

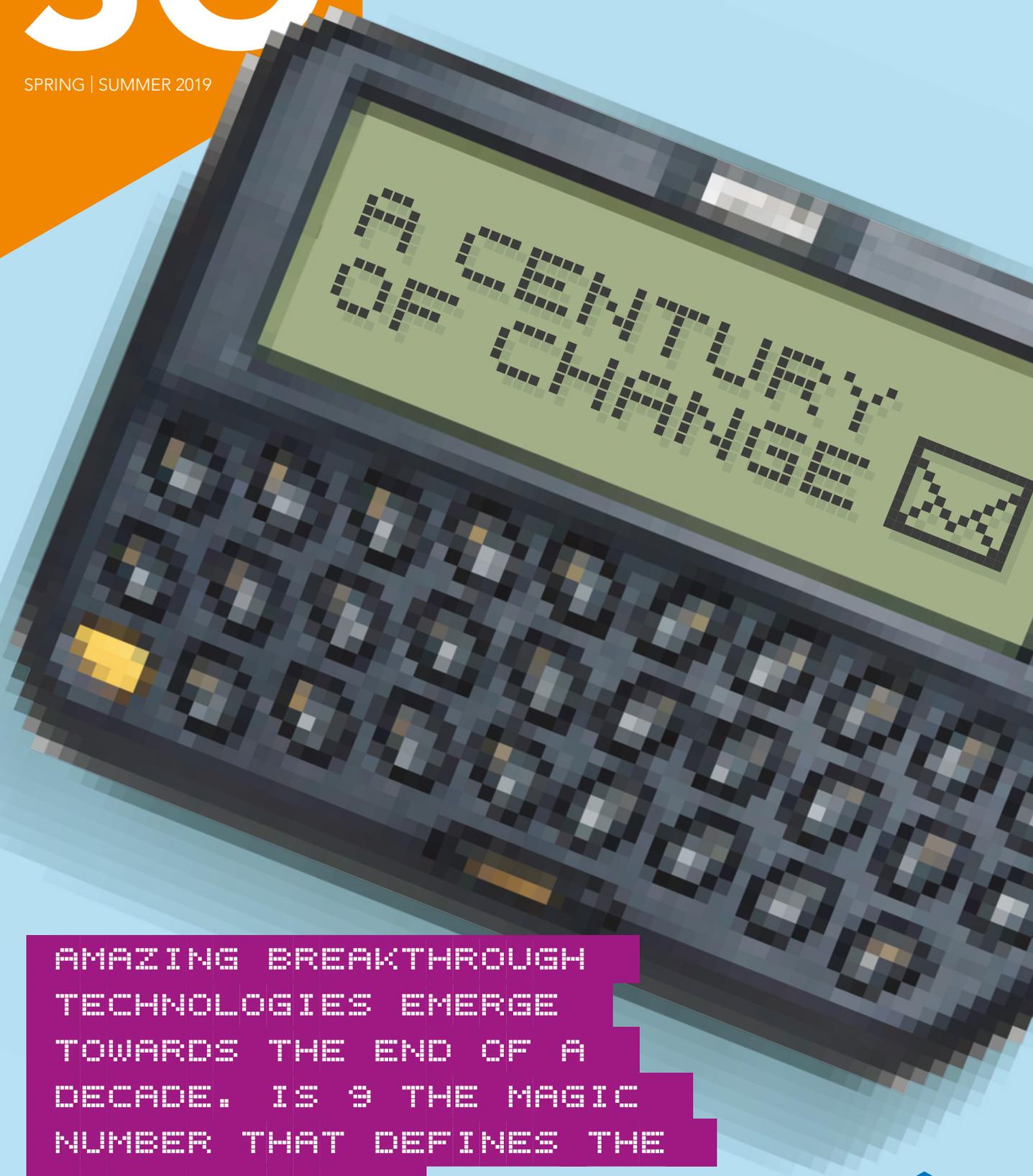
# SO

SPRING | SUMMER 2019

THE WEB  
REINVENTED  
Sir Tim Berners-Lee's  
new mission #forthefweb

THE ART OF  
CONCENTRATION  
Rethinking the rules  
of productivity

THE PRESSURE  
SEEKER  
Inflowmatix challenges  
water inefficiency



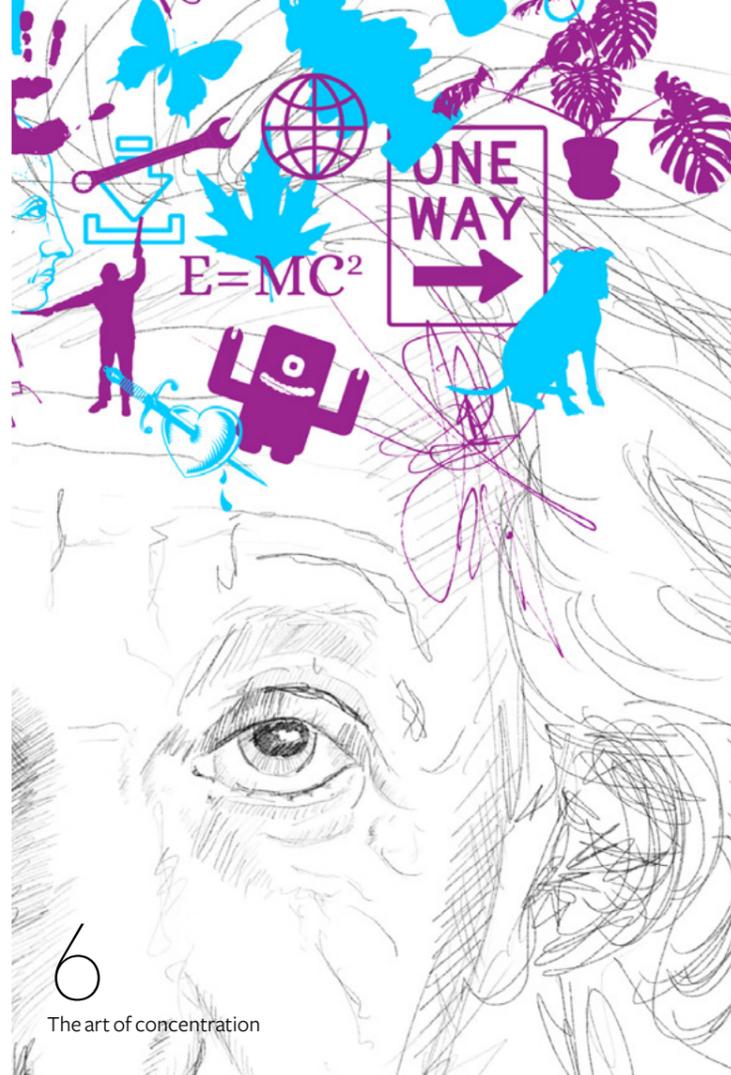
A CENTURY  
OF CHANGE

AMAZING BREAKTHROUGH  
TECHNOLOGIES EMERGE  
TOWARDS THE END OF A  
DECADE. IS 9 THE MAGIC  
NUMBER THAT DEFINES THE  
DECADE AHEAD?



