



Surrey Uni knows the display way to San Jose

16 May 2025



A radical new approach to display screen technology could halve production costs, reduce harmful waste, and deliver brighter, more energy-efficient screens for our smartphones, smartwatches, and even certain medical devices, say researchers at the University of Surrey.

Most display screens use complex circuits made up of tiny switches called thin-film transistors (TFTs), which control when each pixel turns on or off and how bright it should be. However, building these circuits requires a lot of time, energy, water and harsh chemicals, making the manufacturing process expensive and resource-heavy.

At this year's Display Week 2025 Technical Symposium in San Jose, California (11-16 May), Dr Radu Sporea and Dr Eva Bestelink will unveil their latest research, based on a new type of electronic component called a multimodal transistor (MMT). Originally designed as a hardware AI computing element, the MMT also has the ability to simplify display circuits while improving performance and sustainability.

Dr Radu Sporea, Associate Professor in Semiconductor Devices at the University of Surrey, said:

"Our invention challenges decades of industry practice by embracing properties usually seen as flaws. In most displays, engineers try to eliminate the energy barriers that form where metals meet semiconductors because they restrict current flow. But instead of working around them, we've made those barriers central to how our transistors operate.

"Using these effects deliberately, we've shown that the electronic circuits at the heart of display screens can be made with fewer components and processing steps - reducing waste, cutting costs and improving performance. And because it works with existing materials and tools, it's a smarter, more sustainable upgrade for the screens we use every day. For the user, the reduced power requirements in operation will also mean significantly improved battery life."

The MMT's unique operation enables extremely compact, high-performance circuits that are particularly well suited to devices where size, energy use and image quality are critical - such as smartphones, tablets, smartwatches, automotive displays, and future wearable devices.

The technology is already showing promise in simulations, with real-world applications in AMOLED and microLED displays - two of the most advanced and rapidly growing areas of screen technology. It can also be integrated into current production lines with minimal disruption.

Dr Eva Bestelink, Senior Research Fellow at the University of Surrey's Advanced Technology Institute, said:

"I've been working on this technology since my undergraduate days at Surrey, where I had the idea to develop a transistor based on neural behaviour, so seeing it evolve into something with real-world potential is incredibly rewarding. We've shown that it's possible to rethink how displays are built without starting from scratch.

"The MMT lets us design circuits that perform better while also being cleaner and cheaper to make. That's a win for manufacturers, a win for users and a win for the environment. Beyond displays, it could also have major applications in areas like microfluidics, imaging arrays and hardware AI. We're still actively researching the AI potential, but the implication for revolutionising manufacturing is clear - especially if we're to achieve Net Zero."

Dr Bestelink and Dr Sporea will present their research on 15 and 16 May at this year's Display Week 2025 Technical Symposium in San Jose, California. Their invention - the multimodal transistor (MMT), now granted a US patent - builds on more than two decades of pioneering research in thin-film electronics at the University of Surrey.

Image: By Redd Angelo in Technology CC0 license

£500 award for artistic contribution

16 May 2025



Twinned with Chantilly, France

The Epsom and Ewell Town-Twinning Association is delighted to invite applications for this year's **Cyril Frazer Award**.

The Cyril Frazer Award is a legacy set up as a memorial to Cyril Frazer, who died in 2016. He was Mayor of Epsom and Ewell when it was first twinned with Chantilly in 1995 and was a founding member of the association. As well as Twinning, one of his other great passions was singing, and he was a keen member of the Epsom Male Voice Choir.

Both are reflected in the requirements for the award of **£500**, which is available to individuals and groups within the Borough and will be awarded to qualified applicants who meet some or all of the following agreed criteria:

- Applicants live or study in the Borough
- The award meets a special need, such as mental or physical health
- It benefits young people
- It has cultural/educational value
- It is music or performing arts related
- It furthers friendships or links with Chantilly
- It supports a key twinning or community event

The prize will be awarded at the Twinning Association's AGM in June, and the deadline for applications is **May 31st 2025**.

