The Arms of the University of Surrey. The check device in the centre is drawn from the arms of the Warenne family, former Earls of Surrey. The woolpacks derive from the Borough of Guildford, and the stag on the crest is an allusion to Stag Hill, site of the new campus.
The University of Surrey was granted its Charter on 9 September 1966. There was no ceremony about this landmark occasion. The document arrived unheralded by taxi at the main building of Battersea College of Technology in south-west London. An official messenger hurried inside, delivered a package, and then vanished straightaway into the waiting cab.

Peter Leggett, the College’s last Principal and the first Vice-Chancellor of the new University, greeted the Charter’s arrival with a simple ‘Whoopee!’ It was a characteristically modest response (though he later gave, at his own expense, a celebratory champagne party), for the granting of the Charter was the culmination of the complex planning and negotiations he had directed for nearly five years in order to bring the University of Surrey into being. While it would not start to occupy its new home in Guildford, on Stag Hill beneath the Cathedral, for another two years, the crucial step had been taken.

The College had been primarily a teaching institution, albeit with increasingly strong research in some disciplines. As the University of Surrey it would now establish itself as a campus-based residential university, increase in size, create its own distinctive ethos, and gradually win for itself an international reputation for its research and teaching, thereby fulfilling the objectives set out in the Charter: ‘The pursuit of learning and the advancement and dissemination of knowledge, in Science and Technology and all that pertains to a fuller understanding of humanity, in close co-operation with the industrial life of the country and with commerce and the professions.’

A university town

Just as, by the early 1960s, Battersea College of Technology was a potential university in search of a campus, so Guildford was beginning to be a town in search of a university. Gradually, but ever more confidently, influential voices and organisations in the town came to realise the advantages a university could bring. One of the earliest and most prominent advocates was Jack Penycate, editor of the Surrey Advertiser. In his leading
article on 10 June 1961, he forecast that the Robbins Committee (which was already examining the UK’s provision of higher education) would recommend the creation of additional universities and put forward a vigorous case for the considerable benefits a university would bring to the town:

Guildford is an ancient town of character, with a cathedral, an orchestra and a technical college already educating students to degree standards. It stands midway between important scientific research centres at Farnham and Leatherhead, and within easy reach of the great aircraft factories of Vickers-Armstrong at Weybridge and Wisley as well as many smaller industries, some of them dealing with advanced scientific projects... The Guildford of tomorrow may be a vastly more important place than the Guildford of yesterday. If it were a seat of learning as well as a centre of commerce, each of these aspects of its importance could help to foster the other.

Jack Penycate recalls that his leader had an instantaneous impact: ‘Immediately supporters and opponents (the latter including the then Mayor) began to ring up or write in.’ Peter Leggett telephoned to fix a lunch engagement. Other supporters who got in touch included John Brown, the chairman of the Guildford Society, and Dr Robert Williams, an electronics research scientist who lived in Guildford. Robert Williams had already suggested that Guildford should establish a university, and Jack Penycate persuaded him to address the Rotary Club on the subject the following week.

In early 1962 the Rotary Club formed a town committee to sound out opinion at local and national level. Important personalities in the town were soon persuaded of the case for a university, and for Battersea College of Technology in particular. Sir Richard and Lady Nugent became staunch supporters, and continued to work hard on the University’s behalf even after Sir Richard’s retirement as MP for Guildford in 1966. The Bishop of Guildford, the Right Reverend Dr George Reindorp, also lent his support, crucial in view of the physical proximity of the University and the Cathedral.

The Surrey Advertiser did not let the issue drop. Another forceful leading article, on 23 February 1963, argued that the debate about whether Guildford should acquire a university masked another, even more important, debate about the town’s future direction:

An opportunity is about to be presented to Guildford and West Surrey - an opportunity which, if allowed to pass, will not recur... A university would balance the town’s rapid commercial growth, help its cultural life to develop and assure its status... In an era of rapid change, you either control the flood or are swept away by it. Either the Guildford of tomorrow is shaped by positive planning and by seizing the opportunities for appropriate growth, or powerful influences outside the borough will shape it for themselves... A welcome to the future University of Surrey would be both bold and wise.

In March 1963 Guildford Borough Council promised the ‘fullest possible support’ for a university, although with the reservation that neither ‘the character’ nor ‘the future
An early map of Guildford showing Stag Hill.
development of the town’ should be affected. There were of course also strong economic
reasons for a university: it would pay substantial rates and become a significant local
employer, while both staff and students would bring money to the town. Surrey County
Council started to investigate the planning implications. April brought the first of a
number of planning meetings attended by the organisations most closely involved.
These included the County Council, Guildford Borough Council and Guildford Rural
District Council and, at a later stage, the University Grants Committee (UGC), the
government agency responsible for university funding.

There was some concern in the town. Guildford was still a quiet market town, not
the regional centre for government, the economy and commerce it is today. Housing was
one issue, traffic another. A third was the environment: beautiful countryside reaches
almost to the centre of Guildford and townspeople felt strongly that such green areas
should be preserved. Perhaps most important of all was the belief that, were the town to
acquire a university, it should be a ‘proper’ one. The Town Clerk reflected local opinion
when he wrote to Peter Leggett that the town would not welcome the College ‘if it only
came as a technical establishment’.

Peter Leggett was a mathematician, but the fact that he placed a high value on the
arts and humanities had a critical influence on the growing local acceptance that the
College’s move to Guildford was to be welcomed. The College itself was starting to
develop degree courses in these areas, and also offered General Studies courses to all
students. A second important factor was the Principal himself. Peter Leggett started with
two significant advantages. He had lived in Guildford for some fifteen years until 1960,
and still lived in Surrey (at Oxshott). And he was obviously a sincere and genuine man,
committed to the expansion of his institution but equally committed to generating true
enthusiasm for the new University of Surrey, both in Guildford itself and throughout
the county.

The Robbins Report, published in October 1963, heralded a substantial expansion
of higher education in Britain. Among its proposals was one that the Colleges of
Advanced Technology (CATs) should become technological universities. (Battersea
Polytechnic, which had started life in 1894, had been designated a CAT in 1956.) Now
the CATs would be able to award their own first and advanced degrees; student numbers
would increase to between 3,000 and 5,000, with improved staff–student ratios; and
staff pay and working conditions would be improved.

In March 1964 the College Governors submitted development proposals to Surrey
County Council. Some 200 acres would be required initially, increasing to at least 300 to
allow for gradual expansion; the Governors proposed to acquire land on Stag Hill,
immediately beneath the Cathedral, and at Manor Farm, on the other side of the A3 from
Stag Hill. In May the Government approved the College’s move to Guildford. It was an
apt link with history that the Minister responsible was Quintin Hogg, grandson of the
founder of Regent Street Polytechnic (see page 168). After informal meetings with
selected architectural practices, the University had already appointed George Grenfell
Baines of the Building Design Partnership (BDP) as its Planning Consultant, and it
commissioned BDP to design the University buildings. On 8 December the University’s
development plans for the Stag Hill site were presented to, and broadly approved by, a
meeting of the local authorities and other groups involved. The following year brought local protest meetings. The main criticisms were the speed of development, the loss of farmland and the proposal (later abandoned for an underpass) to connect the two parts of the University by a large flyover across the A3.

That the Minister ‘called in’ the planning application worked in the University’s favour. A three-day public enquiry in October 1965 looked beyond the question of the University’s siting to examine the wider issue of whether Guildford should have a university at all. The Minister’s decision, announced in January 1966, gave wholehearted support to the University. While objections were acknowledged sympathetically, the report noted that the ‘responsible authorities’ were in ‘remarkable agreement’ about Guildford’s suitability as the location of a new university. The University, the Minister stated, would bring ‘imaginative possibilities for the future of the town which only the most compelling objections could override’. The contractors went on site almost immediately.

**Stag Hill**

The decision to build on Stag Hill rather than Manor Farm was a fundamental one. It committed the University’s planners to creating an urban institution that would, in the words of a Planning Report produced in November 1964, ‘be a dynamic part of Guildford’ rather than developing ‘apart from the town’s life and facilities’. Lessons had been learnt from the new ‘plateglass’ universities (Sussex, East Anglia and so on) founded in the early 1960s; built on semi-rural edge-of-town sites, these were already felt to be isolated, geographically and socially, from their ‘host’ community. In addition, the College at Battersea was rooted in a dense urban community, and there was a general desire to preserve this aspect of its character.
Above: Aerial view of Guildford in the early 1960s.

Left: John Cory Dixon, the University’s first planning officer.

