Imperial College London

ESTATES OPERATIONS

PEOPLE PLACES SPACES

December 2023

Last orders please!

Inside this edition:

Day to night — Reynold's refurb

Our first fossil fuel-free building

Farewell

from Nick Roalfe

I've become accustomed to using this 'welcome' column to talk about the achievements of the past term, look forward to the next, and importantly thank you all for your contributions to making Imperial College a great place to both study and work.

This edition I do the same, although this time it is my 'farewell' column.

I have been very proud to have served Imperial College for 17 years, and to have worked with so many truly inspirational and dedicated people, both past and present, within my team and across the whole College. I would thank you all.

Together we have achieved great things and set the foundations for more and better things to come for this world-class university. I will not even attempt to single out any example or individual, or to try and create a list, there have been far too many in my time here. As I said last month, when I let you know of my resignation for personal reasons, I will cherish these memories.

I say goodbye with sadness; however, I hope that you will allow me the privilege of continuing my links with you. This is a close-knit sector, and I'm sure our paths will cross again and hope that on occasions you will invite me back to visit the results of your future endeavours. If anyone ever wants the benefit of my 'pearls of wisdom', well, how could I refuse!

As you enter a new era in supporting Imperial, as it grows and expands with its ambitious campus plans, taking it to the next level, I would wish you each personally and Imperial College the very best. There is a bright future ahead for Imperial College London.

My biggest concern now is whether Mrs Roalfe is willing to look after me as well as a certain person has done in the office for the last 17 years!

It has been a real pleasure and privilege to work with you and I wish you all every success for the future.

Goodbye for now.

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Alternative format
This magazine is available as a downloadable PDF on our website at: https://www.imperial.ac.uk/estates-facilities/about-us/people-places-spaces/

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Cover Story: **Last orders please!**

A 17-year contribution to Imperial College is immense. Summarising that and the many tributes as Nick Roalfe departs just scratches the surface.

His impact on the campuses has been huge, meeting the challenges of an aging estate along with significant new builds and redevelopments to meet an evolving College vision. Over time he has secured some £50m funding to support a Capital Plant Replacement Project and put into place plans that will get the College to Net Zero Carbon by 2040 through a plan of projects for the next 16 years. He has laid the foundations of a strategy to support the growing numbers of the College.

He leaves this legacy thanks to his leadership, through clear direction, vision, respect and collaboration, recently exampled through the challenges of a global pandemic. He has been forward thinking, setting standards of best practice across all disciplines within his orb, encouraging colleagues to achieve highest standards for College and to achieve their best selves through generous training.

Nick's loss to the College will be keenly felt. Estates Operations are very sad to lose him, but wish him the very best for the future.

All change

As Estates Operations Director Nick Roalfe calls time after 17 years at Imperial and the directorate ceases to be, a new structure to deliver the new Imperial College Strategy has been announced.

The structure is intended to align areas of responsibility which emphasise shared focal points and objectives. As we went to press details were still being resolved, and staff from all departments concerned consulted.

At the head of the structure is the introduction of the Chief Property Officer, yet to be appointed, reporting into Robert Kerse (Chief Operating Officer). The Chief Property Officer (CPO) will have five direct reports. Paul Noke, Director of Residential and Community Services (top left), Jane Neary Director of Campus Operations (second left), a Director of Property and Major Projects (to be appointed), William Hollyer, Director of Sport and CPO Central Services (third down), and Paul Foley, Commercial Activities Director (fourth down).

The Campus Operations team will focus on the campus experience for all students, staff, and visitors.

The Property and Major Projects team is responsible for the built estate and the major projects that underpin the development of our campuses (excluding White City).

The Residential Community Services team is centered around community and safeguarding areas of activity, Residential Services, Early Years, and Community Safety & Support (formerly Security).

The Sport and Central CPO Services team oversees sports services, and a new single, central location for functions across the CPO division, including Adminstration, Communications and Learning and Development.

The Commercial Activities group's focus is developing ancillary income streams to support College's academic mission.

Deputy Director posts are being created in each of the Chief Property Officer, Campus Operations and Property & Major Projects directorates. The purpose of the deputy roles is to develop succession planning and ensure appropriate cover for the absence of the postholders of these key roles.

Alongside this structure sits the White City Development Team under Director, Sara Cary, (bottom left), who will be handing back responsbilites and functions as things complete between now and 2030.

One life, one day – Mark Wilkinson

“I like to be in the office early to get on with the day, but I wouldn’t describe myself as a morning person.” Jan Carberry meets Mark Wilkinson, Sustainability Manager.