For further information and to apply, please contact: diana@epsomtwinning.com.



Surrey Housing protocol agreed for people with mental health needs

16 May 2025

An agreement between councils and NHS services in Surrey will help people with mental health needs find housing and avoid delays in leaving hospital.

The Surrey Mental Health and Housing Protocol sets out how services will work together to support people who find it difficult to secure long-term housing because of the mental health challenges they face.

By strengthening coordination between health, social care and housing, the protocol aims to help people find accommodation to aid their recovery and reduce the risk of becoming homeless.

The protocol, which sets out step-by-step guidance to services, will also help prevent delays in people leaving hospital, freeing up space for others in need.

Housing difficulties are a key factor in people having to stay in hospital longer than necessary. The protocol outlines clear processes for making sure that people have access to suitable housing when they are ready to be discharged.

The protocol also aims to help prevent evictions from tenancies and reduce incidents of cuckooing, where criminals exploit vulnerable people by taking over their homes for illegal activities such as drug-dealing.

Detailing a number of possible scenarios and the approaches to follow for each, the agreement encourages services to identify early warning signs of housing problems and work together to intervene proactively and find tailored solutions. This is especially important for people with complex needs or who face multiple disadvantages, such as unemployment, poor health, domestic abuse and trauma.

An earlier version of the protocol was introduced in 2016 but it has now been strengthened, updated and expanded, with a sharper focus on supporting people at the right time. Surrey organisations renewed their commitment by signing up to the updated protocol in March.

Partners who have agreed the relaunched protocol are Surrey's 11 borough and district councils, Surrey County Council, Surrey and Borders Partnership NHS Foundation Trust, as the county's mental health NHS provider, and the five acute care hospitals in Surrey (Royal Surrey, Epsom, East Surrey, St Peter's and Frimley Park). The protocol can be found on the [Healthy Surrey website](#).

Sinead Mooney, Surrey County Council's Cabinet Member for Adult Social Care, said: *"We know that safe and stable housing promotes good mental health, and this relaunched protocol is an important step forward in helping people stay in their homes or find suitable new ones at a time when they most need support."*

"By strengthening the way that services work together, we can help people earlier, supporting their recovery, independence and overall wellbeing, and making sure no one is left behind. With local government reorganisation on the horizon, this protocol will also support partners in getting ready for the changes ahead."

Jo Lynch, Chief Nursing Officer at Surrey and Borders Partnership NHS Foundation Trust, said: *"I am delighted we are jointly working with our partners in social care and housing to ensure people have access to suitable accommodation when they are ready to be discharged from hospital."*

"It can be complicated to understand how best to support people to get the housing they need. The joint protocol guides us on who we need to talk to and the conversations we need to have to help people more quickly find housing that can support them with their recovery and which then frees up hospital beds for others in need."

The boroughs of Reigate & Banstead and Runnymede represented Surrey's 11 borough and district councils on a multi-agency group which worked on updating and strengthening the protocol.

Cllr Mus Tary, Executive Member for Housing and Support at Reigate & Banstead Borough Council, said: *"Officers from our Housing Team have been involved in the co-design of the updated protocol, alongside other partners, bringing their expertise on some of the housing challenges faced by those with mental health needs. We hope this protocol will ensure consistency across the partnership and lead to improved housing outcomes for some of our most vulnerable residents."*

Cllr Mike Smith, Chair of Runnymede Borough Council's Housing Committee said: *"Homelessness affects people from all walks of life, and there is no one-size-fits-all solution. For those facing mental health challenges, securing and maintaining stable accommodation can be even more difficult. This updated and vital protocol prioritises early intervention and strengthens collaboration between housing, health, social care, and many other agencies to ensure no one falls through the cracks. By identifying housing issues early and providing tailored support, we can help people transition from hospital into housing—giving them stability and the best chance to recover and rebuild their lives."*

What is Buddy-Up?