Right: Sidney Rich, the University’s first Chairman of Council, addresses a meeting against a backdrop of plans of the new campus on Stag Hill. George Grenfell Baines, the University’s Planning Consultant, is on his left, Peter Leggett on his right.
The site itself was challenging. It was small for a university that was planned to increase to 5,000 students by some time in the 1980s; it was steep, and would have to be stabilised; it was crowned by the Cathedral. Most important of all, the design had to create physical links between the town, the University and the Cathedral.

The circumstances of the move to Guildford brought another significant challenge: to design, build and equip a sizeable university in a very short period. The ‘plateglass’ universities had started with very small numbers of students (Kent, for example, had 500 in its first year), and new buildings were completed more or less as each new intake of students arrived. The situation at Guildford was markedly different. There were already some 1,800 students at Battersea, and rapid expansion was planned in Guildford; indeed, the need to expand had been the original motive for finding a new site. Initially it was hoped that half the departments would start work in Guildford in autumn 1967, the remainder a year later, though each of these dates was soon put back by twelve months. Sufficient accommodation – teaching, administrative, social, residential – had to be ready for staff and students.

George Grenfell Baines was closely involved in formulating the aims of the new University through his work in defining what the November 1964 Planning Report called the ‘physical, psychological and intellectual environment’ to be created on the new campus. In a symposium on *University Planning and Design* held in 1967, he commented that at Surrey ‘designers have been accepted as partners in discussing aims, philosophy and policy as influencing forces on the character and nature of the [University’s] physical environment.’

George Grenfell Baines’s master plan made the most of the site by concentrating development in the centre, so emphasising the University’s urban character. A press report issued in December 1964 explained:

> From a distance it will seem like a compact hill town clustered below the Cathedral, surrounded by trees, with an encircling wall of academic buildings. But through these there will be glimpses of the precinct spaces, of the clustered towers, and of the Cathedral itself.

The plan proposed three ‘bands of activity’ – residential, social and academic – that would ‘sweep round below the crest of the Cathedral Hill in a compact linear form’. The social buildings – Senate House, Students’ Union, Library, health centre, restaurants, lecture theatre and so on – would form the central spine: a ‘continuous sequence of pedestrian spaces’ generating ‘as much activity and liveliness... as possible’. The report continued:

> This central spine branches to the south in a variety of informally grouped residential clusters... that can be combined... to form ‘houses’ of up to fifty [students] which combine in turn to create neighbourhoods of up to five hundred. The spine also branches north linking with the academic buildings... In contrast to the informal residential... clusters, these teaching buildings form a broken wall of building across the north of the site.
The academic buildings were designed as an adaptable standard shell to provide maximum flexibility for change and reorganisation; on the upper storeys are small and medium-sized spaces (offices, classrooms, laboratories), with specialist workshops and laboratories on the lower floors. The master plan also allowed each band of activity to expand westwards towards Manor Farm.

The University was to be a ‘walking institution’. Pedestrians and vehicles would be strictly segregated, with parking largely confined to the perimeter – though even in the mid-1960s it was expected that most staff and a large number of students would arrive on campus by car. The spine walkway would ‘provide a varied sequence of spaces with glimpse views north and south between the residential and academic buildings to the landscape and trees beyond’. Vertical walkways would link the three zones, with the academic buildings themselves connected by bridges. Ease of contact among teaching staff, especially from different disciplines, was one feature of Battersea that many staff were keen to maintain. This was one reason why academic buildings were not allocated to individual departments.

The density of development in George Grenfell Baines’s original concept was in marked contrast with the ‘plateglass’ campuses. Almost four decades on, even after a substantial new building programme, the three ‘bands of activity’ remain, and the core of the campus continues to be lively and bustling, at least during the day. The University remains a ‘walking institution’; and, as George Grenfell Baines and Peter Leggett foresaw, planting has softened the initially raw edges of the buildings (see also page 88). That said, the twin constraints of time and money meant that the original plan did not produce buildings of outstanding merit. It fell to future generations to commission buildings that would give the University a place on the architectural as well as the academic map.

Creating a new university

The go-ahead for the University came just in time. In 1963 the Conservative Government accepted the conclusions of the Robbins Report and committed itself to increased spending on higher education. A year later, the newly elected Labour Government, faced with economic crisis as soon as it took office, made substantial cuts in public expenditure. All the crucial decisions required to transform Battersea College into the new University of Surrey had been taken during that year, and so could not easily be rescinded by the new Government. Had Peter Leggett, supported by his Governors, not pressed for university status with such determination and vigour, it is likely that the opportunity would have been missed. It seems that Chelsea College, not so fast off the mark in planning to move to a new site, was blocked for this reason.

Even so, progress was delayed. The Treasury’s moratorium on new building postponed the start of building work from 1 April to 1 October 1966, and the University Grants Committee (UGC) and the Treasury were slow in approving negotiated contracts. Even more serious, the UGC was permitted to release only £1 million (at 1962 prices) per institution for building starts in each financial year. This limitation hit the University hard, since the new campus required enough buildings to house an existing institution.
Left and below left:
Site visits by Lord Robens, the first Chancellor of the University.

Below: View from the Cathedral of the early building work and the formation of the lake.

Above and left: Aerial views of the campus under construction.
As a result, the new buildings at Guildford remained ‘sub-standard’, in terms of space requirements, for several years.

Money was a major issue from the start. Looking back in retirement, Peter Leggett recalled that:

Although the UGC provided money for the running of the University and for putting up essential buildings, the finance provided did not extend to the purchase of the site, the provision of playing fields, or building vitally important student residences. Hence the need for very substantial fund-raising.

Capital costs for the University to autumn 1969 were estimated at about £6 million, of which the Government would provide just over half, £3.5 million. Local generosity made up almost all the shortfall. Surrey County Council gave £1 million towards buying the site; Guildford Borough Council reduced the price of the land it sold to the University by £250,000. A major appeal was launched in May 1968; three years later £2.6 million had been raised. This money proved crucial, as Peter Leggett readily acknowledged:

Without the really substantial additional help given as a result of the Appeal, the University would scarcely have been able to function... What the University owes to individuals, firms, trusts, foundations and to Surrey and Guildford Councils is very great.

The launch event proved memorable. Peter Leggett again:

The Appeal was formally launched on 10 May 1968 in a marquee in Stoke Park at a dinner attended by over 2,000 guests. The weather was not of the best, the speeches being greeted by torrential rain and a rumble or two of thunder. But the marquee stood up, the dinner was excellent, and speeches by Lord Nugent, who with Lady Nugent had taken responsibility for all the arrangements, Lord Robens, Sir William Mullens, and the Vice-Chancellor were all well received... The target was set at £5 million; and in the event £3 3/4 million was raised - in cash or kind... Such a result was not obtained without tremendous effort by a large number of people. Outstanding among these were Lord Nugent, MP for Guildford prior to his translation to the House of Lords; Colonel Wells, Chairman of Surrey County Council from 1962 to 1965; and the three High Officers, Lord Robens, Sir George Edwards, and Sir William Mullens.

An early task was to select the University’s first High Officers - the Chancellor, Pro-Chancellor and Treasurer. The choice was critical. The right people could do much to advance the University’s cause both in Surrey and at national level. At first sight, the fit between Lord Robens and the University of Surrey might seem unlikely: a former trade union official, born and raised in Manchester, who had become a prominent Labour politician and was now Chairman of the National Coal Board. However, as Chancellor he soon took to the University and the University to him; in addition, he also lived nearby,
The Installation of Lord Robens of Woldingham as the University of Surrey's inaugural Chancellor, Guildford Civic Hall, 22 October 1966

Above: Lord Robens chats with the actress Dame Sybil Thorndike who received an honorary doctorate.

Below: A full Guildford Civic Hall.

Above centre: The Earl of Munster, the Lord Lieutenant of Surrey, and another of the first honorary doctorates.

Far right: Surrey's first Vice-Chancellor, Peter Leggett, and Lord Robens wearing Surrey's new academic dress for the first time.

Right: The distinguished scientist Sir Leon Bagrit receives his honorary degree.
Above: The first meeting of University Council.

Above: Sir William Mullens, first Treasurer of the University.

Above and right: Lord Robens in the academic dress of the Chancellor and during a pit inspection in his role as Chairman of the National Coal Board (see page 45).
at Woldingham. Sir George Edwards, the Pro-Chancellor, had lived in Guildford for many years. A distinguished aeronautical engineer, he was Chairman and Managing Director of the British Aircraft Corporation, whose plant at Weybridge was a major local employer.