After a ‘pleasant’ 20-minute walk to the nearest Piccadilly line tube station the day usually starts on South Kensington Campus alongside his colleagues in the Estates Operations Environment Team. “There’s a richness and diversity to our team,” he says.

Mark joined the College in March, in a new role key in our efforts to improve sustainability and reduce our carbon emissions. “Currently our Net Zero strategy and the progress towards this is the bulk of my work. I’m working with our consultants Arup on this, as well as other stakeholders.”

Time spent pond dipping as a youngster on a trip to Epping Forest was the catalyst for Mark’s career in science and sustainability. With a science degree and a Masters in Environmental Monitoring and Assessment (that’s industrial pollution control to the layman) he brings extensive experience to Imperial for our mission to Net Zero. Thirteen years at the BBC, ‘I was only going to stay for two’, seven years at Middlesex University, and extensive consultancy work, included on that list of experience.

“There are consistent themes in sustainability, but I’ve been in it long enough to realise that there are hot topics in the public perception, and while they tend to be cyclical, none go away.”
“However, as technology evolves, many new solutions have arisen, though perhaps not as fast as people desire.”
Mark’s work is cross-College, working with the new central sustainability team, including Harriet Wallace, Sustainability Strategy Director in the Office of the Provost and Tim Green, the Academic Leader for Sustainability.

The Net Zero strategy and plans are being drawn up as we speak, and when complete, along with the Estates complementary document, Mark’s focus will shift towards working with other departments and holding conversations to marry expectations with what is realistically achievable.
This includes, along with help from the newly appointed Sustainability Coordinator, both influencing departments to consider what they can do, and changing individual mindsets that it is ‘someone else’s’ problem to solve.
Mark says: “The scale and complexity of what we need to achieve can be daunting - if you let it.”
He adds: “What I’ve found though is a ready access to expertise, a willingness to share and input. There have to be some difficult conversations, but equally we’re able to have some good laughs while doing some really constructive work.”

We discuss how individually we can be conflicted about sustainability in our everyday lives despite our best intentions, taking Mark's love of travel as an example. With family in Australia, he had recently returned from down under, which of course involved flying, and was about to spend a long weekend in Slovenia.

He says: “Long haul travel clearly has an environmental impact but that has to be balanced with the benefits of seeing close family and friends, as well as the wider societal benefits of understanding different cultures and environments. While I don’t believe that tourism can be truly sustainable, I strongly feel travel brings people closer together and improves understanding.”

He laughs as he tells me though, he is a bit of a 'Jonah' on trips, often facing last minute cancellations, or other hitches!

More usual leisure time is likely to be a night out for a ‘decent beer’ with friends and a regular run, usually 3-4 times a week, 10k being the favourite distance.

Back though to work, and while as yet, and maybe there never will be, a typical day in his role, currently the focus is on the short-term deliverables that can be achieved quickly returning the greatest cost-effective reductions in our carbon emissions...

You can read more about the Arup report on page 8.

Employees of the Quarter

We have four fantastic Employees of the Quarter to celebrate this edition.

Logistics Manager Paul Kirton was nominated by Rod Coppard, Residences Building Manager Jolene Burger was nominated by Jonathan Ryan and Lucy Cowell in the Fire Office, Natalie Welham, from our asbestos contractor Environmental Essentials, was nominated by Adam Srodzinski and Paul Clarkson, also from asbestos contractor Environmental Essentials, was nominated by Angela Williams.

Each receives a certificate and a gift voucher.

Congratulations to them all.

Paul – ‘regularly exceeds service delivery expectations, going that extra mile and adding value’

Jolene – ‘has pride in providing a high level of service’

Natalie – ‘no problem is too difficult’

Paul – ‘although Paul is not an Estates/Imperial employee, he consistently demonstrates the Imperial Values’

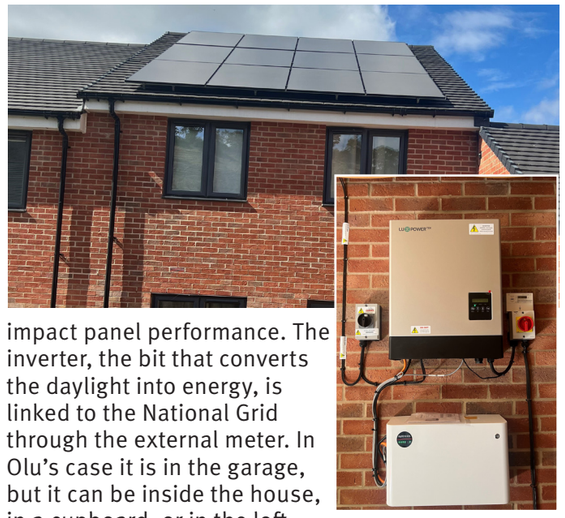
Switch to solar

“It was a no-brainer”, comments Oluseyi Oduntan, Health and Safety Advisor (Contruction) on his decision to install solar panels at his own home.

