁷³Dingle, statement in support of naturalisation, 17 May 1946, SPSL 332/2.

⁷⁴On this, see Imperial College to University of London, 25 July 1942, IC GXH/3.

As for Paul Rosin and Hans Fehling, they became part of a team at Imperial College, led by Cecil Lander in mechanical engineering, that also included an Austrian, Karl Weissenberg, as well as two Polish scientists seconded from the Free Polish Army. Under the aegis of the Petroleum Warfare Department, this team was engaged in the FIDO project—Fog Investigation Dispersal Operation—involving research and development work on petrol burners and their supply and on signalling arrangements for fog dispersal over aerodromes to increase the safety of British and Allied Air Force squadrons.⁷⁵

The integration of foreign scientists into the war effort was also strongly promoted by two influential organisations, the British Association for the Advancement of Science and the Association of Scientific Workers (AScW), in which a number of Imperial College staff, among them once again the mathematicians Sydney Chapman and Hyman Levy, played an active role. In September 1941, the British Association's Division for the Social and International Relations of Science organised a groundbreaking conference on "Science and World Order", for which, as it happened, Chapman provided Imperial College students to act as stewards.⁷⁶ The conference set out to demonstrate "the common purpose of men of science in securing a post-war order in which the maximum benefits of science will be secured for all people" and to involve representatives from "the four great powers" (Britain, China, the USA, and the USSR), scientists from the occupied countries of Europe and "exiled scientists of Germany and Austria, and possibly of Italy".⁷⁷ In April 1942, the AScW set up a Foreign Scientists' Committee and later that same year mounted a Conference of Allied Scientists, likewise to include refugees from Germany, Austria, and Italy. The aim of this conference, held in December 1942 and entitled "Scientists of the United Nations and the War Effort", was to illustrate the wish of foreign scientists to play their full part in the struggle against fascism. A number of preparatory meetings were held by a committee that included Sydney Chapman, representing the British Association, who also delivered the closing paper at the conference itself.⁷⁸ Chapman's paper on "The Use of Scientific Personnel in the War" highlighted the absurdity of a situation in which some highly skilled refugee scientists "were kept digging potatoes and doing other unskilled work when there was a great shortage of skilled persons on the scientific side of the war effort".⁷⁹

Hyman Levy, too, strongly supported the AScW's Foreign Scientists' Committee and was a regular speaker at their events.⁸⁰ In addition, Chapman and Levy were both patrons of the Free German Institute of Science and Learning (Freie Deutsche Hochschule), a subsection of the radical Free German League of Culture set up by

⁷⁵On this, see for example, C.H. Lander, 'Team Work in Research' (Melchett Lecture 1945), reproduced in *Journal of the Institute of Fuel*, vol. 19, no. 104 (October 1945), pp. 9f.

⁷⁶See British Association for the Advancement of Science to Sydney Chapman, 30 September 1941, in Archive of the British Association for the Advancement of Science, Bodleian Library, Oxford (subsequently BAAS) 388, 186.

⁷⁷'International Conference on Science and World Order', n.d. [1941], BAAS, 389, 3.

⁷⁸On this, see material held in SPSL 92/14.

⁷⁹See 'Scientists and the War: Protest against Waste of Ability', *The Times*, 12 January 1942, p. 2.

⁸⁰On 12 June 1943, for instance, Levy addressed them on 'The International Cooperation of Scientists' at the Alliance Hall, Caxton St, London SW1 (see leaflet held in SPSL 92/14).

German exiles in Britain. Soon after the war, a comparable Austrian exile organisation, the Association of Austrian Engineers, Chemists and Scientific Workers in Great Britain, organised a meeting to plan for the restoration of science in postwar Austria. One of the sponsors of the meeting was Imperial College's G.P. Thomson whose message featured in a pamphlet to mark the occasion:

The greatly increased importance that science is playing in military and political life makes it even more important than it was before, that the intimate personal relationships which used to exist between scientists of all countries should be renewed and strengthened. They represent one of the strongest forces for peace, and for this reason I am convinced that scientific research should be not only permitted but encouraged in all countries, and that differences in politics and ideologies should not be allowed to interfere with the free exchange of thoughts and the diffusion of knowledge which is the justification for science.⁸¹

G. P. Thomson, Hyman Levy and Sydney Chapman, so it was discovered after the war, all enjoyed the distinction of appearing in Hitler's notorious "*Sonderfahndungsliste GB*", consisting of persons to be arrested immediately in the event of a successful German invasion of Britain.

The records of the Academic Assistance Council/Society for the Protection of Science and Learning for the years 1933 to 1945 contain the names of 2,541 refugee scholars; in 1946, only 600 were recorded as remaining in Britain.⁸² It has not infrequently been suggested that, given greater vision, Britain could have benefited more from the influx of academic capacity than it actually did;⁸³ certainly the present history of Imperial College and the refugees from Nazism bears this out. Nevertheless, despite lost opportunities in the short term, the gain in the longer term—for Imperial College as for most areas of British public and intellectual life—has been significant. While it is not the intention of this particular paper to examine the role the refugees played at the college in the postwar years, it should at least be noted that Nobel Laureates Dennis Gabor and Ernst Chain arrived at the college in 1949 and 1964 respectively, while Sir Eric Ash, a member of the second generation, served as its Rector from 1985 to 1993.

By way of a postscript: the presence on the staff of the influential Dennis Gabor in 1956 was one of the factors leading to an altogether more sympathetic reception of the next wave of refugees, the Hungarians, at Imperial College. Gabor, who had already been in Britain for twenty-three years when his fellow countrymen arrived⁸⁴ played a central role in receiving Hungarian students at the college and in placing two members of staff, even drawing up a Hungarian-language questionnaire himself to be filled in by new arrivals. A second factor distinguishing the reception of the

⁸¹Association of Austrian Engineers, Chemists and Scientific Workers in Great Britain, *Science in Austria: Leaflet presented on the occasion of the Meeting of British and Austrian Scientists in Support of the Restoration of Science in Austria*, London, 1945, p. 7.

⁸²See SPSL, *Fifth Report*, Cambridge 1946.

⁸³See, for example, Victor Weisskopf, Leon Rosenfeld and Maurice Goldhaber, as cited in Hoch, 'Some Contributions to Physics', pp. 236–237.

⁸⁴The Hungarian Gabor had been working in Berlin when Hitler took power in 1933; of Jewish extraction, he had come as a refugee to Britain that same year.

refugees from Communism in 1956 from that of the refugees from Nazism during the 1930s was the active support not just of individual staff members but also from the very top of the college. Indeed the Rector, Patrick Linstead, who directed fundraising and provided emergency accommodation, among other things, positively went out of his way to welcome the newcomers.⁸⁵ The refugee Hungarians represented, arguably, a more popular cause in more favourable economic circumstances and in more manageable numbers—but that is quite another story.

⁸⁵See IC, SS/1/4, 'Hungarian Relief 1956–7'. See also Magda Czigany, "'Treated as Other Students ...': 1956 Hungarian Refugee Students in the United Kingdom: A Case Study of Imperial College London" in Laszlo Peter and Martyn Rady, *British-Hungarian Relations since 1848*, London c. 2004, pp. 289–302.