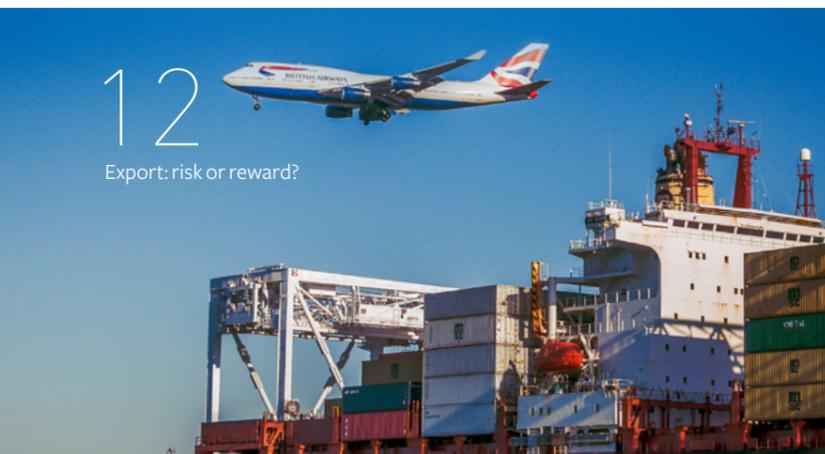
UNIVERSITY OF  
SOUTHAMPTON  
SCIENCE PARK

SCIENCE-PARK.CO.UK



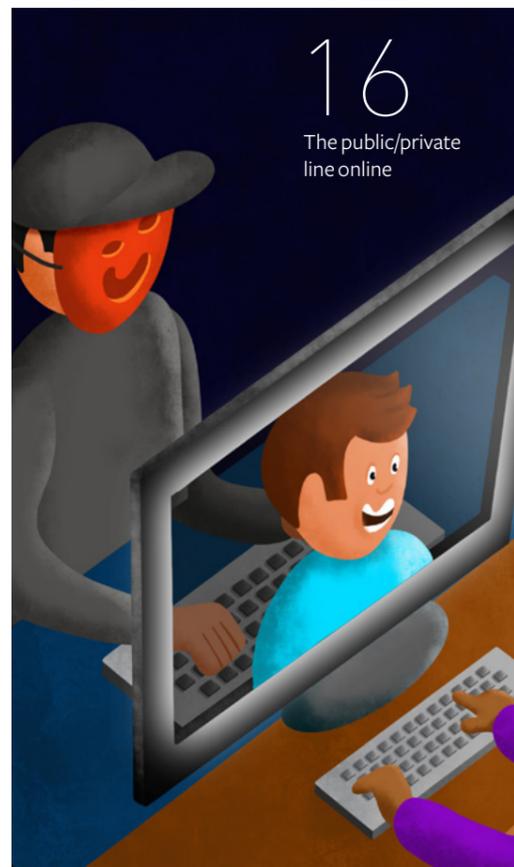
6  
The art of concentration

8  
Accelerating good ideas



12  
Export: risk or reward?

16  
The public/private line online



32  
The buck stops here



# Contents

34  
A century of change



18  
#forthefweb

**Welcome 4**  
Peter Birkett, CEO, Southampton Science Park, says hello

**Bespoke build 5**  
New custom built premises for Promgea opens in the summer

**The art of concentration 6**  
Is your constant juggling enhancing your ability to get things done?

**Accelerating good ideas 8**  
Start-up opportunities are improved across the South

**Park in focus 10**  
AXIS is open

**SO food, so good 11**  
Streetfood Thursdays

**Risk or reward? 12**  
Taking products and services to new markets

**Enterprising students 14**  
University of Southampton undergraduates take part in the Catalyst Challenge

**16 The question of the day**  
Three subject experts contemplate the question of the day

**18 #forthefweb**  
Tim Berners-Lee's open letter on the future of the worldwide web

**20 Summer in the South**  
Out and about in Hampshire this season

**22 News**  
What's happening at Southampton Science Park?

**27 The pressure seeker**  
Gamechangers Inflowmatix are resolving challenges in the water sector

**31 Instant expert**  
Geoengineering – what is it and why is it important?

**32 The buck stops here**  
Climate science is clear – now all businesses have to step up

**34 A century of change**  
Amazing breakthrough technologies emerge towards the end of a decade

**36 Tech in focus**  
Ilika is revolutionising solid state batteries

**37 Great minds**  
News from the University of Southampton

**38 Directory**  
Our community of gamechangers

## Something to shout about?

If you'd like to contribute to the next issue of SO, contact: [parknews@science-park.co.uk](mailto:parknews@science-park.co.uk)

### SO...

**Content, design and production**  
The Escape (the-escape.co.uk)

**The University of Southampton Science Park Limited**  
2 Venture Road, Chilworth, Southampton, Hampshire SO16 7NP, United Kingdom

### SCIENCE-PARK.CO.UK

**Tel:** 023 8076 7420

**Email:** [enquiries@science-park.co.uk](mailto:enquiries@science-park.co.uk)

While every effort is made to ensure the accuracy of SO, the University of Southampton Science Park magazine, no responsibility can be taken for errors or omissions. Commissioned articles do not necessarily reflect the opinions of the University of Southampton Science Park or the University of Southampton.



## Welcome to **SO**

Just like a body which requires multiple organs to work in harmony, innovation needs a multi-faceted ecosystem which encourages a wide range of different players to come together if it is to achieve global commercial success.

A high achieving science park such as ours offers this.

Here in Southampton, we are home to SMEs with fresh ideas as well as multinational companies with established credentials and routes to market. We facilitate access to research excellence from a world-class university, to sources of funding, to a local talent pool, to experienced mentors and also to specialised professional services that are familiar with the challenges that companies at all stages of development face. The result is a dynamic environment that nurtures innovation to give it a global launch pad and the creation of networks that intersect and spark off one another to spin-off in new, uncharted directions.

Our own success as a science park is the direct result of building an engaged community whose influence extends far beyond our 72 acres. We talk much about the societal impacts of the technology that emanates from businesses here and this issue of SO is full of examples of this in action. See, for example, how TrackBack, SeaB Energy and Fresh Relevance planned for international expansion in Risk or Reward on page 12. Or how Inflowmatix is achieving fast-paced growth in the utilities sector in The Pressure Seeker, page 27. Our On the Park round up of news from our community of companies reveals many more

**Whatever future challenges lie ahead, there should be no doubt that science parks will play a vital role in realising the UK's fullest potential**

ground-breaking achievements from innovators tackling a wide array of societal concerns from road safety and cybercrime to fertility and cancer treatments. I hope you enjoy reading these.

Leading science parks have a powerful role to play in reinvigorating and fast-tracking the UK's economic progress on the world stage. They look beyond the property aspects of their business and instead focus on the value-add they provide to facilitate growth. Whatever future challenges lie ahead, there should be no doubt that science parks will play a vital role in realising the UK's fullest potential.

**Peter Birkett**  
CEO, Southampton Science Park.  
science-park.co.uk

### what?

- SO** sees the future differently
- SO** connects
- SO** asks questions
- SO** engages, informs, inspires
- SO** celebrates success
- SO** shows how Southampton Science Park shapes society
- SO** makes science and technology social
- SO** shines on South Coast excellence
- SO** where could it take you?

# BESPOKE BUILD

This summer sees the opening of a new custom-built head office at Southampton Science Park, undertaken by global leader in life sciences, **Promega**.

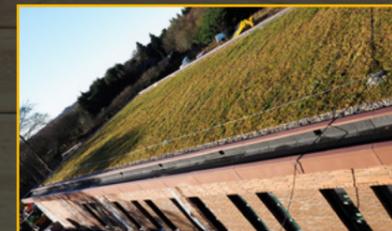
Promega creates innovative solutions and technical support to life scientists in academic, industrial and government settings. Its portfolio of more than 3,500 products aims to help scientists worldwide to advance their knowledge in genomics, proteomics, cellular analysis, drug discovery and human identification.

Southampton Science Park has been home to the company's UK head office since 1989 but, following rapid growth over the last five years and a doubling of revenues, more space was required to expand its operations and support the medium-term growth of its UK business.

It is achieving this with the construction of a stunning new bespoke facility. Covering 16,000 sq ft, the striking building, which features dry stone walling, a beech timber frame and zinc roofing, has been designed to be environmentally friendly, functional and beautiful inside and out. The premises are organised into two wings: the first is for the main office, boardroom and staff recreational areas, while the other has been designed for laboratory work and training. A further grass roofed area houses temperature sensitive storage facilities.



**Our vision is to create a working environment, from both an appearance and sustainability viewpoint, which our employees are proud to work within.**



Managing Director of Promega UK, Derek McCall, said: "Our vision is to create a working environment, from both an appearance and sustainability viewpoint, which our employees are proud to work within. More than this, our new laboratory and training facility will enable us to host customer visits and to reach out to the wider community in terms of local colleges and schools, to provide training on applications and technologies in biological research. We hope to enthuse the next generation of life scientists!"

Councillor Simon Letts, Leader of Southampton City Council, commented: "This development highlights the pivotal role that the Science Park plays in attracting innovative companies to the region and further strengthens Southampton's growth in the life sciences sector."

Further opportunities exist to follow in the formidable footsteps of world leaders Promega, Fibercore and Merck which have all chosen Southampton Science Park as the optimum place to design and construct their own prestigious UK bases. **Call 023 8076 3808 to find out more.**





## CATALYST

Demand for places on the Catalyst business accelerator programme was so high that opportunities for start-ups across the South to participate have been improved.

Catalyst is a unique opportunity for today's entrepreneurial spirits with early stage businesses – or an ingenious idea for one – to get the support they need to bring these to market and propel them towards becoming tomorrow's trailblazers.

On completion, participants will have created an investment-ready Business Plan, Management Team Plan and Funding Plan and benefited from high-level one-to-one mentoring and commercially focused weekly peer group workshops with world class business leaders. Importantly, no stake is taken by any party involved in Catalyst so that entrepreneurs retain all equity in their businesses.

Previously run on an annual basis, Catalyst will now be run three times a year, with programmes commencing in January, April and September. Valued at up to £15,000 for each participant, the scheme is fully funded for successful applicants.

