

### Remembering Battersea

The dynamic, pioneering spirit of the University of Surrey is rooted in its founding institution, Battersea Polytechnic Institute. This timeline is a celebration of the people, the places and the key milestones associated with Battersea.



'We are delighted to pay tribute to our Battersea heritage which has given the University of Surrey such an enduring and valuable legacy'

Professor G Q Max Lu
President and Vice-Chancellor, University of Surrey



**Above:** Stained glass windows of Battersea Polytechnic and University of Surrey coats of arms

This Battersea commemorative timeline is on permanent display in the University's Austin Pearce building.



This project was possible due to the National Lottery Heritage Fund and the generous legacy donation of Battersea engineering graduate Ronald Charles Sansom

1891

# 1893

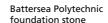
#### Firm foundations

Battersea is founded under a scheme of the City of London Parochial Charities Act of 1883 to provide greater access to further and higher education for the 'poorer and artisan' inhabitants of London.

Funding for the new institution comes from the city's Charity Commissioners, the London County Council, the Government's Board of Education, the City of London Livery Companies, banks and businesses. Considerable funds are raised locally by private subscription. Philanthropic donors include a former local resident, Mr Andrew Guesdon, Sir Henry Tate, the sugar magnate, who was also instrumental in the founding of London's Tate Gallery, and his son, Edwin. £500 towards the building fund is also raised at a bazaar on Wandsworth Common in October 1889, organised by local tradesmen and rate payers' clubs.

The foundation stone for the new building is laid by HRH the Prince of Wales - later King Edward VII - on 20 July 1891.



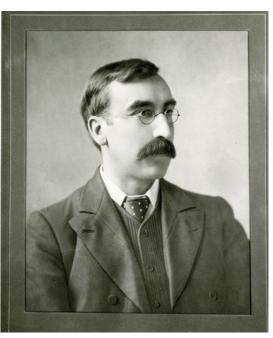




Order of Proceedings for laving the foundation stone

### First principal

Sidney H. Wells is appointed as Battersea's first principal.



**Above:** Sidney H. Wells – Battersea Polytechnic's first principal

90 1900 1910 1920 1930 1940 1950 1960 1890 1900 1910 1920 1930 1940 1950 19

1894

'A noble Institution where the priceless treasures of art, science and literature shall be within reach of all.'

From an appeal to local residents for donations to fund the new Polytechnic

### A grand opening

The Polytechnic opens its doors on Monday 8 January in a new building located on Battersea Park Road, south of the River Thames.

It is built on part of the former gardens of the old Albert Palace, an iron and glass public exhibition venue which took its inspiration from the famous Crystal Palace but had ultimately proved unsuccessful.



Above: Photo of Albert Palace building plans

HRH the Prince of Wales, accompanied by the Princess of Wales and Princesses Victoria and Maud, formally opens the building at a grand ceremony on Saturday 24 February the same year.



**Above:** The formal opening ceremony for the Battersea Polytechnic Institute – the grand procession with HRH Prince Edward the Prince of Wales

Over 2,400 students are enrolled on 115 evening classes across 64 subjects ranging from art and languages to mechanical engineering, building, physics and chemistry and commerce. Over half of them are aged 16-25.

Most of the courses offered are highly practical and all are at a relatively elementary level with charges varying between two to five shillings per class per quarter.

Scholarships are offered to bright students from poor backgrounds by Battersea Borough Council and local companies.





**Above:** Cover and page from programme for Grand Bazaar and Fete fundraising event 1897

Within eight months of its opening, Battersea has developed a thriving sports and social scene. Clubs include cricket, cycling, debating, football, running, lawn tennis, rambling, chess, sketching and swimming.



Above: Battersea Polytechnic Football Society

1897

1899

University of London BSc courses are offered in physics, mathematics, chemistry, botany and biology.

**Construction of the Great** Hall is completed and opened by the Prime Minister, the Right Hon. A.J. Balfour, in February 1899 allowing students and staff to hold popular Saturday evening entertainments. These events, featuring musical performances, lectures and gymnastic displays, are open to both students and the general public enabling Battersea to reach out into the local community and build awareness of its work.