Lord Robens was something of a visionary. At his Installation ceremony as Chancellor, held in the Civic Hall, Guildford, on 22 October 1966, he proclaimed that the University:

represents the technology of the future. Its purpose will be to identify the scientific needs of the second half of the 20th Century, to apply a practical inventiveness and to train young men and women into the new ways of thinking. The setting here in Surrey... is symbolic of what the University sets out to do. Uncluttered by the legacy of the past, the University, like the Cathedral, is built not for today but for the years that lie before us.

While Lord Robens always argued that universities should produce rounded individuals, Sir George would stress the importance of producing ‘the best engineers in the country’. In 2001 he recalled that, in the early years of the University:

I did tend to emphasise the importance of knowing your trade – but it is important to remember that the detail is the heart and soul of what you are doing as an engineer. This was partly to counter Alf Robens’ slightly less practical emphasis, but also to encourage Peter Leggett to take on the best staff and to encourage them in turn to pursue their own research.

The third of the triumvirate was Sir William Mullens, the High Sheriff of Surrey and a former Government Broker, who was well connected in the City. As Treasurer, he set the University’s finances on a sound footing, and proved a brisk and efficient Chairman of the Appeal Committee. He also gave the University a collection of prints of Surrey.

While the University’s new campus was being created on Stag Hill, the institution’s day-by-day work of teaching and research was continuing 30 miles away in crowded south London. To begin with, the University’s main link with the new campus at Guildford was John Cory Dixon, the very effective Planning Officer, who had the thick skin and grasp of detail essential to drive through a very substantial building programme. Professor V S Griffiths (‘Griff’ – see page 55) took over responsibility for developments in Guildford, especially student accommodation, while C W Tonkin, the popular Pro-Vice-Chancellor, kept the show on the road in Battersea; ‘Tonks’, as he was always called, had joined the College as Vice-Principal in 1960, and retired in 1969.

The institutional changes were considerable. University governance had to be established – Court, Council and Senate replaced the College’s Governing Body and Academic Board. Academic staff now enjoyed much greater involvement. So too did students. Initially the President of the Students’ Union attended Senate for relevant items; soon he became a full member, and was joined by two other students chosen by election. Students were members of a number of committees, including the important
My student years covered the crucial transition from College to University status. I was based in Battersea the whole time, though with frequent trips to Guildford. In 1966 I was elected President of the College Students’ Union, and so, when the Charter was issued in September 1966, I found myself in the fortunate, and privileged, position of being the first Union President of the new University. I was also the first sabbatical President; until then, Union Presidents had had to struggle to keep up with their courses alongside their Union activities.

These were heady times. There was considerable turbulence and change in society as a whole. It was a time of pop, protest, political activism, and passions indulged – with student protests worldwide from Berkeley, California, to the Sorbonne in Paris. In Britain there were paler versions at Essex and the LSE. Battersea was never a very politically minded place, but nonetheless there was considerable disappointment at the Labour Government under Harold Wilson, and real concern about events in Vietnam and South Africa.

It is difficult to appreciate now, but students in the late 1960s had very few rights vis-à-vis the University authorities. The main National Union of Students’ campaign was for the modernisation of university charters, in particular to get rid of the very old-fashioned disciplinary regulations, which treated students as children, and to introduce proper and equitable procedures. The change to University status gave us an ideal opportunity at Surrey to lead the way. There was plenty of negotiation – the issue occupied much of my time as President – but really we were pushing at an open door, thanks to the reasonable attitude of the Vice-Chancellor and his colleagues.

Battersea College was a good-natured, intimate institution. By the time I became Union President I reckoned I knew almost everyone, at least by sight. This was partly because I had been editor of the student newspaper the year before. People genuinely liked each other, and staff-student relations were easy. This was partly thanks to Mike Clark, the Dean of Students, who was a good friend and adviser to everyone and, as a keen sportsman, encouraged the sporting side of College life. We also benefited from being close to the centre of London – I used to go across to Chelsea most Thursday nights to listen to jam sessions at the King’s Head.

But there was also a yearning to be a University, and it was exciting to watch that come into being. The College wanted to be able to award its own degrees and develop its own campus. Most people looked forward to the move to Guildford. My Union colleague Alan Millington, who was Vice-President and still works for the University, sat on all the committees dealing with buildings and estates, and made sure student concerns were taken into account.

Meanwhile life went on as normal at Battersea while we prepared for the move to Guildford. The bar was one centre of student life. It was close to the main hall, and
sometimes lubricated the more loquacious speakers at the weekly Union General Meeting, every Tuesday lunchtime. This was real democracy in action, with motions proposed and hotly debated. The other hub was the Union offices, which were in a former junior school close to the main College building. The Union was in effect a small business, and the money it made from selling food and alcohol, plus the statutory grant it received from the University, enabled it to finance the student newspaper and a myriad of clubs of every description.

Above all we had fun, and this for me is typified by the great bands that played at the College. I remember Manfred Mann, the Animals, and the Bonzo Dog Doo-Dah Band among many others. The dances were policed by volunteers from the local police station. In return, our students made up the numbers in identity parades – I’m relieved that during the year I was President not a single student was recognised!

David Varney worked for Shell for almost thirty years after graduating. Subsequently he was Chief Executive of British Gas before becoming Chairman of mmO2 (formerly BT Wireless) in June 2001.
Development Committee which oversaw the planning of the Guildford campus. In his Annual Report for 1966/67, David Varney, the President of the Students’ Union, commented that:

*The attendance of the President at Senate has allowed the voice of the student body to be heard in the chief academic committee of the University... Surrey is at the front of most British universities in the field of student participation, and the responsibilities that are handed to students.*

By the early 1970s there was direct student representation on Senate and Council and on every major decision-making committee; it seems that the University was the first in the UK to involve students so closely in the planning process.

This degree of student representation, and the University’s positive and non-confrontational attitude towards its students, contributed to the fact that the ‘events’ of 1968 – protests, sit-ins and so on – almost completely bypassed the University. The Vice-Chancellor was easily accessible for consultation; Dr Mike Clark, Dean of Students from 1964 to 1970, also played a crucial role in developing harmonious student participation. Another factor was the lack of a political tradition at Battersea; indeed until a few years before, the College authorities had prohibited political meetings. At the annual Students’ Union dinner in March 1968, at a time when students elsewhere were in revolt, Peter Leggett was given honorary membership of the Union. The *Surrey Advertiser* reported that students cheered and sang ‘For He’s a Jolly Good Fellow’; David Varney paid tribute to the Vice-Chancellor’s ‘ability to see the other side of the question’ which ‘has taught us all a sense of tolerance’.

There were also major academic developments. Students in the new University would be divided roughly equally between science, engineering and human sciences. This meant creating new departments and new areas of expertise in sociology, economics, psychology, languages and regional studies. From the start, the direction of teaching and research in these subjects was focused on their practical application in an increasingly technological society. The approach in languages was innovatory: as well as the language itself, students studied the recent history, politics, economics and social geography of the country concerned. The University also established biological sciences virtually from scratch; the College’s biology teaching had been limited to topics required for other courses. Music, which had been a very small department in Battersea, was boosted with the introduction of the *Tonmeister* course (initially in association with the Physics Department) designed for students interested in ‘the technological aspects of music – sound recording, radio, television and film studio work’.
Existing departments were now able to expand their research. Under Professor D R Chick, Electrical Engineering started to develop expertise in ion implantation, an essential factor in the evolution of microchips. In 1966 Standard Telephone gave the department its first accelerator (which, thirty-five years on, still works). For several years after the move to Guildford, the Accelerator Laboratory was housed, rent-free, in the former paint-shop of Dennis Motors, just across the railway from the campus. In 1970 the University was one of three in the UK selected for ‘special support for research’ in this field. The Mechanical Engineering Department under Professor J M Zarek started innovative work in biomechanics. The Space Structures Research Centre (whose dedicated building, funded by the British Steel Corporation, was opened in the early 1970s) worked on stress in space structures and also, in 1966, sponsored the first-ever international conference on space structures. And the Physics Department continued significant work in nuclear physics and also carried out a range of research projects for industry. These are merely some examples among many.