"We have been working to find ways to increase capacity on Catalyst and to further enhance participants' experience and outcomes," commented Catalyst Founder and Science Park CEO, Peter Birkett. "Getting fledgling ideas to market quickly has never been more critical, so our aim with Catalyst 2019 is to fast-track compelling business concepts into high potential commercial operations by shortening and intensifying the programme and hosting three schemes annually."

Since launching the new scheme in February, the team behind the Science Park's spring Catalyst programme have been pouring over applications from entrepreneurs across the region. Some 150 applications were received for the new style programme; from these, 50 were judged to have the highest potential and were invited to attend introductory days in March.

Here, participants were able to network, learn from each other and gain insight from presenters including Angus Webb of Dynamon who shared his business journey to date. He spoke about how the Catalyst mentors had helped him, as a sole business founder, to navigate ways through the stressful elements of building his business from R&D and intellectual property protection through to securing investment, building a team and moving to market. He commented: "One thing that really helped was being here at the Science Park. Not only is the physical environment

adaptive to growing businesses' needs but everyone here is on a similar journey so you can learn from others while building relationships and credibility."

Subsequently, the budding entrepreneurs hoping to follow in Angus's footsteps were given 15 minutes to pitch their proposition and field questions from a judging panel. A vast range of ideas were presented over the two days spanning both consumer and business markets and covering everything from disability access to recruitment, foster care to kitesurfing, and wine to fashion.

### Getting fledgling ideas to market quickly has never been more critical

Peter Birkett was delighted with the interest in the programme, commenting: "Along with the rest of the panel, I was impressed by the huge variety of business propositions presented. Although we were not expecting perfect pitches, the quality of the presentations and the evident work that had gone into preparing them, was impressive. It has made choosing the final ten to advance onto the Catalyst programme a difficult process."

Phil Sharpe, Catalyst mentor and fellow panel member, summed up the journey ahead for the ten business founders who will join the programme this spring. "All business is an experiment. There are no guaranteed solutions – you simply have to work at it," he said.

# Accelerating good ideas

### Do you see the future differently?

Have you had a brainwave that you believe could be a genuine game changer for society? Perhaps you know someone with innovative ideas and heaps of ambition and energy – but little idea how to turn these into a successful commercial operation?

If you have an exciting business concept but need help to successfully bring it to market, harnessing the power of Catalyst, our proven business accelerator programme, could help you get there faster.

For your chance to attend the introductory days for the next programme, simply complete an online form. Places will be allocated based on the strength of the business case put forward in the application.

Visit [www.science-park.co.uk/grow/start-up/catalyst/fast-track-your-business-idea](http://www.science-park.co.uk/grow/start-up/catalyst/fast-track-your-business-idea) to find out more.



PARK IN FOCUS

Enter AXIS

AXIS is Southampton Science Park's new, inspirational conference and exhibitions centre. Designed with flexibility in mind, its three spaces are perfect for delegations of 20 to 200 people, depending on layout. Conveniently positioned at the heart of the Science Park, just minutes from the M27 and M3, AXIS is a place where connections are made, ideas gather pace and boundaries are surpassed!

For details call 023 8076 3805 or email [m.rooms@science-park.co.uk](mailto:m.rooms@science-park.co.uk)

AXIS

MEETINGS | CONFERENCES | EVENTS

AXIS

SOFOOD  
So good

 UNIVERSITY OF SOUTHAMPTON SCIENCE PARK

STREETFOOD THURSDAYS

• GREAT TASTING FOOD •

MEXICAN INDIAN

WEEKLY FROM 12.00 2 VENTURE RD

LIVEN UP YOUR LUNCH BREAK!!

 UNIVERSITY OF SOUTHAMPTON SCIENCE PARK

# Risk or Reward?

For many small to medium sized businesses, the idea of taking their products or services into new markets is, at best daunting and at worst, seemingly impossible. Can the potential reward outweigh the effort and risk?

Stop to think about exporting for a moment and myriad challenges present themselves. Issues such as translations and brand protection, deliveries, customs procedures and paperwork compliance, the impact of currency fluctuations, cross-border VAT and the availability of working capital amid varying terms and conditions, for example, may seem like significant barriers to global domination and, perhaps, a risk not worth taking.

Yet, not to consider selling overseas is the bigger risk. Not only will this throttle growth but, particularly in the innovation arena, it could impact a business's market resilience. The process of tailoring a product or service for a new market often creates a springboard for further innovation through access to different kinds of expertise, the generation of new applications and a wider understanding of market demands. In the longer term, non-exporting innovators will be left behind the curve.

According to Tech UK, the UK is well positioned to take leadership on the world stage; in particular in high value markets such as the US, the Gulf states and Australia. Already the European leader when it comes to e-commerce, m-commerce, software and IT services, British technology companies are growing nearly three times faster than the rest of the economy. The message is: the UK is good for tech and tech is good for the UK.



## World Class Support

A university city, major transport hub and with booming tech and life sciences industries, Southampton is regarded as an area of significant potential growth for the UK. This is why the Institute of Export and International Trade (IOT&E) hosted a World Trade Summit at the Science Park in February.

While the UK's withdrawal from the EU was still causing waves of business uncertainty at the time of the event, there was plenty of optimism amongst speakers and delegates about the significant opportunities for technology businesses willing to broaden their horizons beyond UK trade. Indeed, the overriding message was: exporting is easy – but only if you know how and who to go to for support and advice.

Lesley Batchelor OBE, Director General – Institute of Export and International Trade, supported the optimism around export opportunities espoused by her fellow speakers, but also warned that exporting is only great when you know how to do it properly. She spoke about how the Institute's training courses and customs pathway are helping exporters to prepare for Brexit and encouraged businesses to make the most of the opportunity by exploring the wide array of strategic support and regional funding available.

With the right guidance, exporting can not only be easy, but the turnkey to realising a company's true growth potential



## The World Stage

Representatives from three Science Park companies participated in an exporter case study panel discussion at the South Coast World Trade Summit. Extremely diverse businesses, each spoke of their successes and challenges in international trade.

- James Davenport, Head of Technology at TrackBack which operates in 16 languages across 23 countries, commented that his major export challenge was mitigating issues around data protection legislation. However, he recognised that the company's software services benefit from tariff-free trade.
- Sandra Sassow, Co-Founder and Director of SeaB Energy chooses export markets on the basis of evaluating ease of shipping and security. The company has opened production in three countries to better support national waste management regulations but noted that language-specific service support was an ongoing challenge.

Not to consider selling overseas is the bigger risk

- Mike Austin, CEO of Fresh Relevance, explained that with over 500 global clients, export revenue totalled 15% of his business and this is growing. New markets therefore underpin business growth but he specified the need for perseverance and good planning when starting to export, noting that market entry takes time.

Southampton Science Park's CEO, Peter Birkett, concluded: "There are many businesses here at the Science Park that are achieving significant growth through international trade. Equally, there are many here and across the region that have not yet embraced, or even explored, the potential to do so. This World Trade Summit signposted a way forward for these businesses, clearly demonstrating that, with the right guidance, exporting can not only be easy, but the turnkey to realising a company's true growth potential."



Considering exporting?  
Make [www.export.org.uk](http://www.export.org.uk)  
your first port of call.



Psychology student Sally explained her motivations for taking part. She said: "I feel that I have a certain amount of business acumen and entrepreneurial skills and I wanted to be able to prove that to myself and others. I learnt a lot in a small amount of time like the key components of business planning and I've really enjoyed hearing the stories of real entrepreneurs."

# ENTERPRISING STUDENTS

University of Southampton undergraduates recently took part in the Catalyst Challenge, a unique opportunity to develop core business skills in the entrepreneurial setting of the Science Park.



Sarah Rogers, Head of Student Enterprise, who organised the day said: "I cannot commend these students enough for applying to take part in the Catalyst Challenge. It's a unique, immersive learning experience because they're here at the Science Park surrounded by people who have themselves taken an entrepreneurial journey. The task that the students are set and the presentations they enjoy at both the training and challenge days enable them to look at key aspects of operating within a commercial setting with a different lens – it turns the academic theory into real-world practice. In offering this annual and prestigious opportunity to our students, the Science Park has a distinctive and extremely valuable place in our student enterprise ecosystem."



The 20 students were organised into five competing teams – Insiders, Peachy, Purple People, Yellow Submariners and Team Number One. They were given the challenge of working as the leadership team of a start-up business to complete a value proposition and prepare a presentation to a judging panel posing as potential investors and corporate customers. They had just three and a half hours to fulfil the brief.