16 May 2025



Buddy Up is an **award-winning charity** designed to offer **mentoring to young people** identified by schools as needing one-to-one support from an experienced youth worker and mentor.

It was set up in **August 2020**, after a need was identified in the community. Following the return to school after the pandemic, many schools reported:

- Increased **anxiety**
- Reduced **confidence**
- Struggles with **attendance**

While schools recognised the need for additional support, they lacked the time and funding to provide it.

Buddy Up has been delivering mentoring in schools across **Epsom and Ewell** for five years. To date, we have delivered **over 1,500 mentoring sessions** and still have a significant waiting list.

Our goal is to **support young people early**, believing that early intervention makes the biggest impact.

Who do we work with?

The young people we support may be dealing with:

- Anger
- Addiction



- Self-harm and suicidal ideation
- At risk of grooming
- At risk of county lines involvement
- Victims of domestic violence
- ADHD
- ASD
- ODD
- Bullying
- Low self-esteem
- Victims of abuse
- Trauma
- Disordered eating
- Suicidal inpatients
- Poor attendance
- At risk of exclusion
- Anxiety

Funding

Buddy Up is largely funded by **donations and grants**, allowing us to offer our services free to those in need.

However, in recent months, our **funding has decreased dramatically**. Like many charities, we are feeling the impact of the cost-of-living crisis.

We are now in **urgent need of funding** to keep the charity running and continue supporting young people in Epsom and Ewell.

If you're able to donate, we would be incredibly grateful. Please use the link below:

<https://www.justgiving.com/buddyupcharity>

Contact Us

If you would like more information or to discuss anything further, please get in touch:

[07551 444 246](tel:07551444246)
info@buddyupcharity.org
<https://buddyupcharity.org>

Registered charity number: 1190942

Surrey SEND parents owed money

16 May 2025



Parents of children with special educational needs who were left with little choice but to use private educational psychologists may be due money back from Surrey County Council.

So far 27 families have been reimbursed for having to go private between the 2023 summer term and May 2024 due to a lack of qualified professionals able to create educational care plans.

This has resulted in £26,475 being returned to families - although it has not been a straightforward process for some parents.

The figures emerged following a recently published complaint against Surrey County Council.

The local government and social care ombudsman upheld that the authority refused to reimburse a mother who used a private educational psychologist in support of her son's education health and care (EHC) needs assessment.

The ombudsman also upheld the council delayed making payments for her son's tutor and that its communications were poor.

The ombudsman upheld further complaints about delays at Surrey County Council in completing needs assessments due to the national shortage of educational psychologists - but that it has since been satisfied with the steps being taken to resolve the issue.

Between the 2023 summer term and May 2024 Surrey County Council said it temporarily agreed to reimburse private reports due to its backlog.

The ombudsman said: "If we were to investigate this complaint it is likely that we would find fault.

"This is because the council accepted that a report from an educational psychologist was required and used the one obtained by Miss X.

"Therefore, it should have reimbursed her for the full costs. Also, when responding to Miss X's complaint, the council accepted there were delays making payments to (the child's) tutors.

"Whilst the council did apologise, this is likely to have caused Miss X distress in the form of uncertainty that wasn't remedied.

"I therefore asked the council to write to Miss X within one month to apologise and to make a payment to her for the full cost of the educational psychologist assessment she obtained and to offer a payment of £100 to remedy the distress its delayed payments to tutors caused her.

"To its credit, the council agreed."

Councillor Clare Curran, cabinet member for children, families and lifelong learning, said she was not able to comment on any individual children specifically, but the council accepted the findings from the ombudsman report and apologised to the family affected for any distress caused.



A spokesperson for the council added: "Where we used the private EP report as the sole advice during that time at the parent/carer's request we would cover the cost."

"However, if we did not use it as the sole advice then we would not reimburse."

They added that authority was now operating at over 90 per cent "timeliness" and able to meet demand.