**On campus**

The move to the new campus was planned to happen in two stages, in 1968 and 1969, so that the University would be split between the two sites, Guildford and Battersea, for only a single year. In 1968 construction was due to be completed by June. The plan was for the departments concerned – Chemical, Civil, Electrical and Control, and Mechanical Engineering, Mathematics, Metallurgy and Materials Technology, Physics, and Chemical Physics, plus the Computing Unit – to move during the summer, so that they would be ready to welcome students in October. But construction ran well behind schedule, and, in the words of Peter Leggett, ‘disaster was avoided by an uncomfortably narrow margin’. The account given by the Civil Engineering Department in the 1968/69 Annual Report illustrates the difficulties:

*The Department... was unable to move into the new building until the day before the arrival of the incoming students. The electricity supply functioned only partially, telephones were not connected and the heating and ventilation systems were non-operational. Many items of furniture had not been delivered and with no cleaning services it was simply a case of managing as well as one could in very difficult circumstances. The laboratories... were not ready to receive equipment until Christmas, and for the most part it was not possible to resume experimental work until Easter.*

To make matters worse, the autumn was very wet. There was mud everywhere. Alf Adams, then a newly appointed junior lecturer in physics, later Professor of Physics, recalls that one of his first tasks was to go out and buy a doormat. The University bought a supply of wellington boots for general use – you trudged through the mud, left the wellies when you went inside, and put on another pair when you went outside again.
The campus comes to life

Clockwise from top left:
Campus lights reflect in the lake.

Tending the grounds.

About 1,400 meals a day were served in a hastily erected marquee with a field kitchen attached.

Some of the University’s first cohort of students.
Another urgent problem was food. Only one restaurant was ready, so a marquee, with a field kitchen attached, was hastily erected. The general recollection is that the meals served there were of high quality and excellent value – two shillings and sixpence for three courses. Some 1,400 meals a day were served to staff, students and contractors, according to John Davies, who worked as Catering Supervisor and later became the University Mace-Bearer and Vice-Chancellor’s chauffeur.

Student lodgings were potentially a very serious issue, as not all the residences were ready for the start of the session. So great was the public response when Peter Leggett appealed for emergency accommodation that in the end more rooms were available than were required. In his first Progress Report to local people in spring 1969, Peter Leggett wrote: ‘The University has certainly been made welcome by Guildford. This goodwill has lightened the task of settling in immeasurably.’

Further serious delays lay ahead. In early 1969 it became clear that the second phase of buildings, which were to accommodate the departments left in Battersea, would not be ready by the summer. In the end, Chemistry, Hotel and Catering Management, and Humanities and Social Sciences moved to Guildford, while Biochemistry, Biological Sciences, and Linguistic and Regional Studies remained in London until 1970.

Frustrating and inconvenient though the difficulties were, the University of Surrey now really was a university, settled on its own campus and ready to establish its own approach and reputation. The challenges should not be underestimated, the more so since the University was replacing an institution that had itself achieved high academic standards, in many respects against the odds; had already established a respectable research record in several departments; and felt itself to be a friendly community. And while the decision to move had generally been welcomed, it was not without its difficulties. Some teaching staff did not make the move, and either retired or were helped to find other posts; rather more non-teaching staff, many of whom had served the College loyally for many years, were unable or unwilling to move.

David Pollard (later University Director in Engineering Education and Training) recalls how a ‘tremendous pioneering spirit’ carried the University along in its early years at Guildford.

It was an exciting place to be. We were planning new courses, establishing whole new subject areas, and expanding others. We were also dealing with far more students. Whereas there had been 100 first-year students across all four engineering disciplines at Battersea, now each one was admitting nearly that number. The staff, too, were predominantly young, either people who had been just a few years at Battersea or who had joined in Guildford. And, to begin with at least, we managed to maintain a good social atmosphere - we all met in the common rooms for coffee and tea, which I regret doesn’t happen so much now.

Ken Stephens (subsequently Dean of Electrical Engineering) remembers the collegiate atmosphere, reinforced by staff-versus-student cricket and football matches. John Salmon (Professor of Chemistry and later Pro-Vice-Chancellor for Industry) recalls the
sense of adventure mixed with something of a culture shock that came from the very different surroundings in Guildford. Alf Adams, a new recruit, looks back to the ‘sense of pride that we had become a University. Now we had the chance to prove ourselves, and there were new labs to work in and plenty of new ideas around.’

Three other developments contributed to the University’s distinctive profile. The industrial, or professional, year initiated at Battersea was extended in Guildford, and by 1971/72 was mandatory in twenty-six of the thirty-seven undergraduate courses and optional in a further seven. Traditionally it was students of engineering and of hotel and catering management who had spent their third year working in industry. Apart from its intrinsic benefits, a year’s practical experience of ‘real-life’ problem-solving and team-working made students maturer and more motivated when they returned for their last year of studies and so also more attractive to employers. Now scientists, social scientists, linguists and so on were also given the opportunity to apply their knowledge and skills in the workplace. Many of the University staff acted as industrial tutors, placing students and guiding them during their year out.

The University, encouraged by Sir George Edwards in particular, also set out to ‘extend the range of interaction between the University and industry’. The Bureau of Industrial Liaison, one of the first in British universities, was established to develop collaborative research and consultancy projects, to increase industry’s use of the University’s specialist equipment, and to organise short courses and workshops. This also brought in useful additional income; but its more significant result was to initiate the positive, long-term relationships with industry that the University enjoys to this day. The Managing Directors’ Club, founded and chaired by Sir George, made an important contribution to this process, and also provided an invaluable source of experience and advice for the University, especially in the early years. As the title suggests, members were drawn from senior people in industry and other organisations in Surrey and the nearby counties; during the 1970s membership climbed to over 100.

General Studies continued to form an important and unusual part of the Surrey curriculum, accounting for about 10 per cent of undergraduates’ time. The programme, organised by the Department of Humanities and Social Sciences, involved academic staff from every discipline. Students attended weekly lectures for their first two terms; in 1970/71, by way of example, these covered the ‘social, economic, scientific, aesthetic and moral aspects of “Man and Society”’. During the following five terms (i.e. until two terms before final exams) they took three courses from a wide range of options; these were not permitted to be associated with their degree subjects. In 1970/71 the most popular included economics, psychology, music, and man, environment and pollution. Attendance was compulsory; essays had to be written and the marks obtained counted towards a student’s final degree. Continuing a Battersea tradition, an annual residential discussion weekend was held at Moor Park, Farnham. In 1971 the theme was ‘Exploring the Universe’; the two highly eminent guest speakers were Herman Bondi, Director General of the European Space Research Organisation, and Professor L F Boyd, Head of the Mullard Space Science Laboratory at University College, London.
Becoming established

Now that the University was settling down on Stag Hill, the people of Guildford could begin to get to know the new arrival. As Bill Bellerby, for many years a Guildford Borough councillor, recalls:

Such fears as had existed about the University - mostly superficial ones about unruly behaviour by students - were soon put to rest. People realised that the University would be an asset to the town, which indeed it has proved.

The University's newly founded Centre for Adult Education (which later became a University department) was the focus for many activities. The Centre ran a range of activities for young adults (i.e. aged 16-21), including science and arts extension groups for sixth-formers and sixth-form conferences. It also offered a number of traditional 'liberal education' courses for adults and supplied teachers for courses run by the Workers' Educational Association, which at this time was one of the main providers of adult education. In 1974 the Centre took over direct responsibility for adult education in southwest Surrey, and in 1978 for the entire county. Probably of greater long-term significance were the varied programmes of in-service education provided for professional groups, notably teachers, health workers (e.g. community health nurses, midwives, hospital-based nursing tutors), and the rescue services (chiefly the fire service). This work helped to establish the University as a major source of continuing professional education and development, and so promoted the University to a more diverse audience than did traditional adult education. These professional courses, which were underpinned by the Centre's research into how adults learn and how best to teach them, were the forerunners of the broad spread of opportunities for continuing education that the University offers today.

A wide range of cultural activities also drew outsiders to the campus. Professor Lewis Elton had started to stage exhibitions of original works of art in the Physics Department corridors at Battersea; the first was by students at Camberwell College of Art. The exhibitions continued, at first in 'the rather better corridors at Guildford', as Professor Elton describes them, much later in the Lewis Elton Gallery, which was opened in 1997. One outstanding early exhibition was of works by the Romanian painter Arnold Daghani, who in 1943 had managed to escape from a German forced labour camp shortly before its inhabitants were liquidated. The annual Guildford Festival of the Arts was inaugurated in 1969, during the University's first year on the new campus, and the following year the Students' Union also held its first Free Festival (soon rechristened the Free Arts Festival) in the summer. The event flourished. In 1974, for example, the Students' Union reported that over 3,000 people attended the event, 'which included musical items, both classical and pop, art exhibitions, poetry reading, films, folk concerts and theatre groups'; students from other institutions in and around Guildford collaborated. The Union also founded a 'Surrey University Social Action Group', which organised students to do voluntary work in the local community. As Peter Leggett noted in his last Annual Report, by the mid-1970s the range of exhibitions, recitals, concerts and lectures on campus was enormous. 'The sheer number of such functions', he wrote, '... is worthy of note. During the winter term
Right: Legendary rock band Led Zeppelin made their live debut under the name Led Zeppelin at the University on 15 October 1968.