Above: The Great Hall, Battersea

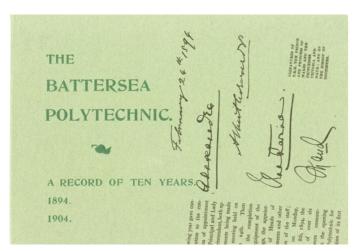
1900 1910 1920 1930

# 1904

### 1907

### **Happy 10<sup>th</sup> Birthday**

Battersea Polytechnic marks the 10th anniversary of the arrival of its first students. In its opening decade the college buildings expanded in size. Student numbers have risen to almost 5,600 and its income has doubled from £8,000 to £17,000. The establishment's first principal, Sidney Wells, leaves the post to take up a new job as the Director of Technical Education for Egypt. Sidney Rawson becomes Battersea's second principal.



Above: The Battersea Polytechnic - a record of 10 years 1894-1904 (facsimile)



Above: Ladies gym class 1908

# 1908 1909

Publication of the first edition of The Battersea Polytechnic Magazine

The Polytechnic offers evening lectures in chemical engineering, the only ones in the UK at the time.



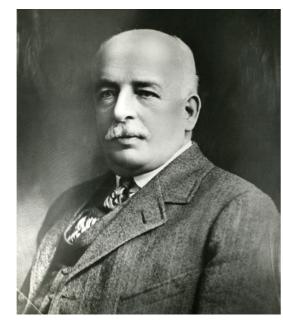
90 1900 1910 1920 1930 1940 1950 1960 1890 1900 1910 1920 1930 1940

# 1910

### A growing institution

New developments include:

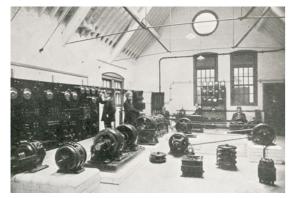
- The opening of the oak-panelled Edwin Tate Library, gifted by the retiring chair of governors
- The establishment of a hostel for female students in a house on Clapham Common
- The renting of a sports ground in Dulwich, complete with a pavilion and men's and women's changing rooms.



**Above:** Edwin Tate – Chair of Governors, Battersea Polytechnic



Above: Metalwork class



Above: Electrical workshop



**Above:** Domestic Economy students

# 1912

Opening of new hygiene laboratories, funded by the Drapers' Company.

1914-18

During the First World War,
Battersea Polytechnic undertakes
valuable research on explosives,
manufactures shells, machine
parts and tools and runs courses
for engineers and workers
in munitions factories. The
Domestic Science Department
gives special courses on first aid
and home nursing.

Many students, former students and members of staff play a direct part in the war effort by joining up or enrolling as nurses and Red Cross workers. A Polytechnic platoon is attached to the University of London Officers' Training Corps and regular drills are held both at the University's headquarters and also at the Polytechnic. All in all, 650 Battersea men fight on land, at sea or in the air for their country. Tragically, 78 Battersea students and staff who went to war do not return.



Above: Munitions work 1915



**Above:** Battersea Polytechnic Officer Training Corps Guard of Honour (March 1914)

1900 1910 1920 1930 1940 1950 1960

### 1915

1919

Battersea holds its first rag day.

#### **Pen portrait**

Lt Frederick H Johnson (Royal Engineers), who earned a first-class degree in engineering in 1914, is awarded the Victoria Cross for his bravery during the First World War. The officer, killed in action two years later, was one of 29 Battersea alumni decorated by the military.



**Above:** Lieutenant Frederick Johnson

– Oil portrait by William Charles Penn

#### First World War Hero: Lt Frederick H Johnson (Royal Engineers) 1890-1917

Born in Streatham, Frederick Johnson entered Battersea's Engineering Department as a day student in 1911. He went on to become Chairman of the Day Students' Representative Council and editor of the Polytechnic magazine.

He gained the Victoria Cross during the Battle of Loos when he took part in an attack on an enemy redoubt on 25 September 1915 and continued on in spite of being wounded in the leg to lead several charges.

The official citation, taken from the London Gazette, dated 18 November 1915, reads:

For most conspicuous bravery and devotion to duty in the attack on Hill 70 on 25th Sept.,1915. Second Lieutenant Johnson was with a section of his company of the Royal Engineers. Although wounded in the leg, he stuck to his duty throughout the attack, led several charges on the German redoubt, and at a very critical time, under very heavy fire, repeatedly rallied the men who were near him.