## A unique, immersive learning experience here at the Science Park surrounded by people who have themselves taken an entrepreneurial journey

Alongside an introduction to entrepreneurship and a rare opportunity to garner commercial awareness, participants in the Catalyst Challenge use this opportunity to develop core enterprise skills including team-working, coping with time pressures, resilience presenting and negotiating.

Petar, studying business, commented: "Today really met my expectations in terms of understanding the start-up experience and the investment process. I will learn from this experience, particularly the mistakes made during the presentation." And astronomy student Jakub added: "Working in a diverse team was the biggest thing for me. Brainstorming, distilling ideas and articulating them effectively was important in our work today and I look forward to developing these skills."

The judging panel comprised of the Science Park's Peter Birkett, SETSquared's David Bream, Catalyst business mentor Phil Sharpe and entrepreneur Ruby Lee.

Entrepreneur Mark Applin of Signly joined the afternoon session to hear the team presentations and was impressed with what he heard. "The speed at which they wrapped their heads around the issues was incredible. They all gave well rounded presentations demonstrating a passion and ownership of their product and they fielded questions with confidence. You could employ all of these people, they'd all bring something to the table," he commented.

In choosing a winner the panel was looking for balanced, credible presentations, evidence of real market research, effective teamwork and the ability to see below the surface of the questions they were asked. None held back on asking some extremely tough questions around pricing models, risk management, revenues, marketing strategies, service delivery and future product

development. Speaking for the judges, Peter Birkett commented: "What's particularly impressive is that the students are studying hugely different subject areas so their range of expertise and experience is extremely varied. None of the students had met before their initial training day

## You could employ all of these people, they'd all bring something to the table

so they had to learn to work effectively together – and fast. All the participants were highly engaged and used the opportunity well. Their enthusiasm was infectious!"

Ultimately, Peachy claimed the highly commended position and the Yellow Submariners – Kaloyan Danovski, Petar Dimitrov, Sally Goillon and Jakub Orwat-Kapola – were named the winning team.

Kaloyan, studying computer science, said of the experience: "There are so many opportunities at the University and I want to diversify as much as possible. You can never get enough practice when it comes to interpersonal skills like teamwork and pitching and today has offered that. I had high expectations and the day delivered for sure. The environment we're in, the mentors we worked with and my fellow team mates were all fantastic!"



# Where should we draw the public/private line online?

Three visionaries debate the question of the day



## Pete Austin

Co-Founder,  
Fresh Relevance

“This is quite a topic. The Universal Declaration of Human Rights 1948 includes the right to privacy: “No one shall be subjected to arbitrary interference with his privacy... Everyone has the right to the protection of the law”.

But many online systems are simpler and cheaper if they allow privacy violations – for example social networks, targeted advertising and criminal investigations.

The internet started as de facto private, then lost its innocence in ten years: from ‘On The Internet, Nobody Knows You’re A Dog’ (Peter Steiner, The New Yorker, 1993) to ‘You Have Zero Privacy Anyway’ (Scott McNeilly, Sun Microsystems, 1999).

Right now, most of the internet is not private. Websites try hard to follow the rules and respect your privacy. But when you buy or consent, your data gets shared with hundreds of payment processors or programmatic advertisers which are big hacker targets – search for Equifax breach.

### It’s possible for companies to provide privacy but there’s little incentive

Some is fairly private. Email marketing for example, because spammers are under control. And some is very private, for example encrypted messaging.

It’s possible for companies to provide privacy but there’s little incentive. The GDPR is a total red herring because details are buried in thousand word privacy policies that would take 250 hours per year to read (University of Texas, 2014).

So what’s the answer?

I think we need legislation for a website traffic light system like food labelling. Green = your data is totally private here / Red = we pass your data to 100+ payment and advert processors.”



## Andy Dollin

Chief Operating Officer,  
Tonic Analytics

“The line can – and should be able to – move to accommodate specific legitimate objectives, but only within the parameters of remaining lawful, ethical and appropriate to the nature of the data and the reason for processing.

Until May 2018, like many SMEs, our main focus for compliance with the new GDPR legislation was limited to the personal data of our own employees and our normal business operations.

Everything changed when we were awarded Phase 2 of Galileo, a data insights programme for the National Police Chief’s Council and Highways England that aims to reduce crime and improve road safety.

Suddenly, at the very introduction of GRPR and the DPA 2018, we found ourselves with a flagship project requiring us to deliver new analytical insights – through acquiring and processing data, including personal and criminal offence data, for over 50 million vehicles and the associated behaviours of keepers and drivers – while remaining on the right side of new data protection laws. The situation was exacerbated when ICO advice confirmed us as the Data Controller rather than Data Processor.

We have successfully navigated this. On reflection, the pivotal moment was when, as a team including our public sector sponsors, we worked to identify an approach that would deliver results, yet comply with the essential elements needed to remain lawful. The result was that we designed the current phase of the project to be executed under ‘Research Exemption’.

This approach is requiring us to adhere to some very strict criteria as well as fully documenting the approach, demonstrating compliance with the exemption and setting out our risk management strategy within the Data Protection Impact Assessment. Most importantly however, the project is delivering on its objectives, while ensuring individual’s data is protected.”



## Laura Trapnell

Partner / Head of Intellectual Property and Information Technology,  
Paris Smith LLP

“What we all choose to share about ourselves online and what we don’t is a personal choice. Content is often posted in the belief that it is only shared with our friends or followers but without considering its subsequent dissemination, how long it is kept for and when, if ever, it is deleted securely. Neither do we ask whether our service provider is keeping our data safe and what organisational and technical measures they have put in place to ensure the security of our private information.

### In reality we are all aware of the risks of sharing personal data

In reality, we are all aware of the risks of sharing personal data but what we choose to share about ourselves online, is not governed by regulation. What is closely regulated is the care and guardianship of that data by third parties (GDPR & DPA 2018).

In contrast, what we post about third parties is regulated (Defamation Act 2013). When sharing data about third parties – friends, employees, customers, public figures or even strangers – we must all be mindful of our obligations under statute or we run a very real risk of breaching national and EU regulation. We are obliged to be able to identify a valid legal basis to share or otherwise ‘process’ others’ personal information; to have the rights of the individual in mind; and to ensure that we do not have a flagrant disregard for the truthfulness of our statements.

My motto is to always think before you act and this applies equally to corporate posts as well as private ones. I advocate some level of corporate governance around what is posted under a company’s name in the same way that I would hope that we have our own set of morals which govern what we post online in a personal capacity.”

## Sir Tim Berners-Lee is reportedly 'devastated' at what the worldwide web, his own creation, has become. Can he save the day?

The media is awash with stories trying to get to the bottom of fundamental questions of our time. Is the internet broken? If so, why and who is responsible? More importantly, what can be done about it?

As the internet marks its 30th birthday this year, it has also achieved another milestone. Half of the world's population (around 4 billion people) are now online. Something to celebrate perhaps but, with each of us feeding the internet with thousands of pieces of information, we are continuing to make it more powerful, more valuable – and potentially more dangerous – than ever. While half

the global population still can't get online, the web's benefits for the other half come with too many risks to our privacy, our democracy and our rights.

In an open letter posted on the [Worldwide Web Foundation \(webfoundation.org\)](http://WorldwideWebFoundation.org), Sir Tim Berners-Lee reflects on how the web has changed our world and what we must do to build a better web that serves all of humanity, acknowledging that it faces real challenges. Part of building this 'better web' is to share this vision so we are pleased to reproduce his letter here.

# #FORTHETHEWEB

## 30 years on, what's next #ForTheWeb?

Today, 30 years on from my original proposal for an information management system, half the world is online. It's a moment to celebrate how far we've come, but also an opportunity to reflect on how far we have yet to go.

The web has become a public square, a library, a doctor's office, a shop, a school, a design studio, an office, a cinema, a bank, and so much more. Of course with every new feature, every new website, the divide between those who are online and those who are not increases, making it all the more imperative to make the web available for everyone.

And while the web has created opportunity, given marginalised groups a voice, and made our daily lives easier, it has also created opportunity for scammers, given a voice to those who spread hatred, and made all kinds of crime easier to commit.

Against the backdrop of news stories about how the web is misused, it's understandable that many people feel afraid and unsure if the web is really a force for good. But given how much the web has changed in the past 30 years, it would be defeatist and unimaginative to assume that the web as we know it can't be changed for the better in the next 30. If we give up on building a better web now, then the web will not have failed us. We will have failed the web.

To tackle any problem, we must clearly outline and understand it. I broadly see three sources of dysfunction affecting today's web:

1. Deliberate, malicious intent, such as state-sponsored hacking and attacks, criminal behaviour, and online harassment.

2. System design that creates perverse incentives where user value is sacrificed, such as ad-based revenue models that commercially reward clickbait and the viral spread of misinformation.
3. Unintended negative consequences of benevolent design, such as the outraged and polarised tone and quality of online discourse.