“I wanted to make an environmental commitment. We try and reduce energy at home, small things such as line-drying washing, etc, but currently I can’t afford to change to an electric vehicle, so I asked myself, what else can I do?

“A friend had just had solar panels installed, so he’d done the research I hadn’t had time for, so I decided to contact the firm he had used, as recommendation from a satisfied customer is a good method.”
Installers, who are regulated companies, need to make initial basic checks whether your property will be suitable, the orientation, size and pitch of the roof, systems can’t be installed on flats, only on single household properties.

As a family of four the monthly electricity spend was around £150. Olu found that he could have the system installed and still only have around the same monthly spend.
Geographic location of the property, orientation and pitch of roof and overshading all affect solar panel output and thus installation payback. The roof also needs to be of sufficient size too. After taking these factors into account and doing his sums Olu has 12 panels on his roof. Panels fitted too close to bird perches (eg chimneys) suffer from fouling which can



impact panel performance. The inverter, the bit that converts the daylight into energy, is linked to the National Grid through the external meter. In Olu’s case it is in the garage, but it can be inside the house, in a cupboard, or in the loft.
He chose the option to store his power, so also has a battery (photo right). The user has a phone app, on which you can monitor your real time usage, see when you are producing energy which is being sold back to the grid, or when you are using energy from the grid, and also what is stored in your battery.

Olu was able to effectively fix his electricity budget by the way in which he financed his installation. He did this through the installers, although you are free to arrange any type of loan, or use your own savings. He has a 10-year arrangement, which as a guide cost £12.5k, although anything he recoups from the sale of excess energy to the grid will help pay off the loan and eventually provide income. He is pleased with this as he is covered by a two-year installation warranty — “the scaffold was up quickly and it was installed in a day” — and the system has a 25-year life expectancy, with a 12-year expectancy for the battery. He said: “There is no maintenance, and I like that I can track real-time usage on an app. If anyone wants to know more I would be happy for them to contact me.”

College and solar

Focus has been on the use of Combined Heat and Power at South Kensington Campus generating 80-90% of its power needs along with investing our money in methods that give greater fuel or carbon reductions than solar, which could potentially only meet 0.6% of needs.
With our Net Zero ambitions, and as the cost of technology reduces, this position is changing – although many of our roofs simply aren’t suitable locations for solar, for example because of the roof design and construction and access requirements to other plant housed on them.
A solar study is underway across the whole estate and some roofs are suited (see page 8). Silwood Park has a large number of suitable roofs and there is the potential to generate up to 11.3% of the site’s needs from solar.

Buyer beware:

- **Always check planning regulations with your local authority.**
- **MCS (Microgeneration Certification Scheme) is the certifying body for compliance and quality, and allows you to benefit from tariffs available in the renewables sector. Certification is required if you sell your house with the installation.**
- **If you do not own your panels, you may be entering into a leasing arrangement for use of your roof.**
- **Always read the small print and take advice.**

Long Servers 2024

The Estates Operations Long Service Recognition Scheme has been celebrating those serving 10, 15, 20, 25, 30, 35, 40 or more years service for Imperial College and those who are retiring since it was introduced four years ago. Each receives a certificate in a presentation folder and a letter from their Head of Department.
The colleagues featured right who were part of Estates Operations are set to reach their milestones in 2024.

Here we meet one colleague reaching a service milestone as we end 2023, Maintenance Technician Leading Hand, Michael Nutley.

Michael (below) is based at St Mary’s Campus. He is part of the three-

strong tight-knit team that, including his 15 years at Imperial, have more than 80 years’ service between them.

Michael came to College from Hammersmith & Fulham Council in 2008. He was told by a staff member that College was recruiting and ‘the timing seemed right’ for a move so he applied and got the job.

He was based at South Kensington for seven years, until there was a reorganisation and new shift patterns introduced. Having a young ‘primary age’ family at the time he applied for a vacancy at St Mary’s where he could work weekday 8am - 4pm shifts and moved across.

He says: “We’re a small unit and get involved with everything, which I like, along with the people here. I can cycle to work, I can’t stand the train.”