Far right: Peter Leggett oversees an early Rag event.

The Free Arts Festival.
there are usually seven or eight different events, all open to the public. Open Days and University exhibits at the annual Surrey County Show and Guildford Show also helped to keep the public up to date with developments on Stag Hill.

In 1975 the University, together with Guildford Borough Council, Surrey County Council and Guildford College of Technology, hosted the prestigious Annual Meeting of the British Association. Some 900 delegates were in residence, and registrations totalled over 1,600. Sir Bernard Lovell gave his Presidential Address in the Cathedral, an outstanding lecture entitled ‘In the Centre of Immensities’.

There were several important academic developments during the first half of the 1970s. Combined courses were launched. Metallurgy or materials technology with a foreign language was the first, followed by others combining a branch of science or engineering either with a foreign language or with economics, and later by various combinations of physics or mathematics with philosophy or government and administration. Courses in telecommunications, toxicology, science education and French were introduced (it seems hard to believe that telecommunications has so recently become a distinct area of academic study). The launch of a multi-disciplinary home economics course in 1970/71 was followed by the establishment of a Home Economics Centre. Both received substantial funding from the National Training College of Domestic Subjects Trust, founded when the National College was closed in 1962, and were also supported by industry. The annual Edith Clarke Lecture, in memory of the National College’s Principal from 1874 to 1919, was endowed at the same time. Although the Home Economics Department, as it later became, was closed in 1984 (see page 76), the lecture remains an important event in the University calendar. The Philosophy Department was formed in 1971/72.

At the start of the 1970/71 session the University was at long last in one place – but the building programme as set out in George Grenfell Baines’s master plan was far from complete. In autumn 1970 the University consisted (broadly) of five academic buildings, Senate House, Hall, three restaurants, the Lecture Theatre Block, the first part of the Library, two residential courts, and 40 acres of sports fields. In March 1971 the Architects’ Journal commented that the University had

gone through a convulsive period of change and growth in a very few years, and the sheer achievement of getting through £7 million of planning and building since 1965 commands admiration. The campus works efficiently and looks thoroughly established.

While this massive building programme had given the University a flying start, the pace of construction continued to increase over the next five years: four academic buildings, the Sports Hall, the Students’ Union, Wates House (the Staff Club), three residential courts, the Interdisciplinary Building, the Space Structures Laboratory, the second phase of the Library, the Teaching Block, and maintenance and stores buildings.

Most of these buildings, like those already completed, were the work of the Building Design Partnership. However, it had always been envisaged that other architects would be brought in for some of the later buildings. Robert Maguire and Keith Murray, progressive young architects who had made their name as church designers, were responsible for the Stag Hill Court residencies and also for the Students’ Union building. Stag Hill Court
(nicknamed Diddy Town as soon as construction started) tumbles down the hillside in a series of compact terraced houses separated by pedestrian streets. The Architects' Journal compared the layout with 'the crowded back streets of a northern industrial town' and anticipated that 'the same intensity of community living seems likely to grow in this setting.' This was as planned. The thinking behind the first residences - Battersea and Surrey Courts, both designed by BDP - had been to create an environment that would help students, in Peter Leggett's words, 'to develop a sense of belonging to a group'. Battersea and Surrey Courts each accommodated about 400 students in separate houses. (The seven houses in Battersea Court were named after Principals and Chairmen of the Governing Body of Battersea Polytechnic; the six houses in Surrey Court carried the names of Surrey rivers.) Each house accommodated 56 students on four or five floors, with single study bedrooms grouped around a 'kitchen-utility-breakfast room' (unappealingly known as a 'KUB') and washing facilities. Each Court also had a communal building with reception, lounges, laundry-room, and showers for non-residents; students living off-campus were assigned to a Court to help them to integrate into social and sporting life.

Maguire and Murray responded to their brief to rethink student living by radically changing both the size and the form of the basic unit. Each unit in Stag Hill Court (the third set of residences to be completed) houses ten students - research by the architects and the University showed this to be the optimum number, allowing students to gain a sense of identity without restricting their independence. Six students occupy single study-bedrooms on the ground floor; there are two duplex double study-bedrooms on the first and balcony floors and a large kitchen-cum-commonroom on the first floor. Because the roofs slope at 45 degrees from very low eaves, every room (even those on the ground floor) is in the roof and has a roof window, which increases privacy by minimising overlooking. The architects explained their thinking in the Architects' Journal:

> Each unit has its own front door. This and the domestic character internally help to create a sense of identity. The external identity of each house is however made subordinate to that of the very small courts and alleyways off which the front doors open, in order to give a strong sense of 'place' in the context of a very large university community.

The sloping roofs originally planned had to be replaced by flat roofs when fears were expressed that the view up to the Cathedral would be marred. The consensus is that the flat roofs enhance the visual interest of the Court.

Maguire and Murray also designed the Students' Union building, completed in 1972; until then the Union's offices and social facilities had been in Senate House. This unusual, sparkly building contains a sequence of strongly defined but flexible spaces - bars, snack bars, lounges, performance areas, offices and so on - and has proved highly adaptable over the years. Clubs and societies - cultural, sporting, leisure - flourished, and plays and concerts were given regularly. The Union also opened its own radio station; the 1972/73 Annual Report described this as a 'very worthwhile means of communication amongst the students'.

The early 1970s brought the first of the two episodes of serious student unrest the University has experienced. At the end of the spring term in 1973, students organised a
Campus in the 1970s

Left and below left: The Students’ Union building.

Right and below: Aerial views of the campus.
rent strike in protest at increased residence fees. When the University threatened to sue the substantial number of students who had not paid their fees, the top two floors of Senate House were occupied for six days. A compromise was eventually reached - a reduction in the fee increase for 1972/73 and 1973/74. Student membership of the Finance and General Purposes Committee of Council was also introduced, the last major University committee on which students had not been represented. Always fair, Peter Leggett was careful to note in the Annual Report that 'a feature of the sit-in was the spotless condition of the top two floors of Senate House when the students vacated them.' Two years later there were two more short sit-ins, although these were less widely supported by students. This time legal action was taken. The University won the test case, and at the same time introduced a regulation barring any student with outstanding debts to the University being awarded a degree.

In the year 1970/71 the University had 2,075 undergraduates and 569 postgraduate students. (Just over 40 per cent of the postgraduates were studying part-time; 57 per cent were studying for research degrees.) There were also 133 collaborative research students reading for higher degrees while working in industry. The number of full-time undergraduates had increased by just under 300 since 1967/68, while postgraduate numbers had increased by just 30. The expectation then was that there would be 2,900 ‘full-time equivalent’ students (excluding those in their industrial year) based on the campus in 1974/75 and 3,350 two years after that, i.e. in 1976/77. The actual increase was considerably smaller, largely because of the national decline in the number of applicants for university places; in 1974/75 there were 2,646 students.

Longer-term planning became more difficult in the mid-1970s. In January 1973 the UGC accepted the University’s long-term target of 4,950 full-time equivalent students by 1981/82, ‘assuming’, as Peter Leggett wrote, ‘that the necessary finance is forthcoming’. By April 1975, however, the UGC was advising the University to plan for 3,350 students in 1981/82. A moratorium on new building work did not disrupt the building programme described above, but did delay the conversion of space vacated by departments moving into new buildings.

Although it was not growing as fast as it had hoped, the University could take comfort in some pleasing statistics. The proportion of applicants to Surrey who made the University their first choice rose from 22.3 per cent in 1971 to 34.7 per cent three years later. And of the 553 students who graduated in summer 1974, only six were still unemployed in December of that year. However, 17.7 per cent of students left the University without the qualification for which they initially registered: a high proportion that, while in line with the national picture, caused Peter Leggett considerable disquiet.

Peter Leggett retired in 1975. For him the University’s ‘characteristic spirit’ was its professionalism: ‘a real mastery of one’s subject and its application, combined with the acceptance and practising of the highest professional standards of integrity, compassion and service to one’s fellow men’. He had dedicated his considerable idealism and energy to creating the University of Surrey as a centre of scholarship and learning and as a living community.
Early degree ceremonies

Above left: Vice-Chancellor Peter Leggett welcomes graduands and their families.

Left: Guildford Cathedral has been used for graduation ceremonies since July 1970.