Image: New Surrey County Council HQ, Woodhatch Place on Cockshot Hill, Reigate. Credit Surrey County Council

Epsom and Ewell Victory in Europe celebrations

16 May 2025



A number of commemorative events are planned to be held across the borough to celebrate the 80th anniversary of VE Day on 8 May 2025.

VE Day marks the official surrender of Germany, the end of the hostilities in Europe and the beginning of the end of World War II. The war continued in the Pacific until September 1945, when Japan surrendered.

Celebrations will begin with a procession from the Town Hall led by the Mayor to Epsom Market Place at 8.45 followed by a proclamation led by Councillor Graham Jones MBE. To mark the occasion a specially designed VE Day 80 flag provided by the Royal British Legion will be raised. The clocktower will be lit up in tribute the evening of May 8th.

In the evening, there will be a beacon lighting event, hosted by Epsom & Ewell Borough Council in partnership with Go Epsom BID and the Jockey Club, taking place on Epsom Downs. Epsom Downs Racecourse will be open from 7pm. Food and refreshments will be on sale, and entertainment provided by a variety of local performers. The event is free to attend and will end at approximately 9.45pm.

At 9:30pm, visitors are invited to gather at the dedicated Beacon site on Grandstand Road, Epsom Downs where the Mayor will lead the Beacon Lighting Ceremony. Please note that there is limited on-site parking available, and the beacon site is on uneven ground.

Bourne Hall is planning to decorate their café and reception area with homemade bunting and is asking local schools to take part in designing and making the bunting. Any schools willing to take part need to hand their bunting in at Bourne Hall by Thursday 1 May.

A patriotic matinee show, Land of Hope and Glory from Neil Sands Productions, is coming to the Epsom Playhouse on Thursday 1 May. This unforgettable afternoon of nostalgia is filled with more than 60 all-time favourite songs, celebrating the best of British entertainment through the decades. Book tickets via the Epsom Playhouse website.

Finally, Epsom & Ewell Borough Council's streetcare team have been working hard in recent months to plant patriotic blooms in time for VE day celebrations.

Councillor Clive Woodbridge, Chair of the Community and Wellbeing Committee, said:

"The celebrations that have been arranged to mark the 80th anniversary of VE Day are an opportunity for the whole community to come together to commemorate the bravest generation, who fought for the freedom we enjoy today."

"I would encourage local schools to take part in creating bunting for Bourne Hall and I hope as many residents as possible are able to attend the proclamation and beacon lighting."

Jackie King, Chief Executive, said:

"EEBC are very proud of those who fought for our freedom and also of all those friends and family members who supported their efforts at home. On this 80th anniversary we are celebrating and commemorating this important day along with local residents who we hope will join us at the Beacon event and also with their own street parties and other activities".

Karen Pengelly, BID Manager at Go Epsom, said:

"It is an absolute honour and privilege to be part of this year's VE Day commemorations, it will be both a moving and celebratory event."

"Performances from the Show Choir, Laine Theatre Arts Choir and Epsom Silver Band will take place from 7pm and the Royal British Legion, Epsom & Ewell Branch will be leading the standard bearers at the Beacon - it should be a wonderful event for all to attend."

Jim Allen, General Manager at Epsom Downs Racecourse, said:

"Epsom Downs Racecourse is proud to be part of the borough's VE Day 80th anniversary commemorations. The beacon lighting will be a moving tribute to those who served and a special opportunity for the local community to come together in remembrance and celebration."

"We look forward to welcoming everyone to the racecourse for what promises to be a meaningful and memorable evening."

Image: VE DAY CELEBRATIONS IN LONDON, 8 MAY 1945 (HU 41808)

A truck of revellers passing through the Strand, London, 8 May 1945.

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Volunteers Join Forces with Councillor to Give Epsom a Spring Clean

16 May 2025



Epsom Town Centre was treated to a thorough spring clean on Sunday 6th April, as a team of around 40 volunteers from the international youth group ASEZ WAO UK joined local councillor **Arthur Abdulin** (RA, Town Ward) in a community litter pick.