Congratulations to 15 colleages who are set to reach major long service milestones throughout next year. Between them this cohort will have completed 280 years service.

40 years
Courtney Richards
Maintenance Manager

30 years
David Traske
Quality Audit and Compliance Manager

25 years
Stephen Hayes Maintenance Supervisor
Ghada Al-Madfai Space Manager
Roger Smith Hazardous Waste Coordinator

20 years
Dave Eaton Carpenter and Handyman

15 years
Sonata Petrauskaite Soft Services Administrator
Juan Correa Valle Soft Services Coordinator
Nic Dent Head of Soft Services
Peter Bodi Assistant Building Manager
Slavo Jasenec Stores Operative

10 years
Ian Davison Waste Manager
Bruna Santandrea Capital Programmes Manager
Rodney Coppard Building Manager
Ivan Carromero Manzano Assistant Building Manager

Planning for Net Zero

Imperial College has set an ambitious but realistic carbon emission reduction target across the Estate by 2040. Arup, a London-based engineering consultancy, was selected to undertake a study to identify the investments required to meet this target. Arup have assisted other universities with their carbon reduction plans.

The study is designed to assist College to achieve Net Zero for emissions from power and heating across all campuses and more than 130 buildings. Not an easy task given the age and diversity of the mainly central London property estate which limits the amount of incoming power available for low carbon heat solutions.

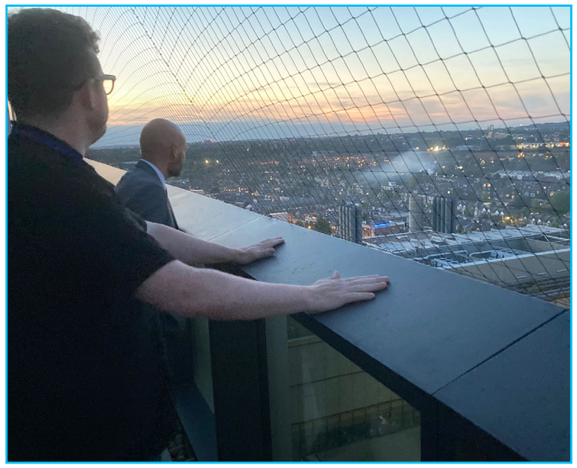
Best practice for Net Zero projects in the property sector typically see properties adopting a building fabric first approach but Imperial's high percentage of laboratories and limited ability to decant buildings has challenged this assumption. Similarly, so do low carbon sources of heat, with the South Kensington Campus heavily reliant on district heating from the energy centre.

Hybrid

As the study has progressed it has become increasingly obvious that the College's Net Zero journey will be tough. While some early wins have been identified such as LED lighting and upgrading automatic controls for heating, ventilation and air conditioning to reduce energy use, large scale sources of low carbon heat are constrained by power availability.

Our quickest route on the journey looks likely to be a hybrid phase where air source heat pumps make use of available power to provide the baseload heating requirements with gas boilers being kept in reserve for colder days and peak loads, while additional power is accessed to enable the full decarbonisation of heat.

To ensure the final study represents best practice and is fully costed, it will be reviewed by the College's Sustainability Expert Group and Mortimer Issacs quantity surveyors prior to the Sustainability Strategy Committee this December. Following sign off, details will become available.



It was a real humdinger of a problem. How to stop an annoying noise coming from plant that was causing upset for neighbours.

As good neighbours it was a high-priority problem and commitment never wavered, yet despite every effort, it took five years to find a solution.

To tell this story, of teamwork, collaboration, and community relations it is best to start from the beginning.

Following the completion of MSRH building at White City Campus (below) a first recorded complaint from neighbours in surrounding roads of a droning noise emitting from White City Campus was received in August 2018.

Given the location, near the noise of the A40, the railway and tube lines, that the sound was causing annoyance meant there was no question that it needed addressing.

Then another noise was reported, after the Sir Michael Uren building came online, described as a 'metallic sort of noise' of a higher pitch, and this was affecting another group of streets.

A top team were on the case, Engineer Mark Reader, Senior Project Manager Paco Villegas Ruiz, Health and Safety Technical Officer Matt Moderate, former Chemistry Safety Officer Tim Jefferson, Maintenance Supervisor Chris Khan, Campus Manager Sarah King, the Community Engagement Team, and the specialist acoustics contractor Hoare Lee.

A real humdinger of a problem

The first plan was to dampen the sound using acoustic blankets around the MSRH plant areas. There are 16 fans in MSRH. (There are seven which are double the size in the Uren building – which at this time were still to come – photo centre). Unfortunately plan A didn't work.