By his splendid example and cool courage he was mainly instrumental in saving the situation and in establishing firmly his part of the position which had been taken. He remained at his post until relieved in the evening."

He was repatriated to London for hospital treatment and received his medal from the King on 22 December 1915. It was the first Victoria Cross to be awarded to a member of any of the Polytechnics. A separate presentation was organised the following year by the Polytechnic at which Lieutenant Johnson was given a portrait of himself which had been paid for by subscriptions collected from staff and students.

He returned to the Front where he rose to the rank of Major. He was killed in action on 28 November 1917 during the Battle of Cambrai having gone back to search for a comrade who had gone missing. He has no known grave but is remembered on the Cambrai Memorial at Louverval in France.



Above: Female students dining

1920

By the 1920s, Battersea has begun to concentrate on science and technology and teaches day and evening students for degrees from the University of London.

#### **Student boom**

Student numbers rise to a peak of around 4,000 due to the influx of returning servicemen. The number drops to between 3,000 and 3,200 from the mid-1920s until the Second World War.



**Above:** Battersea Polytechnic Cookery School 1927



**Above:** Battersea Polytechnic Engineering Workshops 1920s

Dr Robert Pickard and Dr Joseph Kenyon are appointed respectively as principal and head of the Polytechnic's chemistry department. Dr Kenyon, who heads the department at Battersea for 30 years, is credited with forming a research school 'second to none as a source of fundamental and inspiring ideas' and becomes a Fellow of the Royal Society.

#### Pen portrait

### Mini Masterpiece: Sir Alec Issigonis, FRS 1906-1988

Sir Alexander Arnold Constantine Issigonis is one of Battersea Polytechnic's most distinguished students. The designer of the Mini and Morris Minor enrolled at the Polytechnic to study engineering after emigrating to London from the Greek port of Smyrna (now Izmir in Turkey) in 1922.

After Battersea, Alec entered the University of London External Programme to complete his university education and in 1936 went to work as a suspension designer for Morris Motors.

His two crowning achievements are the Morris Minor and the Mini. The Morris Minor which was produced from 1948 – 1971, became the first all-British car to pass the one million mark in sales. The Mini went on to become the best-selling British car in history and has been the inspiration for almost all small frontwheel drive cars produced since the early 1960s.

An independent and original thinker, he is credited with coining the phrase 'A camel is a horse designed by committee.'



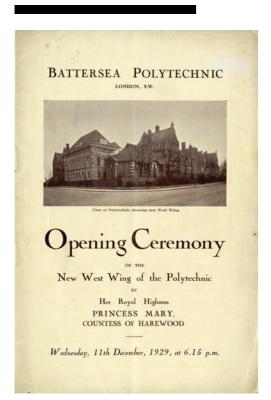
Above: Sir Alex Issigonis



### 1929

### **Further expansion**

The three-storey West Wing is opened by Princess Mary (later the Princess Royal), who goes on to become the Polytechnic's patron.



Above: Opening ceremony programme for the



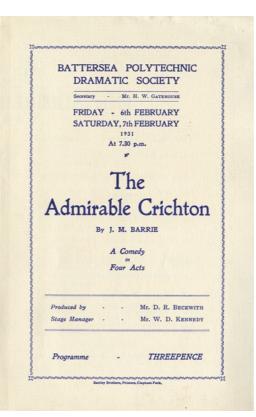
Above: West Wing under construction

'The accommodation includes a common room, three cloakrooms, a rest room, a refectory capable of seating 200 people, a kitchen equipped with practically every accessory of modern domestic science, a physical and chemical laboratory, bacteriological laboratory, two lecture rooms and a store."

Taken from an article in the South **London Press 13 February 1929** 

1931

**Budding actors from Battersea Polytechnic Dramatic Society make their** stage debut in a production of The Admirable Crichton.



Above: Programme for the Admirable Crichton 1931

1934

### The first meeting of the Students' **Union takes place**

The forerunner of the Students' Union, the Student Representative Council, was instrumental in getting Battersea's Grant of Arms. They also standardised the Battersea colours.