Above: Ceremony for the conferment of an Honorary Fellowship, Honorary Degrees and Higher Degrees and Diplomas, Saturday 4 December 1971. Left to right: Sir Edward Fennessey, Professor Stephane du Chateau, Peter Leggett, Lord Robens, Sir Laurens van der Post, Charles Wallace Tonkin (‘Tonks’, see page 25).
Every institution owes a debt of gratitude to the people who helped to shape its history and character. The University of Surrey is no exception, and here we pay tribute to those whose energy, enthusiasm and wisdom were of critical importance. Some of these portraits have been contributed by colleagues; others have been written by the author on the basis of interviews and records in the University’s extensive archives.
When, in 1960, the Governors of Battersea College of Technology appointed Dr D M A ‘Peter’ Leggett as Principal, they chose a man who was to be the inspiration and driving force behind the change from Battersea to Surrey. A religious man of vision and integrity, Peter was guided by three principles: candour, dedication and caring for people. These he linked with three rules:

never make a rule you cannot enforce
never make a promise you cannot keep
never make a threat you cannot carry out.

Peter appreciated first that a leader must always be in touch and in sympathy with those he leads and second that, in order to respond to leadership, those involved need to understand what is happening and why. To that end he ensured that information was widely disseminated and at the appropriate time a University Gazette and a Newsletter supplemented less formal channels of information.

Staff views on proposals for new developments were widely sought in discussion groups and at weekend residential conferences. Peter was always approachable and took the trouble to get to know his staff and their opinions, both on these formal occasions and on chance encounters on trains or in restaurants. Use was made of the talents that he thereby discovered in appointing the various advisory groups and working parties needed to further the project.

With so much to be done, delegation was essential and was practised effectively by Peter on the basis of an absolute trust that denied the possibility of failure. Outside help was also essential and it is a tribute to the trust that he inspired in them that so many distinguished people in academia, business, industry and politics were prepared to serve in a variety of capacities.
Despite a formidable workload, Peter attended and even initiated social gatherings at which in his quiet way he would always manage to promote the cause of the University. He also spoke on the University at many formal meetings at which he sought financial support for it. That he managed at the same time to keep track of developments and to respond to the problems that arose gives a measure of his energy and dedication. Yet, in his care for people, he also found time to listen to the problems of staff and to help where he could.

Progress in the five years after the move was hampered by problems such as student unrest and financial cuts. Peter met the complaints and accusations of the dissident students with complete candour and openness, eventually reaching a satisfactory outcome. Financial problems were sources of arguments at Senate. His solution was to adjourn further discussion of the contentious matter until the next meeting and in the meantime to convene a meeting of the protagonists in a medium-sized room with a round table. The effect was to lower the degree of confrontation to the extent that, with a little discreet guidance, a compromise solution could be agreed to be put to the next meeting of Senate.

A very modest man, he probably declined a number of honours, but on his retirement he accepted an honorary doctorate, no doubt in order to retain a formal link with the University for which he had done so much. Retirement gave him more time to develop his interest in psychical and spiritual study, and he became active as an author and lecturer in that field.

John Salmon worked closely with Peter Leggett as Head of the Chemistry Department at Battersea College of Technology and subsequently as Dean of Biological and Chemical Sciences and then Pro-Vice-Chancellor at the University of Surrey.
In inviting Lord Robens to be its first Chancellor, the University of Surrey was selecting a controversial and vigorous figure who had already established a public reputation, first in politics and then in industry as a modernising Chairman of the National Coal Board. In its obituary in 1999, the Independent described him as a complex, extremely clever individual who reached the top of every tree he attempted to climb and did not endear himself to everybody along the way. He had three things going for him: an immense belief in himself; an instinctive capacity for leadership; and a shrewd and nimble brain.

Alf Robens left school in Manchester at the age of fifteen in 1926. After a short period as a shop assistant, he rose through the ranks of the Co-op and then USDAW, the shop workers’ union. Elected Labour MP for a Northumberland mining constituency in 1945, he became a junior minister two years later and joined the Cabinet as Minister of Labour in April 1951, serving for just six months until Labour lost power. Life in Opposition did not suit Robens’ managerial temperament – he said later that, had he ever become Prime Minister, he would have run the UK as a ‘huge corporation’. In 1960 Harold Macmillan offered him the chairmanship of the National Coal Board (NCB) and a life peerage. The prospect of high office, albeit not in government, after nine not wholly successful years as a senior shadow minister, was too tempting to refuse, and he left full-time politics. The irony is that, had he remained in Parliament, he (rather than Harold Wilson) might well, or so he often asserted, have become leader of the opposition on Hugh Gaitskell’s death two years later and then won the subsequent general election.

Robens’ first years in charge of the NCB won him extensive praise from virtually every quarter: government, management, trade unions. Coal was facing increasing competition from cheap oil and gas supplies. Robens pushed through a major programme of modernisation and mechanisation, accompanied by pit closures and job losses; by the end of his ten years at the NCB 400 out of 700 pits had closed, 300,000 jobs had been
lost, the industry’s wage structure had been revolutionised, and productivity had increased by more than 50 per cent.

Lord Robens’ image – modern, energetic, reforming, technocratic – was very much in line with the aspirations of the embryonic University of Surrey. His first public duties in his role coincided with his most difficult moment at the NCB. On the morning of Friday 21 October 1966, the day before he was due to be installed as Chancellor, a colliery tip at Aberfan, south Wales, swept down the mountainside and engulfed the village school; 144 people died, 116 of them children. Having put all the NCB’s resources at the disposal of the rescue teams, Robens made the difficult decision not to travel to Aberfan immediately where, he felt, his presence would only hamper the rescue work. Instead he remained at the NCB’s headquarters in London, keeping in close touch with events in Aberfan. In *Ten Year Stint*, his account of his stewardship of the NCB, he recalled that in the evening he attended a dinner at Battersea College to mark the University’s inauguration. ‘After earnest discussion with the Vice-Chancellor... we decided that the [installation] ceremony must go on’ – guests were already travelling to Guildford, and he would leave Guildford as soon as he received a message that the moment had come for him to travel to Aberfan. Inevitably this proved a controversial decision, the press contrasting the pomp and ceremony of the installation with the rescue workers clawing their way through the mud and rubble at Aberfan. Robens stuck to his belief that:

> the appearance of the layman at too early a stage inevitably distracts senior and essential people from the tasks upon which they should be exclusively concentrating...
> In similar circumstances, I would still stay away until my presence could be useful, and not a hindrance.

In subsequent years, Lord Robens continued to work loyally and actively for the University despite the pressures of his NCB post and, after his retirement in 1972, numerous directorships; he also served as Chairman of the Engineering Industries Council. He greatly enjoyed his link with the University, and could be relied on to put its case wherever and whenever he could. He always believed that the University was ‘well placed to comprehend the technical forces that are changing our society’ and was proud of its achievement in producing graduates who go into ‘those industries which create the wealth on which this country depends’. Lord Robens stood down as Chancellor in 1977, when he was made an honorary Doctor of the University.
The University of Surrey owes an enormous debt to Sir George Edwards, its first Pro-Chancellor. It was Sir George’s vision and tenacity that, in the early days, did much to create the University’s unique approach and to ensure that, in all its endeavours, it remained rooted in the real world.

Sir George became Pro-Chancellor designate in 1964 and Pro-Chancellor proper two years later on the day the University was granted its Charter. At this time he was at the peak of his career in aeronautical engineering. Sir George had joined the drawing-office of Vickers Armstrong Ltd at Weybridge in 1935 as a designer. His abilities were soon recognised, and after working as the company’s Chief Designer and Chief Engineer, and advising the war-time government on aircraft production, he was appointed Managing Director in 1953. In 1960 he became Executive Director (Aircraft) of the British Aircraft Corporation (BAC), and in 1963 Chairman and Managing Director.

This list of posts, important though they are, does not reveal Sir George’s true contribution. The survival and the ultimate success of the post-war British aviation industry are largely the result of his technical skills, managerial acumen and foresight. He is associated with a distinguished roll-call of aircraft. At Vickers Armstrong he developed, among many others, the Vanguard, VC 10 and TSR 2. Later he initiated the BAC One Eleven jet airliner, and took the lead in a series of major international ventures including Concorde, Jaguar and the Panavia Tornado Multi Role Combat Aircraft. Sir George’s work has been acknowledged with the highest possible honours. He is a Fellow of the Royal Society, he was knighted in 1957, and in 1971 he received the Order of Merit.

Within the aircraft industry itself, Sir George inspired tremendous loyalty and affection. He was a leader who knew how to get the best out people, and in return his staff would do anything for him. His voice was also listened to with great respect in the highest circles of government.