The only way they could begin to understand the noises was to conduct 'on and offs' of, by now, both buildings, separately, singly, and together, on multiple occasions to try and eliminate and pinpoint the causes. This was carried out at least 10 times.

Mark said: "The problem is you can't just shut down science building(s) to carry out tests."

The earliest they could do this was from 8pm and work overnight. Also the team had to work with the affected residents, fitting in with them as their permission was needed to enter their homes with sound testing equipment at unsocial hours. Working when there was less traffic and train noise would help investigations.

The team spent 'many romantic evenings together looking out on White City' (photo top left) , or 'in the security hut out of the cold' connecting remotely into controls because, for health and safety, they could not work inside the shutdown building.

Breakthroughs

It became clear that the sound was coming from extract fans and the flues.

Inserts were put into the fans to reduce the noise from the flues, (photo above). It worked for that problem - reducing the gap for air and therefore the sound it makes - but still other sounds continued, so therefore, did the investigations.

Planned shutdowns were also postponed because the weather conditions would prevent them tracking the sound, protracting investigations.

To cut the story short, it was a lightbulb moment for Mark which cracked open the potential solution.

During one test, working with Chris Khan, they took a decision based on 'let's see what happens when we push this button'. "We did, and it worked." Mark explains: "With modern electronics, rather than belts and pulleys, motors are inverter driven" (photo right). The inverter controls motor speed by switching the power to it very quickly. It was at the 4kHz 'factory setting' running at optimised efficiency. By pushing the button and increasing the energy to 8kHz, the switching was smoothed out and the motors became quieter.

The change in energy efficiency is minimal, offset by less wear on the components so reduced maintenance costs, and of course worth every penny for neighbourhood relations.

Mark said: "It really was teamwork, although Paco is the real hero of this story, for driving this and never losing sight of it, which could have been easy given the length of time. Put in perspective, my youngest child has been born and started school since this began, Paco too now has a child as does one of the team from Hoare Lee."

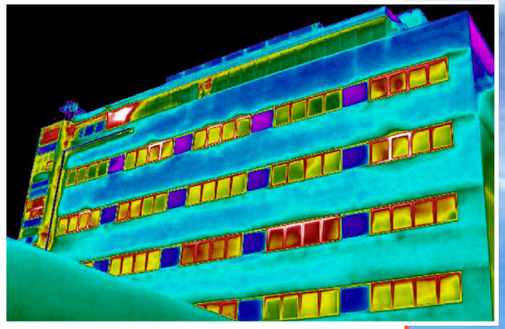
Paco said: "It's been a bit of a journey, but since day one it was fantastic to have such a great team from Imperial helping out. Mark Reader and Matt Moderate have been complete stars in the process, we would have not resolved this complex issue without their continued support and expertise."

Resolved

Now the issue has finally been resolved, no chances are being taken. As well as the full settings being documented, they'll also be clearly marked on every flue and inverter so that no-one can accidentally trigger the problem again during a maintenance call-out!

Thermal imaging

Our first fossil fuel-free building



Hammersmith Hospital Campus is perhaps not so familiar to the majority who don't have cause to go there.

Next to the Wolfson building and just behind the Commonwealth building is the seven-storey Clinical Research building (CRB), set to become Imperial's first fossil fuel-free building. Thirty-years-old (built in 1994), it is soon to be home of the National Heart and Lung Institute as the final stage in the Faculty of Medicine relocation from St Mary's in Paddington and South Kensington.

This major move requires the redevelopment of the CRB. Project Manager Paco Villegas Ruiz (above left) is leading on this work. The project is running to a tight deadline as the decant must happen in autumn 2024, as St Mary's Medical School has been sold and decommissioning works cannot be delayed.

Levels two to six, including plant rooms, ground floor and upper floors are being refurbished; this is a significant improvement intervention, all while keeping Central Biomedical Services (CBS) operational in the lower floors.

There will be a split between lab and office space on each floor, brand new toilet provision throughout and a breakout space. There will be two new containment labs (CL3) units, located on the ground and fifth floors. Infrastructure upgrades include new heating, cooling and power for the whole building. It's a huge intervention.

Explains Paco: "We have since the beginning been focusing to improve sustainability beyond the original scope. We did various feasibility studies on many items, looking at what we could do and finally settled on three main interventions. The first one was to disconnect the building from the Trust Steam Network, the second was to improve the building fabric and the third to improve the overall energy efficiency, to be carried out in this order."