90 1900 1910 1920 1930 1940 1950 1960 1890 1900 1910 1920 1930 1940 1950 1960

# 1939-45

### **Helping beat Hitler**

The Polytechnic suffers three direct hits during German bombing raids. This doesn't stop it from taking part in a number of initiatives to help the war effort during the Second World War including:

- Fighting fit In 1940, the Domestic Science Training College at Battersea, which had relocated to Shrewsbury following the outbreak of war, returns to Battersea to lead the food education campaign locally. Later in the war, the Polytechnic hosts the local 'Londoners' Meal Service' providing midday meals to the public.
- A workforce fit for war The Polytechnic also introduces a number of training courses to skill people up for the war effort, including those for analytical chemists, anti-aircraft teams and wireless mechanics.
- Bringing in the harvests Battersea staff and students join forces with other Londonbased schools and colleges to help bring in crop harvests vital to the war effort. The scheme is repeated in 1944 and 1945. The harvest camps continued to run after the war too.

#### **Battersea memories**

Margaret Blower (nee McPherson) Institutional Management (IMA) 1951

On taking part in the harvest camps:

'... they were a riot ... it was in a disused RAF camp. And we were in Nissen huts. And it was lovely; we all had a great time. And the domestic science people, they did the cooking and... the food was wonderful. I didn't do the cooking, I went out on the farm ... We picked up potatoes, we had to go along after the tractor... I can remember that, day after day. And I can remember we were all moaning about it. And my husband, who was Scottish and had been used to doing a lot more manual labour on the farms as a youngster, he said, "This is nothing." And he just went up and down the fields like a rocket!'



**Above:** Lady tying wheat sheaves

The Second World War diverts the Polytechnic's efforts towards vital war work, but student numbers grow again during the post-war years and beyond.

1944

### **1947**

### Golden anniversary

Battersea celebrates its golden jubilee with a lunch for 40 guests. The meal is followed by a variety performance and dancing in the Great Hall.

BATTERSEA POLYTECHNIC

JUBILEE CELEBRATIONS

24TH FEBRUARY, 1944

The Governing Body requests the pleasure of the company of

Thomas H. Jones Esq., Chairman, L.C.C.,

at Luncheon in the Polytechnic Refectory, to be served at 1 p m.,

and at a Concert in the Great Hall at 3 p.m., to be followed
by a Social and Dance. Admission to the Luncheon will

be by ticket

R.S.V.P. by 16th February, 1944, to

The Secretary,

Battersa Polytechnic.

Battersa Polytechnic.

**Above:** Invite to Battersea Polytechnic Golden Jubilee Celebrations February 1944

#### Soldiers' return

Returning military men boost numbers at the Polytechnic. The upturn coincides with the appointment of Dr Ralph West as principal. 1890 1900 1910 1920 1930 1940 1950 1960 1890

# 1953

#### **Battersea memories**

#### John Salmon

Joined the Chemistry Department in 1948 (subsequently Head of Department and Professor and Pro-Vice Chancellor, University of Surrey)

On the influx of returning servicemen who enrolled as students after the war:

'They were as keen as any I have ever taught, mature and enthusiastic, and they helped to turn the Polytechnic into a real powerhouse. It may have been congested and cramped, but the building hummed with energy from nine in the morning to nine at night.'



**Above:** Crazy Sports mascot, 'Little Fanny', won by the ladies netball team



Above: Netball Team - 1947



**Above:** Rugby Team – 1946 *Photos by Patricia Waters* 

### A growing reputation

Battersea's academic standing as a technical and research institution receives a welcome boost when it takes over the engineering departments of the Polish University College.

Battersea ceases to award degrees that do not lead to "diplomas of professional status" and Dr West makes the bold claim that Battersea is "the foremost technical college in the country for advanced level work".

#### Pen portrait

Code cracker: Henryk Zygalski 1908-1978

**Lecturer in Mathematical Statistics** 

One of the staff who transferred across to Battersea from the PUC was the mathematician Henryk Zygalski. It was revealed well after his death in 1978 that Zygalski had been one of the trio of brilliant young mathematicians who in 1932 had set to work in Warsaw to break Germany's Enigma Code. Zygalski's particular contribution was to devise a new method of breaking the code using perforated cards, after the Germans altered their enciphering procedure in 1938. Fleeing the German invasion of Poland in 1939, Zygalski eventually reached Britain via Spain in 1943.