Dressed in high-vis jackets and armed with litter grabbers and bin bags, the group covered key areas including the High Street, Epsom Square, and alleyways leading to the railway station — even tackling neglected corners of car parks and hotspots often used by the homeless. In total, the team collected an impressive 38 bags of rubbish, which were later gathered by council rangers.

The ASEZ WAO UK is a local volunteer group in Epsom that works to serve the Surry area and make it a better place for everyone. Mostly made up of young adults who are passionate about doing their bit to help the local community, they have been carrying out various volunteer activities in Surry since 2021.

The Epsom clean-up began with a presentation highlighting the dangers of plastic pollution — a growing threat to the environment and public health. The initiative aimed not only to tidy up the town centre but also to raise awareness about responsible waste disposal and inspire behavioural change among residents.

Councillor Abdulin, who frequently takes part in litter picks, joined volunteers in clearing a significant amount of long-neglected waste. "The greatest impact this kind of event has is sharing the message," he said. "It will have a great impact on people so that they think before littering and get rid of it properly."

The warm spring-like weather added to the atmosphere as locals strolled through the market and visited the Ashley Centre — perhaps unaware that just metres away, volunteers were working hard to ensure the town remained pleasant and welcoming for all.

Recent signage from Epsom & Ewell Borough Council reminds residents that dropping litter could lead to a £100 fine. But campaigners like ASEZ WAO UK hope that community-led efforts and education will play an even greater role in keeping the town clean.

Their message is clear: everyone can make a difference. Whether by using a bin, reducing plastic waste, or picking up just one piece of litter, every small action contributes to a cleaner, healthier Epsom — and a better world.

Image: L to R. A volunteer and Cllr Arthur Abdulin

Shock as Surrey Council Puts Protected Woodland Up for Auction

16 May 2025



A surprise decision by Surrey County Council (SCC) to auction off a cherished woodland in the heart of Cuddington has sparked uproar among residents and elected councillors, who are now rallying to save the green space from the threat of large-scale development.

The 13-acre site, situated between Grafton Road and Old Malden Lane and bordering Linden Bridge Special Needs School, was discreetly marketed for potential development of up to 40 homes by commercial estate auctioneers. The move came without prior consultation with Epsom & Ewell Borough Council or even the local Surrey County councillors representing the area.

Local County Councillor **Eber Kington** (RA), alongside RA Cuddington ward councillors **Kim Spickett**, **Graham Jones** and **Phil Neale**, and the Cuddington Residents' Association, have launched a campaign urging SCC to reconsider its course of action.

"This woodland isn't just a patch of land - it's a vital green refuge in our urban landscape, a space of peace, biodiversity, and community value," said Cllr Neale. "We're asking residents to stand with us and help protect it for future generations."

The woodland, known locally for its mature trees and diverse wildlife, lies adjacent to the Grafton Park Road estate and has long been considered a buffer zone preserving local environmental quality and character.

The auction concluded in late January, but SCC is yet to announce a winning bidder. The auctioneers stated that the highest bid would not necessarily be accepted, leaving room for alternative proposals to be considered.

One such alternative comes from a joint venture involving the Cuddington Residents' Association, the Wandgas Sports & Social Club, and a local developer. Their bid proposes a modest housing scheme to fund the creation of a community-led sports and recreational space, including public woodland access for walkers and cyclists. The vision includes safeguarding the majority of the natural landscape and establishing long-term protections for its use.

Campaigners argue that SCC's recent adoption of a **Community Asset Transfer** (CAT) scheme—championed by Epsom & Ewell's own county councillor Eber Kington—should provide the framework to enable this type of locally-driven project.

"Transparency and local accountability are vital when it comes to decisions that affect our shared spaces," Cllr Webb added. "We're calling on the County Council to respect the CAT process, consider our community proposal seriously, and honour the values of environmental stewardship and public trust."