While the first category is impossible to eradicate completely, we can create both laws and code to minimize this behaviour, just as we have always done offline. The second category requires us to redesign systems in a way that change incentives. And the final category calls for research to understand existing systems and model possible new ones or tweak those we already have.

You can't just blame one government, one social network or the human spirit. Simplistic narratives risk exhausting our energy as we chase the symptoms of these problems instead of focusing on their root causes. To get this right, we will need to come together as a global web community.

At pivotal moments, generations before us have stepped up to work together for a better future. With the Universal Declaration of Human Rights, diverse groups of people have been able to agree on essential principles. With the Law of Sea and the Outer Space Treaty, we have preserved new frontiers for the common good. Now too, as the web reshapes our world, we have a responsibility to make sure it is recognised as a human right and built for the public good. This is why the Web Foundation is working with governments, companies and citizens to build a new Contract for the Web.

This contract was launched in Lisbon at Web Summit, bringing together a group of people who agree we need to establish clear norms, laws and standards that underpin the web. Those who support it endorse its starting principles and together are working out the specific commitments in each area. No one group should do this alone, and all input will be appreciated. Governments, companies and citizens are all contributing, and we aim to have a result later this year.

Governments must translate laws and regulations for the digital age. They must ensure markets remain competitive, innovative and open. And they have a responsibility to protect people's rights and freedoms online. We need open web champions within government — civil servants and elected officials who will take action when private sector interests threaten the public good and who will stand up to protect the open web.

Companies must do more to ensure their pursuit of short-term profit is not at the expense of human rights, democracy, scientific fact or public safety. Platforms and products must be designed with privacy, diversity and security in mind. This year,

we've seen a number of tech employees stand up and demand better business practices. We need to encourage that spirit.

And most important of all, citizens must hold companies and governments accountable for the commitments they make, and demand that both respect the web as a global community with citizens at its heart. If we don't elect politicians who defend a free and open web, if we don't do our part to foster constructive healthy conversations online, if we continue to click consent without demanding our data rights be respected, we walk away from our responsibility to put these issues on the priority agenda of our governments.

The fight for the web is one of the most important causes of our time. Today, half of the world is online. It is more urgent than ever to ensure the

other half are not left behind offline, and that everyone contributes to a web that drives equality, opportunity and creativity.

The Contract for the Web must not be a list of quick fixes but a process that signals a shift in how we understand our relationship with our online community. It must be clear enough to act as a guiding star for the way forward but flexible enough to adapt to the rapid pace of change in technology. It's our journey from digital adolescence to a more mature, responsible and inclusive future.

The web is for everyone and collectively we hold the power to change it. It won't be easy. But if we dream a little and work a lot, we can get the web we want.

Sir Tim

The fight for the web is one of the most important causes of our time.



There are many ways that companies and citizens can help create the web we want:

- Support the Web Foundation with a donation.
- Spread the word on social media and share this letter with **#Web30 #ForTheWeb**.
- Contribute to our crowdsourced Twitter timeline of the web's important moments.
- Add your voice to our Contract for the Web.

Find links at [webfoundation.org](http://webfoundation.org)

# SUMMER IN THE SOUTH

Each year 52 million people visit Hampshire for a day out. A further 4.5 million stay for a while.

With historic and vibrant, multicultural cities, five national parks, wide-ranging sports and culture a-plenty, it's easy to see why Hampshire's 1400 square miles are such an attraction for visitors and residents alike.

If you're thinking about getting out and about over the next few months, here are some key events not to be missed. Visit [www.visit-hampshire.co.uk](http://www.visit-hampshire.co.uk) for details.



**1 BRICKOSAURS!**  
Marwell Zoo – Winchester  
Until 1 September

Marwell Zoo is the first attraction in the world to host a collection of giant LEGO brick dinosaurs. The interactive exhibition, featuring 50 life-sized sculptures created using more than two million bricks, is sure to excite families, LEGO and dinosaur enthusiasts alike – but be prepared for a few surprises! A highlight includes the largest touring brick dinosaur model ever made – a whopping eight metre T-Rex.

**JUNE**  
**2 ICC Cricket World Cup**  
Hampshire Bowl – Southampton  
5-24 June

The ICC Cricket World Cup returns to Hampshire for the first time in 20 years with five fixtures announced. Matches will see England, South Africa, India, West Indies, Bangladesh and Afghanistan all compete at Hampshire's stunning home of cricket.

**3 Kitesurfing Armada Festival**  
Sea Front – Hayling Island  
21-23 June

Whether you want to be on the water all day or just chill out with a beer, this event promises something for everyone. The annual Kitesurfing Armada brings the everyone together for a fantastic weekend of kiting, music, fundraising and record breaking (to date participants have broken five Guinness World Records and raised over £160,000 for charity).

**4 Jane Austen Regency Week**  
Charlton and Alton  
22-30 June

Celebrating the internationally-acclaimed writer as well as a very interesting period in history, this nine day festival welcomes Jane Austen devotees from far and wide to see this picturesque corner of Hampshire and the most treasured Austen site in the world. It was here that Jane's genius flourished and where she wrote, revised and had published all her major works. Events include Alton Regency Day, a regency ball, talks, music, walks, tours and more.

**JULY**  
**5 Hampshire Food Fair**  
Countywide  
1-30 July

Wander through vines, explore lavender fields, tour breweries and get hands-on in the kitchen during this award-winning month-long food festival which is now in its 19th year. With over 60 events taking place at farms, pubs, hotels and restaurants across Hampshire, it is a chance to explore what goes on behind the scenes to grow, rear and serve some of the county's tastiest produce.

**6 Hat Fair**  
City Centre – Winchester  
5-7 July

The UK's longest continually running festival of Outdoor Arts, the Hat Fair inspires and is inspired by the people, heritage and public spaces within the city of Winchester. Over three days of entertainment, theatre, dance and circus events, the event shines a light on the city, transforming the everyday into the extraordinary. It's named after the tradition of an audience showing its appreciation by putting money in a hat following a performance.



**7 Mela Festival**  
Hoglands Park – Southampton  
13 July

Southampton's biggest free family festival is back and set to fill the city centre with music, dance and family activities from around the world. Enjoy an assortment of music and dance styles from South Asia and around the world, including Indian classical, Bollywood, folk, qawwali, Asian fusion and flamenco, plus great activities for the family, international food and market stalls and a friendly atmosphere.

**AUGUST**  
**8 New Forest & Hampshire County Show**  
Brockenhurst  
30 July – 1 August

Across 30 acres of showground in the heart of the New Forest National Park this county show features an exciting timetable of main ring attractions and local producers. As well as animals there's countryside traditions and demonstrations, international show jumping, crafts, antiques, art, displays, show gardens, flowers, vegetables, a huge variety of local produce and over 600 trade stands.

**9 Boomtown**  
The Matterley Estate – Alresford  
7-11 August

Boomtown fuses a diverse line-up of underground and global music with boundary pushing immersive art, theatre and performance coming together as a living, breathing, fictitious city. Boomtown's 14 districts follows a storyline that evolves each year to create a world within a world. A theatrically-led experience like no other, the event's hundreds of actors bring the film-like street sets to life where attendees become part of the story themselves.

**10 British Touring Car Championship –**  
Thruxton Circuit – Andover  
17-18 August

Fast, close and full of action, the British Touring Car Championship is the UK's most illustrious championship. Since its inception in 1958 it has captivated millions of fans around the world with independent teams competing alongside manufacturer-backed teams. See the stars of BTCC race wheel-to-wheel on the fastest circuit in the UK.



# ON THE PARK

What's going on around Southampton Science Park?

## Fertility treatment



VivoPlex Group has closed its Series A fundraising round at £3 million – funds that will be used in the clinical development of the

company's intra-uterine monitoring product, CE marking and development of a finalised production-ready device. The product is expected to enter a clinical feasibility study (supported by the UK NIHR's i4i Programme in a joint project with the University of Southampton) later this year.

VivoPlex is a leader in real time and accurate intra-uterine monitoring for the optimisation of fertility treatment and uterine health – transforming fertility through precision medicine. Its product is in development as the first insertable wireless device for the measurement of key uterine parameters – oxygen concentration, pH and temperature – in vivo. Better understanding of these levels in humans in real time and over the long term should enable improvement of the success rate of fertility treatment, currently 25-30%.



and clinical expertise, combined with their global networks of key opinion leaders, will contribute significantly to VivoPlex's progress. I'd like to welcome the five members of the Scientific Advisory Board and thank them for their commitment to the company."