To resolve the heating problem once the building was disconnected from the steam network, the switch had to be made to electric. Paco said: "The installation of air source heat pumps was the preferred choice, but we did it in a way that it would cover the whole building to future proof it, undertaking the necessary adaptations to connect areas outside the scope such as Central Biomedical Services."

The next step was looking at the building fabric improvements. A thermographic survey of the building was carried out last winter.

The fabric is performing quite well. As the photo top left shows anything towards blueish and green colours are a cold surface which is what you want to see – heat is not being emitted from the inside, so it's well insulated. Windows – yellows and reds – is where heat is escaping the building. For this, all the windows and the existing curtain wall in the south facade are being replaced with high performing, triple glazed windows. That's savings of around 22% in energy for the life of the building, so value for money for the spend.

Additional measures

For additional energy saving improvements, we are introducing water source heat pumps. These will work as a heat recovery system and also support the supply of both domestic hot water and heating for CBS. In such a complex installation, where it is required to maximise energy and best performance, the design and installation of the controls system (Building Management System) are of capital importance.

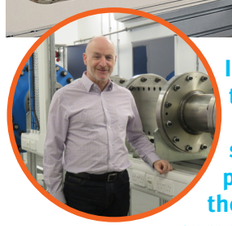
Explains Paco: "There have been a lot of discussions with Estates Operations Controls Engineer, Mark Reader, the engineering team, the contractor and design consultants to make sure that we get this right. It's not only new technology at the College, but also never implemented at this scale before (to cover a whole building). Also, we want to get to a point where once we finish the project we can measure what we've done and confirm that it is performing as we expected."

The icing on the sustainability cake came with the plan to replace the existing equipment within CBS in the ground floor, consisting of two autoclaves, a tunnel wash and a cage wash (quite energy hungry and coming to the end of its life). Replacing all this equipment for brand new, fully electric state of the art equipment will save the College around £300,000 per annum in energy bills for the first few years, with ongoing savings, subject to the fluctuation in energy prices. The payback period is quite short in the scheme of things, so the right decision was an easy decision!

Photos: Top left, the thermal imaging study of the building (Credit: Scan Therm). Scaffolding on the same elevevation as the thermal image. Below left and above right: the structures and plant are taking shape. Above middle: work underway inside, and above a generated image of how the finished interiors will look.

THE NEW WIND TUNNEL

10 years in the making



It is one of the longest-standing projects on the budget spreadsheet. The development of the Hiru N Patel Supersonic Wind Tunnel has taken some 10 years.

Will Frame (above) has been the Project Manager for all that time from business case through to design and implementation and is delighted that it is about to be completed. This major facility is in lab 148 of the Ace Extension Building within the High Speed Flow Laboratories. It has been funded by College, with a sizeable alumnus donation, to whom it is now dedicated following an official reception in October.

Explains Will: “In 2014 the department of Aeronautics was relocated into the City & Guilds Building as part of the major Aeronautics and Mechanical Engineering Project at South Kensington Campus and there wasn’t a suitable space to accommodate the new planned Supersonic Wind Tunnel.”

The new facility is unique in Europe. It has variable settings that allow for simulation of real-life flight conditions. It will allow students and researchers to carry out studies of airflow at speeds in the transonic (close to the speed of sound) and supersonic (greater than the speed of sound) ranges.

Research conducted in the tunnel will have applications in fields such as military and civilian aircraft design. The tunnel can also replicate the atmospheric conditions on Mars for research into Martian/space vehicles.

In 2013, Quadratec Ltd were appointed to design the supersonic wind tunnel. It was a bespoke design to fit within room 148 and to utilise an external space for the required vacuum tank. Once the design was completed, it was handed to Sheppard Robson, the project architects, to design the lab interior, new entrance and external plant compound which would accommodate the design.

Said Will: “I can still remember being stopped on the Sherfield walkway by Dr Nigel MacCarthy back in 2013 asking me if I would manage this project, he described it as being quite straight forward, not difficult. Nobody ever thought that it would take 10 years to complete. It has been a very interesting project.”

The construction contractor, Russell Cawberry, carried out the refurbishment to room 148 and constructed the new entrance and external compound. The area it is housed in was originally constructed in the 1960s for research using hydrogen — a blast-proof building with a brick skin covering solid concrete walls with lightweight roof, so the lid would blow up rather than the walls blast out. A feature that was never put to the test as that research never came about (see photos right).

Like so many projects, the installation was part complete at the onset of the global pandemic in March 2020. It was halted and continued after restrictions lifted, resulting in delays.

Then in February 2022 came the war between Russia and Ukraine. The materials for the wind tunnel had initially been ordered from the Ukraine and could not now be delivered, so a new supplier had to be sourced.