Residents are now being asked to sign a petition backing the community bid and urging SCC to reject blanket housing development in favour of a sustainable, locally-beneficial plan.

The petition can be signed online and will be submitted to Surrey County Council ahead of a final decision.

For more information or to add your name to the petition, visit: Change.org

Surrey in race to capture carbon

16 May 2025



A unique carbon capture technology developed by researchers at the University of Surrey could offer a more cost-effective way to remove carbon dioxide (CO₂) from the air and turn it into clean, synthetic fuel.

A study published in Applied Energy demonstrated that the Dual-Function Material (DFM) process – which combines carbon capture and conversion – could match or outperform more established industry methods. Under optimal conditions, it was shown to remove carbon at a cost of US\$740 per tonne, with the potential to drop below \$400 as materials improve.

Dr Michael Short, Associate Professor of Process Systems Engineering at the University of Surrey and lead author of the study, said:

“For the first time, we’ve been able to demonstrate it can be financially competitive to use DFMs for direct air capture (DAC) – all the while creating clean fuel like methane in the process.

“Using green hydrogen from renewable electricity and carbon from the atmosphere, our system can help to replace fossil feedstocks in sectors like steel manufacturing. If a steel mill uses this fuel, it could effectively have zero net emissions – offering a sustainable path to decarbonise industries that are otherwise hard to electrify.”

Using superstructure optimisation – an advanced modelling technique – the team tested a wide range of configurations to identify the most cost-effective design for capturing 10,000 tonnes of CO₂ per year – a scale comparable to other commercial systems.

With further improvements in material performance and catalyst cost, researchers suggest it could hold promise for large-scale deployment and can be integrated with existing industry infrastructure.

Dr Melis Duyar, Associate Professor in Chemical and Process Engineering at the University of Surrey, said:

“Recycling carbon in this way is a powerful idea, with potential to create many new value chains and enable energy independence by embedding renewable energy into the production of conventional fuels and chemicals.”

The Intergovernmental Panel on Climate Change (IPCC) warns that limiting global warming to 1.5°C will require not only cutting emissions but also removing billions of tonnes of CO₂ from the atmosphere this century.

In the lead up to Net Zero target deadlines, the technology offers a promising and economically viable route to help achieve that goal – while helping us to reduce overreliance on fossil fuels.

Surrey Uni Study: long Covid patients proving their illness is real challenges

16 May 2025



People living with Long Covid often feel dismissed, disbelieved and unsupported by their healthcare providers, according to a new study from the University of Surrey.

The study, which was published in the Journal of Health Psychology, looked at how patients with Long Covid experience their illness. The study found that many patients feel they have to prove their illness is physical to be taken seriously and, as a result, often reject psychological support, fearing it implies their symptoms are “all in the mind”.

Professor Jane Ogden, co-author of the study from the University of Surrey, said:

“We found that the problem isn’t people with Long Covid refusing help – it’s about the deep need for people to be believed. When a patient feels dismissed, offering psychological support instead of medical care can be misconstrued as insulting.”

According to the Office for National Statistics, there are 1.9 million people who live with Long Covid in the UK. Long Covid symptoms include fatigue, difficulty concentrating, muscle aches and shortness of breath, which persist for many weeks, sometimes months, after the initial Covid-19 infection.

Surrey’s study involved in-depth interviews with 14 people in the UK between the ages of 27 to 63 who had experienced Long Covid symptoms for more than four weeks. The group included 12 women and 2 men.

Saara Petker, clinical psychologist, co-author of the study and former PhD student at the University of Surrey, said:

“We found that our participants are living a life of constant uncertainty, struggling to find treatment. People told us that they didn’t feel listened to, some said they’d lost trust in doctors, their social circles and even their own bodies because of the whole experience.

“Medical advice is crucial – but psychological support must be offered with care. If it’s seen as replacing medical help, it can feel dismissive.”

Image: License details Creator: Jose Luis Navarro. Copyright: CC BY-SA 4.0