Led by Professor Macklon, Medical Director of the London Women's Clinic and Professor of Obstetrics and Gynaecology at the University of Copenhagen, the international board comprises fertility and embryology experts based in Auckland, London, Melbourne and San Francisco. [vivoplex.com](http://vivoplex.com)



The company has also appointed Joanna Smart as CEO (formerly COO) and established an international Scientific Advisory Board.

Ms Smart, commented: "The Scientific Advisory Board will be an invaluable resource for us as our intra-uterine sensor moves through the next stages of clinical and product development. Their scientific

## New club

The gym at The Club at Chilworth Manor is relaunching on 3rd June with a complete new range of Matrix Gym Equipment. Science Park tenants benefit from discounted membership rates and the team there is on hand to offer support and advice as well as personal training programmes for those looking to get fit for summer.

Call in or call 023 8076 3022 for more details.



## Road safety



Tonic Analytics has completed phase two of Galileo, a major project jointly sponsored by Highways England and the National Police Chief's Council. Galileo aims to reduce road-related fatalities, injuries and crime while also reducing incident-related disruption on the road network through better use of data and analytics.

Phase one of the programme focused on understanding the landscape and identifying priorities, while phase two involved building an extensive Digital Twin data model which essentially

recreates events in the real world in a parallel virtual world of data.

Obtaining data for the Digital Twin required collaboration with multiple stakeholders across the public and private sectors as well as from open sources. It now incorporates blended data for over 50 million vehicles and detailed behavioural insights relating to vehicle keepers and drivers. In addition, over 1 billion records of traffic flow and speed on the road network have been blended with records of more than 9 million incidents as well as weather and temporal data.

Chief Operating Officer, Andy Dollin, commented: "It is believed that this is the most extensive data

model of its type, necessitating close engagement with the Information Commissioner's Office to ensure its lawful and ethical processing. A key outcome for us has been seeing the ease with which our red.thread technology and methods have again been transitioned from its aerospace applications to a completely new sector.

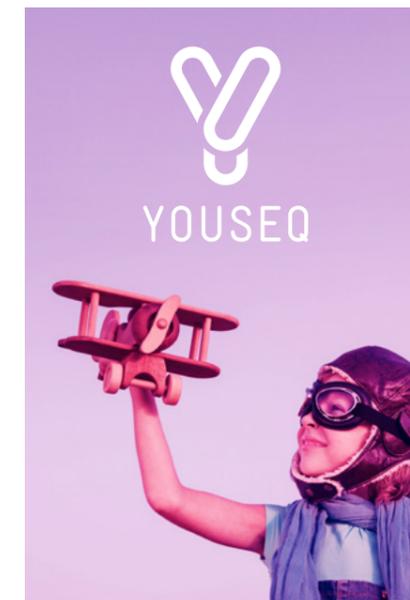
Galileo now moves into its third phase which will see the Digital Twin used in several pilots though to October 2020. These will demonstrate the potential for advanced analytics to enable real world outcomes against the programmes' safety and crime objectives, while also underpinning a business case for full scale implementation. [tonicanalytics.com](http://tonicanalytics.com)

## DNA sequencing

YouSeq has won a substantial contract to develop and supply its unique next generation DNA sequencing laboratory kits to a major private diagnostic company in the United States.

Although only incorporated in October, the Catalyst graduate company is attracting global attention for its next generation sequencing (NGS) technique. Whilst it has many uses, NGS is regarded as the key to driving breakthroughs in cancer treatment.

Cancer is caused by a mutation of DNA in a particular patient. NGS enables laboratories to 'read' someone's DNA, find the mutation and indicate which treatment will offer that particular patient the best chance of survival with the least side effects. YouSeq's cutting edge approach is making it easier and faster to read DNA than ever before. [youseq.com](http://youseq.com)



## New to Southampton Science Park



UniqTechnology offers a wide range of IT support to companies large and small. Dell and Microsoft partners, the company provides support for cloud, mobile and network solutions. [uniqt.co.uk](http://uniqt.co.uk)



Science Park company and Catalyst programme graduate Optomel has announced a joint business development and technology partnership with San Francisco based Artemis Optical.



Optomel has developed a breakthrough technology which gives customers precise, customisable optical filters at a price and scale which empowers new applications and markets in photonics. Not only does the technology offer interesting pricing opportunities it also offers new solutions to existing challenges in the LED, augmented reality and head-up display markets, particularly to medical, automotive and aerospace businesses.

Founder Dr Damian Gardiner commented that he was thrilled and optimistic about the opportunities that the partnership offered, commenting: "It is clear to me that with this technology breakthrough and with Artemis Optical's experience, we will be able to offer a truly game changing solution to the market."

Artemis Optical has an established reputation in providing LED display solutions such as the innovative BAE Systems LiteHUD. It is also a world leader in the design and manufacture of other precision optical coatings, including laser protection, in the aerospace, defence, medical and industrial markets.

Its CEO Nick Hurst said: "We are delighted to have teamed up with Optomel who have come up with an innovative solution to a problem that has been challenging the market for optical filters and displays for some time now." [optomel.com](http://optomel.com)

## Spin-outs

Two Southampton Science Park companies have cemented their success to date with the formation of spin-out companies.



The team behind iMeta – an award winning company which provides on-boarding and client lifecycle management software and services to investment banks and financial services firms – has cemented its success with an equally successful spin-out, Mi-Voice.

Mi-Voice provides e-voting software, electoral services and ballot services to facilitate greater engagement and consultation between an organisation and its stakeholders for elections, referendums and surveys. Designed for universities, professional bodies, student unions, charities, local authorities, housing associations, the NHS and corporate sectors, the aim is to facilitate greater engagement in democratic events whilst delivering tangible cost savings through the use of technology. [imeta.com/mi-voice.com](http://imeta.com/mi-voice.com)

Meanwhile the founders of ITDev – a provider of software and electronic engineering design services across multiple markets from broadcast and telecoms to aerospace and oil and gas – has created Mantella.

Mantella offers bespoke engineering consultancy services aimed at improving the competitiveness of companies engaged in high-tech product design through enabling engineering excellence. It does so by optimising electronics and software development, implementing policies, processes and procedures matched to the culture, strengths and challenges of individual clients. [mantella.co.uk/itdev.co.uk](http://mantella.co.uk/itdev.co.uk)

## Cryptocurrency and cyber crime



Over 200 representatives from law enforcement agencies, government and academia met for a cryptocurrency masterclass at Southampton Science Park's Axis Conference Centre to launch a partnership between the University of Southampton's Cyber Security Academy and the South East Regional Organised Crime Unit (SEROCU). SEROCU is a police unit delivering a cohesive regional response to serious organised crime within the boundaries of Hampshire Constabulary, Thames Valley Police, Surrey Police and Sussex Police.

Virtual currencies are being used in increasing quantities on domains such as the dark web, requiring new approaches and legislation to be enacted by police authorities. The cryptocurrency masterclass drew upon best practice and expertise from a range of speakers to prepare attendees for this new challenge.

Professor Vladimiro Sassone, Director of the Cyber Security Academy, said: "It is important that academia and law enforcement agencies come together to apply the latest outcomes from the UK's research and innovation. I am delighted to have formally launched this partnership with SEROCU which I hope will make a difference in police's increasingly challenging and complex criminal investigations in this arena." [csa.southampton.ac.uk](http://csa.southampton.ac.uk)



The launch of the Test Valley Business Awards

## Test Valley awards

Following a record-breaking 2018, the Test Valley Business Awards is back for a 15th year, following a launch at Southampton Science Park.

The annual awards scheme is well established as the platform for businesses in the area, especially new and smaller enterprises, to gain the recognition they need to grow while celebrating their achievements to date.

One category that draws a great deal of attention is the Innovation & Technology Award. Open to any business which is achieving business success through the innovative application of new ideas, technology or practices, Southampton Science Park is pleased to be Gold Sponsor of this category once more.

A gala dinner will be held in September when winners will be announced. [tvbawards.org.uk](http://tvbawards.org.uk)

## Medical devices

The IGES Institute has acquired majority shares in Science Park company Device Access to support the growing global medical devices market.

Founded in 2010, Device Access works collaboratively with various NHS and UK Government bodies including the National Institute for Health and Care Excellence (NICE), The National Institute for Health Research, and The UK Department of International Trade in bringing new and innovative medical technologies to benefit patients faster. The company has a large client base of US, European and British medical device developers and a successful track record of navigating and supporting its clients into the NHS. It recently announced that it had successfully helped clients through 30 NICE Medical Technology appraisals.