Sir George and Peter Leggett, Principal of Battersea College and the University’s first Vice-Chancellor, had one important quality in common. They were both direct and straightforward men. Sir George recalls how he first became involved:
I already knew Peter Leggett and had visited the College at Battersea several times. At first sight he did not seem a commanding figure, but he had the ability to get things done the way he thought they should be done, and he was not afraid to take a stand when he needed to. He and Alf Robens and I had several discussions about the University, and Peter Leggett persuaded me that I could play an important part. He was keen to ensure that the University produced the best engineers and technologists who could grasp the detail essential to successful design and innovation. I thought that the way the University planned to tackle this, especially with the year’s practical experience in industry, was the right one, and I also supported Peter Leggett’s determination to find the best possible people to teach at the University. I knew from my own job how important it was to have young graduates who were knowledgeable and enthusiastic, and right from the start I thought the University could produce them.

Another important factor was Sir George’s close connections with the county, and especially with Guildford Cathedral.

At first the Cathedral authorities were understandably a little concerned about the plans for a new university to be built right on their doorstep on Stag Hill. I was able to reassure people about the character of the University, although again it was Peter Leggett who really built the strong relationship between the University and the Cathedral. He had the gift of encouraging people’s interest, and could persuade them to take part and give money. The University owes him an immeasurable debt.

During his fifteen years as Pro-Chancellor, Sir George did far more than appear at formal ceremonies and meetings. He devoted much time and effort to academic development in the University, especially in its relationship to industry. He also established and chaired the Managing Directors’ Club, which for many years provided an important forum for senior people in industry and commerce to interact with the University. Sir George’s influence was also felt on the sports field, especially in cricket, for which he remains a passionate enthusiast. Besides serving as President of Surrey County Cricket Club, he was the first President of the Staff Cricket Club and established two cricketing trophies.

On his retirement as Pro-Chancellor in 1979, Sir George was made Doctor of the University and also became Pro-Chancellor Emeritus, in which role he has continued to give valuable counsel to the University.
Sir Richard Nugent and his wife Ruth were among the most significant of the Guildford movers and shakers who were quick to understand the benefits a university could bring to the town and the county. In the early days, when local opinion was hesitant, the support of Sir Richard – who had been Guildford’s Member of Parliament since 1950 and was a respected and popular figure in the town – was crucial. As early as January 1963 he was present at an informal lunch, also attended by, among others, the Mayor and the Principal of Guildford College, to discuss the prospects for a university. Sir Richard’s national perspective as an MP, plus the experience gained from eight years as a minister during the 1950s, must have been influential in helping to win doubters over. The following year Sir Richard tabled the Parliamentary Question in answer to which the formal announcement was made that the Government agreed to the establishment of the University in Guildford and was prepared to commit resources ‘as part of the programme for the expansion of higher education’ in line with the recommendations of the Robbins Committee.

Sir Richard retired from the House of Commons at the 1966 general election, and was immediately given a life peerage, taking the title Lord Nugent of Guildford. He and Lady Nugent were among the most vigorous supporters of the University appeal, and took responsibility for organising the highly successful inaugural banquet, held in Stoke Park in May 1968. The event has entered Guildford folklore, not least because of the torrential rain that poured down outside the marquee where the guests were dining. Subsequently both Lord and Lady Nugent took an active part in soliciting gifts for the appeal fund, addressing many functions and gatherings, and in the University of Surrey Society, which acted as a forum for town and gown. Lady Nugent also served on University committees planning residences and other buildings, and always showed special concern for the welfare of students.

The University was quick to show its thanks to both Lord and Lady Nugent, awarding them both the honorary degree Doctor of the University in December 1968. This was by no means the conclusion of their involvement. When the University of Surrey
Society was formed in the late 1980s, Sir Richard became its interested and beneficent President. In the opinion of Jane Cohen, the University’s Alumni Officer,

_He was the best possible person to have as President. He was shrewd and wise, but charming and appreciative at the same time. A friendly thank-you note would arrive after every event, or whenever we did anything for him. He and Lady Nugent were also the most hospitable and generous hosts._

Lord and Lady Nugent were Surrey people through and through; she was born in the county and he arrived there as a young man to take up farming and poultry-breeding after a brief commission in the Royal Engineers. Interest in the University represented only one, relatively small, part of their lives of active public service. Both gave considerable support to the Cathedral, the Yvonne Arnaud Theatre and to many local voluntary organisations.

Lord Nugent’s sixteen years in the House of Commons were preceded by seven as a Surrey County Councillor. _The Times_ obituary that followed his death in 1994 described him as a paternalist Tory whose politics were rooted firmly in the English countryside, and he was certainly the least partisan of men. Unusually, his career flourished after he left the Commons for the Lords. The environment and planning became special interests. He served for fourteen years as Chairman of the Thames Conservancy Board, for five as Chairman of the National Water Council and for nine as President of the Association of River Authorities. Alongside this, he chaired the highly influential Standing Conference on London and South East Regional Planning for nineteen years throughout a period of considerable social and economic change. All this was done, as _The Times_ emphasised, with the geniality and calmness that were his stock in trade.
Professor V S Griffiths, always known as ‘Griff’, was a central figure – perhaps the central figure – in the transition of Battersea College of Technology into the University of Surrey. He typified all that was best about Battersea – a remarkable scholar who had come up the hard way, who was ready to turn his hand to anything. A family financial disaster caused him to leave school at an early age. He was in the thick of the fighting at Dunkirk, but was captured and spent the rest of the war causing the Germans as much trouble as he could. After 1945 he completed his studies with distinction and was immediately taken on to the Polytechnic’s staff as a lecturer in chemistry: the start of a brilliant career in both teaching and research.

Griff was a good chemist, but he was a genius with people. He made friends quickly, and had the ability to identify people’s strengths - and to build on them - very rapidly. That did not apply only to academics; Griff was just as much at home talking to the cleaners and labourers as he was to professors and politicians. He was much sought after by those wanting advice and help with problems, from students to vice-chancellors. It was natural that he should occupy the position of Pro-Vice-Chancellor when Battersea became a university, and equally natural that the Vice-Chancellor, Dr Leggett, should effectively make him overseer of the building operations.

Griff was a wonderful negotiator. There were plenty of disputes when we became a university - not only connected with the building operations, but with the change of status that many staff had to meet, with trade unions, and with the student unrest of that period. Many, indeed most, were solved as a result of his wisdom and his warm humour. When all else failed, Griff would invite all parties to join him in a glass of bitter ale - a technique in which he was also expert.

People often remarked on meeting him for the first time that he was a most unlikely person to be a Pro-Vice-Chancellor. Almost completely bald, with a rolling gait and a robust sense of humour, he did not fit the image of a senior academic. When he was among his confidantes, his origins in working-class London showed: not in his speech, but in the phrases he sometimes used. The remark ‘Well, I’ll go to the foot of our stairs’
might be heard when some new development burst upon us. I often felt that I was fortunate to have a professor who once hailed me with the words “Ere, where you been?”

Griff enjoyed most of his work, and he greatly enjoyed teaching. It is fitting that the University’s principal auditorium should bear his name. The memorial plaque in the Griffiths Theatre reads: ‘This lecture theatre is named in honour of Professor V S Griffiths, whose tireless efforts and warm humanity were instrumental in the establishment of both the fabric and the community of the University of Surrey.’ When he died in 1998, the most apt tribute came from one of the non-academic staff: ‘He was a lovely man. He had time for everybody.’

Arthur Tarrant taught at Battersea College of Technology and the University of Surrey from 1958 to 1990 and was a close associate of Professor Griffiths.
On his appointment in 1975, Anthony Kelly recognised that he did not come from a background typical of many vice-chancellors, and I suspect that he relished the prospect of the challenges ahead. He brought a single-minded determination to deal with any problems that he encountered, coupled with a wide vision of the priorities for higher education within our society.

Some were upset by his new broom and his impatience for change. However, those who knew him recognised that he was driven by a broad conviction that the quality of education in the UK, especially in mathematics and languages, was comparatively poor; that a proper concern for the future of our environment was lacking; and that the universities should foster a new spirit of enterprise.

Anthony Kelly was also dedicated to the welfare of students through a concern for good teaching and by a very sensible and empathic attitude to young people. Good relationships with the student community soon became one of the most attractive features of our University. He made himself available on an evening every week so that any student could talk to him privately about personal difficulties – not something that many vice-chancellors would attempt.

There was a certain detachment in his relationship with senior colleagues, and he was unfailingly addressed as ‘Vice-Chancellor’. This was mainly born of respect but was sometimes linked with an apprehension about the challenging conversation that might ensue! He was also capable of being a charming and witty companion, and, however frank he was with colleagues within the University about the need for change, he was always intensely proud of its achievements, and fearlessly defended its reputation.