Another challenge faced over the course of the project was the global increase in the price of steel causing the contractor to find alternative suppliers which consequently delayed the installation.

Air conditioning units were installed to ensure that a constant temperature is maintained, a critical feature of the successful function of the lasers when the tunnel is in use. The tunnel has been installed with air heaters just after the compressed air tank, this allows the users to control the temperature of the air within the tunnel (photo third right).

Following refurbishment and construction work, Quadratec Ltd supplied and installed the supersonic wind tunnel (main photo: the laser viewing window is in the centre, and, inset: a close-up of components).

At the time of going to press commissioning was to take place once the insurers had surveyed, pressure tested and approved.

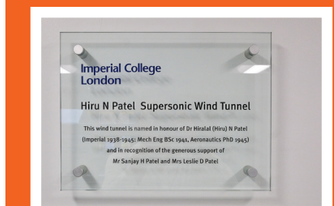
The project cost £2.15m, with a £200k donation from the Patel family (see panel below).

Dr Nigel MacCarthy, Experimental Services Manager, Safety Officer (far right in the photo below) said: “We are incredibly grateful for the support of Estates and in particular, William and his team who showed great patience, tenacity and determination to get this project over the line. His efforts co-ordinating complex project dependencies between the contractors providing essential laboratory infrastructure and the Supersonic design engineering teams was especially impressive.”

Did you know?

- **Before the new entrance to the High Speed Flow Laboratories was constructed the space was used for car parking bays.**
- **The compressed air tank has capacity of 11,500l and due to the height and diameter had to delivered and installed in its final location before any internal walls and the new entrance were built.**
- **The huge vacuum tank has a capacity of 50,000l and Prince Consort Road gates had to be removed to enable it to be delivered to campus. Two cranes were required to lift and position it into location.**

“My father’s love for Imperial was so strong that honouring his memory with this project would have meant a lot to him. He would have been thrilled to be a part of new scientific discoveries in this wind tunnel”
- Sanjay Patel



The new Hiru N Patel Supersonic Wind Tunnel is dedicated to the memory of Imperial alumnus Dr Hiralal Patel (1919-2021) (Plaque left). His son Sanjay and his wife Leslie contributed $250,000 (approximately £200,000) towards the cost.
Mr and Mrs Patel, together with family and friends, joined members of the Imperial team for the launch in October.
Dr Patel’s thesis focused on understanding ‘flutter’ - the unstable oscillation that occurs on surfaces like the wings of an aircraft during flight. The tunnel’s capabilities, in accurate modelling of ‘flutter’, will enable continued study of the work of Dr Patel.

Day to night student space

Two years ago, People, Places, Spaces said 'watch this space' as the College set out to fix a problem for our students at Charing Cross campus. The bar and café, the sole social space for the medical students, had an identity crisis and just wasn't meeting their needs.

Photo Left, from left to right: Manager Kat Iliopoulou, Kirsty Scallan and Jeremy Moss (Henry Riley)

It was a café by day, catered by Campus Services, and a bar by night run by the Students' Union, which also serves the students in nearby residences.

Hours for both were limited, and trying to make both functions work in a single layout wasn't working.

In September the bar and café re-opened, totally revamped as a cohesive space to meet both functions, with a new back of house kitchen and front of house servery, now open until 8pm, and new modern décor suitable for any student club night!

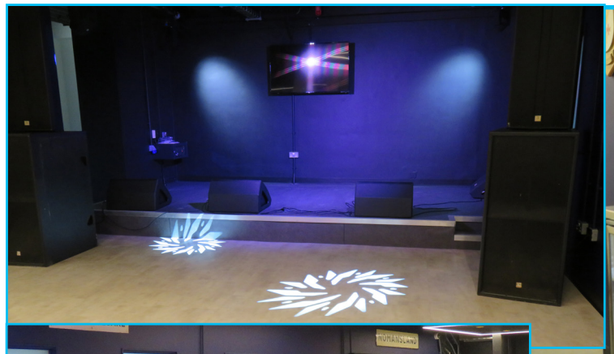
Key features of the design, as shown in the photos, include:

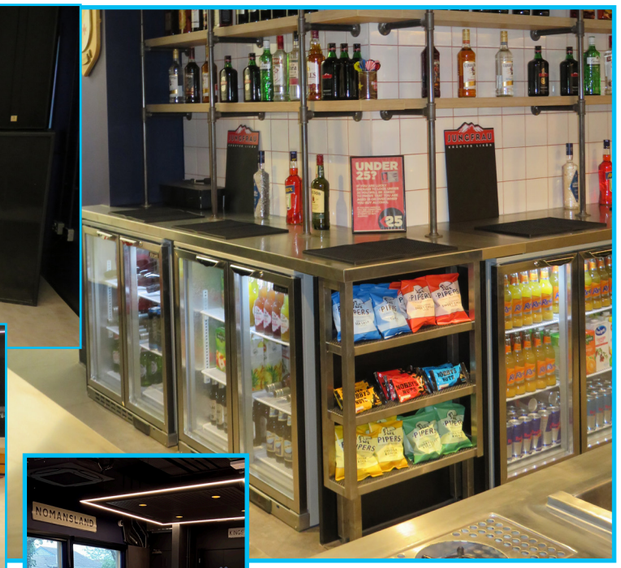
- a new bar counter, with improved layout, security and storage
- new lighting and flooring
- new flexible seating configurations
- improved use of space and reduction in pinch point areas with a flexible layout
- a games area
- new audio-visual equipment
- new CCTV

The revamp was led by Estates Operations Project Manager Kirsty Scallan, and Jeremy Moss, external Project Manager from consultant Henry Riley, with the main contractor BW Interiors.

They were working with the Students' Union - in fact three different SU Presidents and committees over the time scale of the project! Kirsty said: "The end user requirements changed throughout the design process, mostly because of the annual change in Students' Union representatives and stakeholders bringing new ideas. It's fair to say this slowed the design process down, but ultimately, we have given the current end user representatives the space they have asked for."

They were also working with Campus Services, and the café area (photos this page) now offers a new servery and back of house kitchen befitting the space.





Working with so many experts in their own field has also ensured that great attention to detail has been paid. Things such as:

- a drip groove under the polished concrete bar counter-top, (photo right) which will stop any spills running down the decorative corrugated bar front and make for easier cleaning
- upholstery selected by the student panel concerned – who did not want their new seating stained with blackcurrant juice spills
- extending the length of the bar to remove a bottleneck by a pillar that stopped movement through the space.
- wheelchair accessible space (photo far left).

The project has benefited from earlier learning for example, greater 'hand-holding' from the start for contractors new to the College to ensure our requirements and standards are always fully understood.

One bonus working on the project, said Kirsty, was that: "As a standalone building there were never any problems carrying out work, or carrying out isolations, as it didn't affect any other users."

Kirsty added; "The Building Managers at Reynolds were a pleasure to work with", concluding: "Everyone worked very well together to make it happen, and communication was good, everyone felt very well informed and kept in the loop."

There was a soft launch of the new space, which cost circa £1.75m, followed by the official re-opening on 29 September. Right until the last moment everyone was working hard on the finishing touches, including the stocking of the bar and café, including the cleaning team (photo below right) who were making sure everything was gleaming.

Meanwhile, there's another 'watch this space'. Plans for refurbishing levels one and three for future teaching space, are currently in mid-design. This had previously been put on hold by the School of Medicine while they explored costs and financing. Will Frame is managing this project.

Holidays, celebrations, diversity days and events

● Intl. Day of Persons with Disabilities	3 December	● Dry January	January
● Autumn Term ends	15 December	● Veganuary	January
● College Closure days	27 - 29 December	● National Mentoring Month	January
● College re-opens	2 January	● Big Energy Saving Week	17-23 January

Learning and development

Please visit the Learning and Development One-Stop Shop on sharepoint for further information about these and other courses available this year and in 2024.

The Learning and Development service will continue and will be provided under the new structure, please see page 3. There will be several amendments to the Learning, Development & Wellbeing One-Stop Shop and some of our local policies to reflect the new changes eg, the Estates Sponsorship Scheme.

Now is a good time to review your training history on ICIS 'My Training' and check your Imperial Essentials dashboard, so you can discuss your training plan for 2024 with your line manager.

Several courses such as Asbestos Awareness, Legionella, Mobile Lifts, Site Supervision Safety Training Scheme, First Aid at Work, Manual Handling, Imperial Essentials etc, have refresher timescales and expiry dates. This will also help you to prepare for your Annual Review Conversation (ARC) which starts from February-April 2024.

A selection of courses that it has been possible to arrange are listed here, further courses will be arranged in the coming months and information will be circulated.

● **Disability Awareness Briefing for Managers and Supervisors (online)**
17 January 2024:
9.30am - 11am

● **Asbestos Awareness (online)**
8 February and 9 April 2024:
9.30am - 11am

● **Customer Service Training (online)**
12 March 2024:
9.30am - 12.30pm

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