Michael Branagan-Harris, Founder and CEO, will continue in his role and will additionally lead IGES's UK business activities as Country Manager, working to bring the two markets closer together. He commented: "Device Access and the IGES Group unite extensive knowledge of approval, market launch and reimbursement of medical devices, and their cultures fit outstandingly. The deal strengthens our respective market positions and builds the potential for our growth in the European markets."

With this majority acquisition, the IGES Group continues its European expansion, servicing the growing global medical devices market in which Germany and the UK constitute core markets.



## Sign language

Lloyds Bank has become the first financial services company to trial Signly, innovative British Sign Language (BSL) translation technology devised by Catalyst programme entrepreneur Mark Applin.

Signly enables customers to scan Signly-enabled literature on their smartphone which provides translations into BSL through augmented reality. This is important because masses of essential content is not independently accessible for the 250,000 people in the UK that use some sign language in their daily life. Simply writing things down isn't enough because of low literacy rates among the deaf community. Furthermore, BSL is its own language, constructed in a unique way.

The Lloyds Bank trial incorporated Signly's functionality into both written and online material, enabling hard of hearing and deaf customers to use BSL to understand the financial material they were being shown.

Nick Williams, Lloyds Bank's Consumer Digital director said: "We are always looking for new ways to support our customers and trialling this new technology is a great example. Signly provides a new tool to make it easier to engage with the Bank. Improving our services to make them simple and intuitive for all our customers is key to removing barriers of financial exclusion." [signly.co](http://signly.co)



IGES Director, Professor Bertram Häussler, said: "The UK is an important country for the development and application of medical devices. Furthermore, it has traditionally been seen as a European beach-head for global companies to launch into Europe. The aim of this acquisition is to strengthen these connections and make them usable for all our international clients." [deviceaccess.co.uk/iges.com/international](http://deviceaccess.co.uk/iges.com/international)



Credit: Dr Alex Dickinson, Faculty of Engineering & the Environment, University of Southampton

## Musculoskeletal health

Southampton Science Park was pleased to welcome academics, clinicians, researchers and those working in musculoskeletal health together for the fourth annual FortisNet conference in January.

Launched in 2015, FortisNet is a unique, collaborative, interdisciplinary network working to develop products and solutions for stronger, healthier bodies. The network brings together a wide range of stakeholders with different insights and skills but all with a passion to make a difference in the management of musculoskeletal health: a growing global health challenge as a result of increased life longevity.

Professor Jo Adams, FortisNet Director, said: "We believe that strength lies in effective collaboration. Such is the interest and demand for solutions in regenerative medicine, orthopaedics, prosthetics and assistive technologies that FortisNet has grown steadily since its inception to become a world class partnership and an energetic community which spans the academic and commercial spectrum."

If you share the network's collegiate, interdisciplinary vision and want to help shape the future of musculoskeletal research FortisNet welcomes new members.

[southampton.ac.uk/ifls/research/ifls/lifetechnologies/fortisnet.page](http://southampton.ac.uk/ifls/research/ifls/lifetechnologies/fortisnet.page)

## Gas distribution

Following a major contract award in 2018, Utonomy has begun live trials of its innovative gas network optimisation technology with SGN, which distributes gas to nearly 6 million households in the UK.

SGN's Innovation Project Manager Mark Skerritt commented: "We are delighted to announce our collaboration with Utonomy on this exciting project. The aim is to provide the UK gas network with a new and unique pressure control and management system that is not only more efficient than existing systems but also enables network operators to confidently exercise 'real time' control over their governor assets."

The benefits of real-time pressure management and grid monitoring across the gas distribution networks are significant in terms of reducing environmental impacts, lowering operating costs and increasing efficiency.

Utonomy's technologies help gas network operators achieve their decarbonisation, digitalisation and decentralisation goals quickly and with minimum disruption because its intelligent sensors and cloud-based monitoring systems are easily retrofit-able to existing network infrastructure.

The news comes as Utonomy announced that it had been awarded a prestigious Southampton Business Award 2019 in recognition of its significant contribution to both the community at large and to Southampton business.

[utonomy.co.uk](http://utonomy.co.uk)



He continued: "For many employers, 2019 could also mean re-enrolment since they must re-enroll employees into a qualifying pension plan roughly every three years. As with automatic enrolment, there are statutory communication requirements and a minimum level of information that must be sent to employees. This may be a suitable opportunity to review pension provision as a whole."

One Pension Consultancy LLP offers guidance to employers on this, and, with a recently expanded corporate benefits department too, all aspects of employee benefits including Group Life Assurance, Income Protection Insurance (long term sickness cover), Private Medical Insurance, Critical Illness and investment advice on a range of products on an individual basis.

[onepc.co.uk](http://onepc.co.uk)



# The Pressure Seeker

**Robin Bell**

is Chief Operating  
Officer of Inflowmatix.

Founded in 2015 as a spin

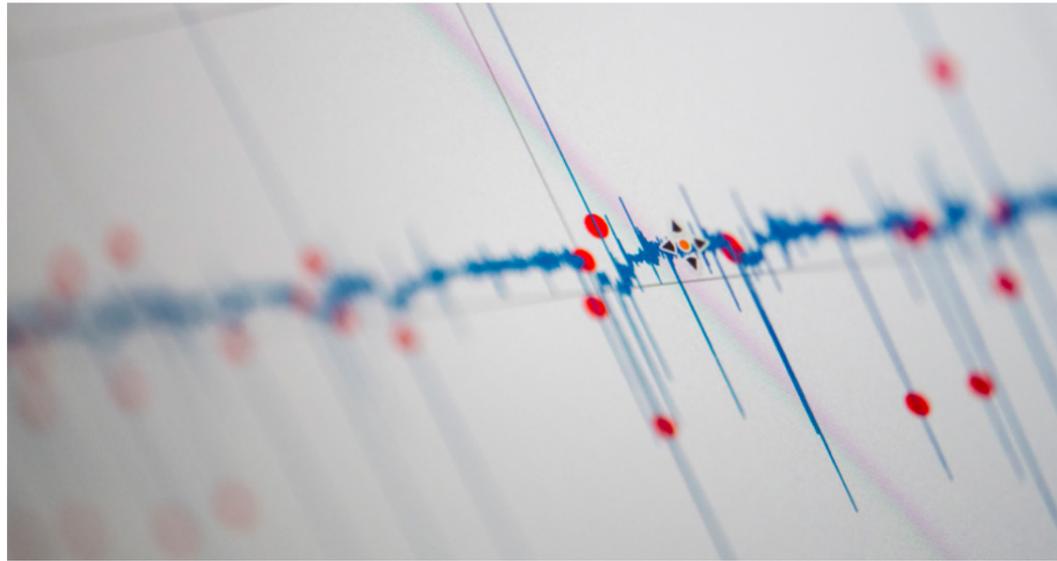
out from Imperial College London,

Inflowmatix has built on cutting edge research

to develop patented technology that specifically

addresses the ever-increasing challenges that the water

sector faces. Here, he tells us more •



**Robin, tell us about the problem that Inflowmatix is working to resolve.** Water network leakage is an endemic problem across the world. It costs operators within the water industry a great deal of time and money to resolve, it impacts customer service delivery and it interrupts the availability of clean, safe water. As two thirds of the world's population faces water scarcity for at least one month each year, boosting resilience across the sector through tackling this significant leakage problem is incredibly important. Water is the world's most precious resource and we are wasting it.

**The water sector in the UK has never been under greater scrutiny from policy makers and regulators. Is this happening globally?** Yes, the UK regulator Ofwat has embarked on a big push for innovation and improved service delivery, holding water retailers and wholesalers to account like never before. The rest of the world is certainly waking up to the same needs and this drives us and other suppliers to find innovative solutions.

**It's a big social and political issue wherever you are**

In the UK, 21% of our treated water is wasted as it does not reach the end consumer, thus demonstrating the level of network leakage. In Bulgaria this figure rises to 60% and there are countless other examples across the world... it's a big social and political issue wherever you are.

**How does your technology work and how does it differ from other solutions on the market?** Inflowmatix has created precision technology that helps operators control and calm water network pressures and optimise their services to keep customers supplied. We provide detailed insights into the network's behaviour – including events such as pressure surges, unusual usage patterns, negative pressures and asset misbehaviours – mapping these risks and giving infrastructure owners the opportunity to take corrective or pre-emptive action to implement pressure calming control strategies.

Our joined-up approach starts with high-speed, low-cost hydraulic pressure monitoring devices that can be deployed on existing network infrastructure in minutes. Using data sensed and edge-analysed from these sensors, we then use sophisticated mathematical, statistical and machine learning algorithms to characterise the network and provide customer insight via our cloud-based platforms.