He never resumed his work on Enigma, but without his efforts and those of his colleagues, Jerzy Rózycki and Marian Rejewski, Enigma might not have been broken – and it can only be speculated as to what consequences this would have had for the course of the Second World War.



Imagery: Henryk Zygals

1954

### **Space:** the final frontier

The Princess Royal opens a new East Wing as the Polytechnic tries to solve a growing issue with lack of space.



**Above:** Key used by Princess Royal to open wing

In the same year, the Polytechnic hosts the first of many international evenings, a tradition that thrives in the University of Surrey today.

#### **Battersea Memories**

Mike Banfield Chemical and Process Engineering 1958

On the Battersea International Evenings:

"...the concept was that because we had a very... wide group... of nationalities,... each national group would be invited to produce and show some event or dance... The Brits would do something silly like singing 'Mad Dogs and Englishmen'... But the Polish were wonderful. They would build a set based on a typical Polish kitchen in a country home, and they would have... wonderful national dress... guys with their boots and big, puffy sleeves and... girls with ribbons in their hair and so forth.'

### 1955

# Equipping students for the world of work

Sandwich courses – the forerunner of the Surrey placement year – are introduced. These allow students to spend a significant time gaining hands-on industrial or professional experience.



**Above:** Student Elizabeth Purnell, with 'Oscar the eagle, the Battersea Mascot



**Above:** Students Dick Housden and Ray Cooke enjoy some muddy Crazy Sports fun

### 1956

#### A change in status

Battersea Polytechnic officially becomes a College of Advanced Technology under a new Government scheme which allows it to teach advanced technology to university standard. The title of Battersea College of Technology is adopted in 1957.

In 1956, the college receives its first research grant for industry of £500.



Above: Battersea Cookery Book recipes



Above: Professor Daphne Jackson

#### Pen portrait

A patent success: Ernest Littauer DOB: 8 March 1936

BSc in Metallurgy in 1958 and PhD in Electro-Metallurgy in 1961

Following his time studying at Battersea and an introduction to Lockheed Aircraft Corporation in California arranged by his research adviser, Ernest Littauer began a fruitful and long-lasting career with the aviation giant in 1963. He went on to become Director of Materials Sciences in 1984 and Vice President of Lockheed Palo Alto Research Laboratory in 1990 where he was responsible for over 1,500 scientists, engineers and support staff.

Ernest has published widely and has been awarded 10 patents over the course of his career. He retired in 1996 and was awarded a Dr Honoris Causa Degree from Surrey in acknowledgement of his time at Battersea and his subsequent illustrious career.



Ahove: Frnest Littauer

#### **Pen portrait**

The UK's first woman professor of physics: Professor Daphne Jackson OBE 1936-1991

Daphne Jackson became a research student at Battersea in 1958, working with Head of Physics, Lewis Elton. She joined the academic staff two years later. Together they worked on the theory of nuclear reactions and nuclear structure, laying the foundations of an internationally respected research group.

In 1966 she was made Reader in Nuclear Physics and Leader of the Nuclear Physics Group at the University and five years later she was appointed Professor and Head of Department.

Daphne remained the UK's only woman professor of physics for 15 years.

As a result of her unique situation, she encouraged women in science and engineering with outstanding consequences.

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 launched the Women Returners' Fellowship scheme now administered by the Daphne Jackson Memorial Fellowships Trust.

### 1960

#### Part-time degree courses stopped being offered by the college after a fall in the number of part-time students during the 1950s.

New principal, Dr Peter Leggett (later the first Vice-Chancellor of the University of Surrey), writes a paper on the future development of the institution in which he suggests that if numbers of full-time students are permitted to be increased from 2,000, "consideration must be given to the transfer of the College to a completely new site", adding that any move should be made "at once".



Dr Peter Leggett



Battersea Students Handbook '60 '61

The so-called 'golden era of Battersea' results in ever-increasing numbers of students wishing to enrol. It is increasingly difficult to accommodate them on campus. Something must be done ...