Personally he had the security of a very happy family life, and his gracious and loving wife Christina was everywhere held in deep affection. Although from a devout Roman Catholic background, he never allowed his faith to intrude and encouraged the remarkable ecumenical spirit that existed between the chaplaincies.

In 1981 the whole University community was justifiably shocked by a drastic reduction in funding and there were severe staff reductions. I know that the loyalty and
co-operation of the staff at this time deeply touched the Vice-Chancellor and more than fulfilled his opinion that the main asset of the University was a dedicated and hard-working staff.

He supported the colleagues who made Surrey a leading validating institution for academic qualifications, which later led to the establishment of the Federal University. He recognised that others shared his view of the enormous potential value of the University land, and his personal involvement in negotiating the planning consents and land transactions that resulted in the establishment of the Surrey Research Park was invaluable.

Although he was (and remains) an eminent scientist, his support of the arts, particularly music and dance, brought new life to the campus and increased its attractiveness to students. His total commitment to the four-year undergraduate course with its links to the professions and industry ensured that there were outstanding employment prospects for graduates whatever the state of the national economy.

Unusually among vice-chancellors, Anthony Kelly remained a true scholar and somehow managed to maintain his research interests. He chaired a Working Party of the Fellowship of Engineering (now the Royal Academy of Engineering) which produced a very imaginative and influential report, *Modern Materials in Manufacturing Industry*, an area in which he remained a scientific and technological authority. No doubt his own intellectual energy drove him to remain ‘research active’, but this had the additional advantage of ensuring that the University had an ethos of high standards in research. He also maintained contacts throughout the world, especially in America and the Far East, and became a firm advocate of closer collaboration within Europe.

Inevitably a constant commitment to innovation on the part of the Vice-Chancellor led to a fascination within the University as to what his next proposal might imply and who would be selected to take it forward. Sometimes the tasks were daunting, but life was never dull! He expected high standards and usually succeeded in his expectations, thanks to the ethos of loyalty within the University.

Leonard Kail was University Secretary from 1980 to 1992.
Daphne Jackson devoted her working life to Battersea College of Technology and the University of Surrey, and played a major role in establishing highly successful and productive research in nuclear physics in both institutions. She was also a determined champion of women in science and engineering.

When Lewis Elton was appointed Head of Physics at Battersea in 1958, Daphne became his first research student, joining the academic staff two years later. Together they did important work on the theory of nuclear reactions and nuclear structure, laying the foundations of an internationally respected research group. Daphne quickly began to publish individual contributions to the interpretation of nuclear reactions, for which she was awarded a University of London DSc in 1970.

In 1966 Daphne was made Reader in Nuclear Physics and Leader of the Nuclear Physics Group at the University; five years later she was appointed Professor and Head of Department. The strong start she and Professor Elton made produced a Group that grew into the largest and most strongly supported in the UK and played an important part in establishing the University as one of the UK’s major research-led universities.

From about 1978 Daphne’s interests began to move towards applications of nuclear physics, especially in medicine. The MSc courses in medical physics and in radiation and environmental protection she helped to develop attracted students worldwide, providing trained personnel for industry and hospital physics departments.

Daphne remained the UK’s only woman professor of physics for fifteen years. This unique situation stimulated her interest in encouraging women in science and engineering with outstanding consequences, perhaps even exceeding those of her contributions to nuclear physics. As President of the Women’s Engineering Society in the mid-1980s, she helped to establish the national Women in Science and Engineering initiative to attract schoolgirls to those disciplines. She also conceived and launched the Women Returners’ Fellowship scheme to enable women whose family commitments have compelled them to give up careers in science or engineering to return to high-level technological or scientific work.
Daphne identified a genuine need, planned an effective way of meeting it, and implemented that plan, raising substantial funds and proving the many sceptics wrong in the process. She was awarded the OBE in 1987 in recognition of these and related efforts – and the fact that these initiatives continue to flourish is effective testament to her vision and determination.

Daphne had a single-minded commitment to the University and to her work. But she found time for many other activities. She served on numerous public bodies, many concerned with science and medicine. She enjoyed the arts and sport, especially cricket. She had a marvellous sense of humour and relished life to the full.

It was particularly poignant that, at a time when her professional interests were focused on using nuclear physics to diagnose and treat cancer, Daphne herself was diagnosed with the disease. Throughout a long struggle she continued to contribute to science and society at University, national and international levels. Only hours before she died she was advising a PhD student. Her memory is perpetuated through her former research students, who hold positions all over the world, and through the Daphne Jackson Memorial Fellowships Trust, which administers the Returners’ Fellowship scheme from the University’s Department of Physics.

This article is based on a contribution by Professor Ron Johnson and Dr Betty Johnson to the New Dictionary of National Biography with additional information supplied by members of Daphne Jackson’s family.
Born in Prague to a Czech father and an English mother, Otto Pick came to Britain after the Nazi takeover of Czechoslovakia in March 1939. He finished his schooling here and went on to Queen's College, Oxford, as an Organ Scholar. After graduating Otto fought with great distinction alongside British and US forces in the D-Day landings and across northern France into Germany. Returning to Prague, he obtained his doctorate in international law at Charles University and witnessed the brief post-war flowering of democracy in Czechoslovakia. But in 1948, during the 'peaceful' Communist takeover, he heard by chance on a café radio his name read out in a list of people considered unreliable and therefore wanted by the authorities. He was forced to flee with his new wife, first to the US Occupation Zone in Germany and then to the UK, where he worked for the BBC Monitoring Service at Caversham.

Otto’s expertise in the analysis of international politics and his comprehensive grasp of international relations theory were built on research and teaching at American and British universities; his vast experience and insider knowledge made his lectures and seminars challenging and highly informative. Before joining the new University of Surrey, he taught at the LSE, and before that he had been a researcher in the USA for Dr Henry Kissinger, who doubtless shaped some of Otto’s views on theory and practice. Certainly those of us who studied under him and later worked with him considered him to be Surrey’s own Kissinger. While he had a thorough grasp of different theoretical approaches to the analysis of foreign and security policy, like Dr Kissinger he never lost sight of the realities of the world in which practical politics are conducted. His time in America brought him the friendship of many leading American figures in politics and higher education. It also shaped his views on the benefits of open government as compared with the more secretive world of British national politics and contributed to his conviction that the transatlantic relationship between Europe and the USA, as embodied in NATO, was the only guarantee of peace and stability during the Cold War. A lifelong liberal, he advised the British Liberal Party on security and foreign policy. This did not impair his long-standing friendship with Julian Critchley, the Conservative MP for Aldershot. With Critchley, Otto
directed the Atlantic Education Trust, an information service for school and university teachers, and co-authored an undergraduate reader, *Collective Security*, which reflected his considerable expertise in the politics of transatlantic security and NATO.

Although not one to suffer fools gladly, Otto was the soul of kindness and helpfulness to students and colleagues alike. His door was ever open, and his flexibility of mind, resourcefulness and advice in personal and professional matters were much appreciated.

When the University was established, Otto’s vision and experience helped to create a strong International Relations Section within the then Department of Linguistic and Regional Studies. A fluent linguist, he brought to the Department the conviction that students of politics in particular should be equipped with the applied linguistic and analytical skills necessary to understand the contemporary world and to make a valuable contribution to national and international life and letters from an interdisciplinary perspective. Academe, the media and the Foreign and Commonwealth Office all have cause to be grateful to Otto’s tutoring of generations of undergraduates and postgraduates. In the early 1980s, when the University struggled to cope with the cutbacks of the Thatcher government, it was Otto who took the lead in reaching equitable solutions that won the support of almost the entire University community.

At the end of 1983 Otto moved to Munich to head the Czech Service of Radio Free Europe, which he was determined to model on the BBC World Service in terms of quality, balance and veracity of reporting and analysis. He continued to teach at prestigious German universities, the US Forces College at Garmisch-Partenkirchen and the European University Institute at Bologna. After the 1989 ‘Velvet Revolution’ in Czechoslovakia, at an age when many lesser men would have been enjoying retirement, Otto found himself ‘called home’ to help set up a department of international relations at his alma mater. He was also active in promoting the new University of Central Europe.

More recently still, Otto served as Deputy Foreign Minister during the Kosovo crisis, at a critical time after his country had joined NATO. It used to be said by some of us that Otto couldn’t keep his desk tidy – he had no need, being blessed with an almost infallible photographic memory – but could easily run a country! His most recent career has proved this correct.

Besides all this, Otto has always found time to enjoy opera and theatre, good books, good food, good wine and good company.

John Taylor, who studied under Otto Pick and was privileged to work with him in the International Relations Section from 1972 to 1980, is currently Head of German in the School of Language, Law and International Studies.