**Above:** Ariel view of Battersea College from the west during the early 1960s

#### **Pen portrait**

#### A top table place: Professor Rik Medlik 1928-2007

A visionary academic who helped to shape the study of hospitality and tourism in higher education, Professor Medlik led the case for Surrey to offer degrees in the fields of hotel and catering management in the 1960s.

Subsequently appointed the first professor in the field in the UK, he also provided the first textbooks, established some of the first academic journals and led the group that set up the Tourism Society, the first professional body for tourism in the UK.

Professor Medlik was widely renowned for his modern, forwardthinking approach. This was seen in his efforts to establish links between academia and industry and in his recognition, as early as the 1950s and 60s, that the future prosperity of countries like Britain lay in service sectors like tourism and hospitality rather than manufacturing.

His legacy at Surrey lives on in the School of Hospitality and Tourism Management, and in the range of hospitality and tourism programmes offered at the University.



**Above:** Rik Medlik gives a class on reception work c.1956 *With thanks to Sue Walton* 



**Above:** Student memorabilia from the 1960s With thanks to David Varney

1900 1910 1920 1930 1940 1950 1960

# 1962

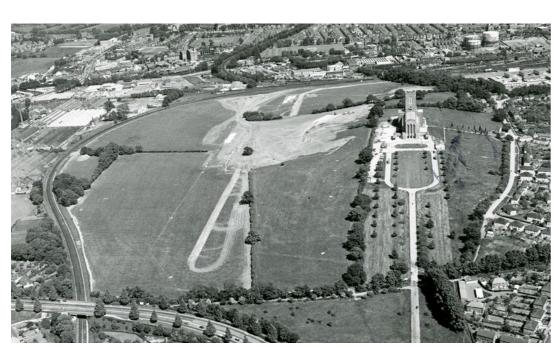
### 1965

#### A new home

After initial opposition, the College's governing body agrees to look for a new site for the College.
A development advisory committee considers locations including Crystal Palace, Harrow, Stevenage, Hammersmith, Epsom, Barnes and Guildford.

# The royal seal of approval

Following agreement with the local authorities on a suitable site the previous year, Her Majesty Queen Elizabeth II is formally petitioned for the grant of a Royal Charter and the establishment of the University of Surrey.



Above: Ariel view of Stagg Hill, Guildford early 1960s

### 1966

# A final farewell & new beginnings

The University of Surrey Act is passed in August and, on 9 September, the Grant of Charter formally establishes the University of Surrey. The 75-year history of Battersea Polytechnic draws to a close, but its legacy endures...



**Above:** A truck loaded with equipment in readiness for the



Above: Students at the Charter Ball in Guildford



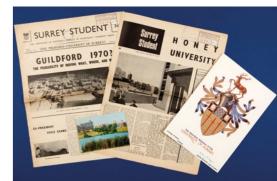
Above: Alumni enjoy their day at the Battersea Honorary Degree Ceremony in 2011

#### **Battersea memories**

Derreck Siddell Metallurgy PhD 1968

Sharing memories with old friends at the Battersea Honorary Degree Ceremony in 2011:

'We lose our hair, we grow old, but our personalities don't change. They were the same guys – they hadn't changed.'



Above: University of Surrey early memorabilia

'The New University of Surrey is one of the most vital projects of the decade. Vital because of its relevance to the industrial life and problems of the nation.'

The Rt. Hon Lord Robens of Woldingham P.C. First Chancellor of the University

('University of Surrey – Technology and the Total man.')



This is a very special year for the University of Surrey as we celebrate our golden anniversary (2016-17). It's a wonderful opportunity to reflect on what we have achieved in the past 50 years and the impact our students and research have had on the world.

We now want to look forward and build a secure future for the University in its next 50 years so we are launching a 50th Anniversary Appeal. We want to raise money to support the people, the ideas and the facilities that together shape the University of Surrey. We rely on the generosity of our alumni and friends like you to help write the next chapter of the University of Surrey story.

To find out more visit: www.surrey.ac.uk/50th-anniversary Email: alumni@surrey.ac.uk
Telephone: +44 (0) 1483 683143