Various competitors offer hardware solutions that can do elements of this but, for us, it's less about the hardware and more about the analytical insights which give our customers the opportunity to intervene and create long-lasting impacts of change. We're addressing the 'data rich / information poor' conundrum by providing tangible value.



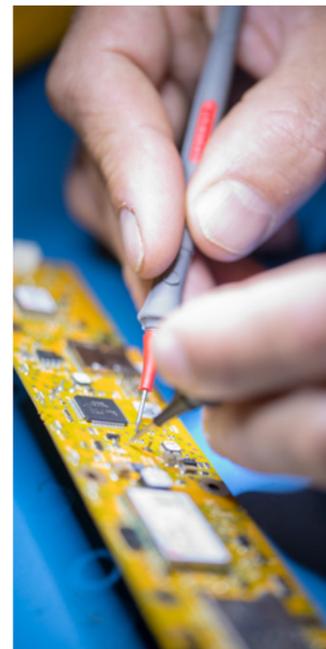
There are products on the market that measure and report pressures at 15 minute intervals whereas ours does so 128 times per second. It's these very high frequency measurements and unparalleled accuracy combined with our unique analytics that, for example, help us identify pressure spikes – signatures of something going on in the network – and drill down to the particular asset that is most likely to be the cause of the problem. Resolving these issues helps achieve a calmer network and can significantly extend asset life.

**As a start-up, it's tempting to grow too quickly**

Another key differentiator is cost. We've worked really hard to deliver a solution that's not only versatile and easy to deploy but also cost-effective. It's affordable at the outset with a relatively short payback time and longevity of service.

**Where is Inflowmatix technology in use?** In the UK, Western and Eastern Europe, South and North America and Australia. We're currently engaged in a large project working with Cla-Val and Suez in Italy and another major roll-out in the UK will be announced soon.

Importantly, the results so far have been impressive. In a one month trial with Severn Trent Water in the UK, we helped them achieve a 70% reduction in pipe burst rate, equating to a saving of £60,000 per annum in repair costs. They now have in excess of 200 Inflowmatix devices and have been using them on a daily basis for two years to proactively address issues on their network.



**As a start-up, getting a foot in the door of corporate customers can be extremely difficult; yet you're working with some huge household names. What challenges do you face and how do you overcome these?** It's true. I think the key challenges are around applicability, credibility and scalability.

Firstly, our technology is applicable, relevant and timely for customers who face real problems with significant impacts if they are not addressed. Water mis-management is not only an operational, but also a political and societal issue.

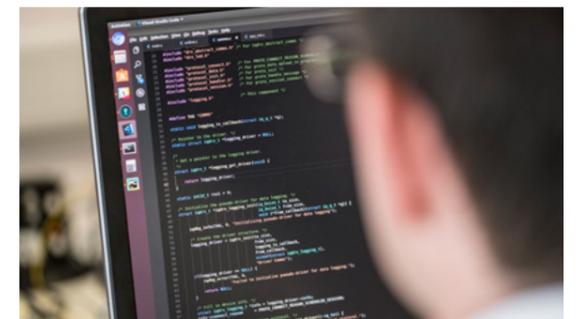
Secondly, our ongoing links to Imperial College and the wealth of research that has fed into both our company and our intellectual property are critical in cementing our credibility with potential customers. We only have so many customers to approach (23 in the UK, for example) and it takes time to build a relationship and move to large scale deployment.

Finally, in terms of scalability, customers must be able to see how the solution can be installed and scaled effectively. Our agile approach to the market, starting with Minimum Viable Product methodologies, along with our starter kit concept, has helped us to achieve early engagement with customers. Deploying four or five devices in each district metered area in the UK can give incredible insights, thus enabling customers to get up and running quickly: seeing the benefits for themselves before rollout is imperative.

**It's clearly working as you have grown to 25 staff in under 4 years. How have you managed this significant and fast-paced growth internally?** Flexibility is key here. We've adapted our roles according to the changing demands of the business.

As a start-up, it's tempting to grow too quickly but, our wide experience has taught us to be very selective in building our team, mindful of getting the right skills on board. We work with a limited number of recruitment partners and online platforms. It's a strategy that's working – we have team members around the world with very little permanent staff turnover and we use contract staff when we need them.

Our agile development processes are a core feature of how we work. For example, we define 'sprints' with clear goals and have daily 'scrums' to drive progress with 'show and tells' and 'retrospectives' at the end of sprints. This helps us keep the team engaged wherever the work is being done and provides constant feedback for process and people improvement.



Why did you choose the South coast as a base for the business? Despite our roots at Imperial College, we never intended to locate in London. Neither do we need to, as our links to Imperial via founder Ivan Stoianov are so strong. London is not only very expensive for start-ups but we also knew that recruiting high quality engineers would be a problem: the South has a very rich seam of engineering talent. We've since partnered with a local manufacturer, Season Electronics in Havant, and proximity to them is important to us too.



Both our CEO Mike and I live locally and had prior knowledge of Southampton Science Park. We viewed several options but, although rents are a little higher here, the facilities and support offer so much more than if we were in the middle of nowhere. It's proved to be a good decision. Our base here at the Science Park provides us with both office and laboratory space and, with varying levels of staff in the office at any one time, we have the flexibility we need.



How will you capitalise on your success to date? Last year we tripled our revenue from the previous year. We're looking to do the same again this year through broadening our worldwide customer engagement and scaling with our UK customers. It's an achievable goal. Ultimately, we want to be known as the solution of choice for providing unprecedented insights into water networks for water utility businesses around the world.

Robin, reflecting on your career to date, what advice would you give to other entrepreneurs? At SPI Lasers, we took a small business to a turnover of \$50m in just short of a decade so I've been through the growth journey previously. Most of all, it's important to keep your feet firmly on the floor. It's easy to expand too quickly and run out of money faster than planned so careful spending is critical balanced against aggressive objectives.

Also, be flexible and agile. Mike and I both know that we can't do everything alone so we recognise the need to team up with strategic partners, to recruit high calibre individuals, and to modify our own roles to meet the needs of the business as they change.

In this way, we achieve what we set out to do.

The facilities and support here offer so much more than if we were in the middle of nowhere



# Geoengineering

## What is it and why is it important?

There is widespread consensus amongst the global scientific community that human activities have pushed global warming to unsustainably high levels and that major intervention is now required to avoid catastrophic impacts that could see entire ecosystems wiped out.

Geoengineering has been put forward as one potential solution to this problem. Geoengineering – or climate engineering – is an umbrella term being used to describe various approaches to a deliberate large-scale intervention in the Earth's natural systems to moderate and/or counteract climate change.

## How can it be applied?

Geoengineering initiatives fall into two categories:

- **Greenhouse Gas Removal (GGR) or Carbon Geoengineering:** this aims to remove carbon dioxide or other greenhouse gases from the atmosphere. Whilst there have long been projects geared towards reducing greenhouse gases, this takes the idea one step further by actually capturing and removing harmful gases already present. Ideas put forward include ocean fertilisation, afforestation, and using biomass techniques to capture, concentrate and permanently store carbon in deep geological formations.
- **Solar Radiation Management (SRM) or Solar Geoengineering:** this approach seeks to reduce the amount of sunlight that the earth absorbs by deflecting it away from the Earth and back into space, or by increasing the reflectivity of the atmosphere or the Earth's surface. Ideas put forward include brightening marine clouds using seawater, deploying huge solar mirrors and injecting sulfate particles into the atmosphere to mimic volcanic activity.

## Questions about around the ethics of geoengineering and the enviro-socio-political consequences

### Where will it go from here?

Unsurprisingly when it comes to global warming, it's a hot topic. Whilst greenhouse gas removal is seen as the least risky option, it could be a long time before the effects are felt in a meaningful way. Solar radiation management on the other hand is currently theoretical, entirely untested and hence potentially dangerous but, if technologies are proven and adopted, it could realise greater benefits, significantly faster and inexpensively.

However, taking decisions about which route to go down are a long way away given the overriding controversy around the whole concept of manipulating the planet more than we have already. Questions about around the ethics of geoengineering and the enviro-socio-political consequences. Who, for example, decides what research should take place, who pays for it, who benefits from it and who does not? How can we ensure that research is conducted transparently and results shared openly for the good of all? What happens if the technology fails and we unwittingly increase the occurrences of droughts, flooding and associated food shortages?

Many more argue that any kind of geoengineering is a potentially damaging policy approach which could only ever be a partial solution and one which will distract us all from the task of implementing the scientifically proven need to deal with the root cause of the issue and simply cut greenhouse gas emissions.

# THE BUCK STOPS HERE

The science is clear on climate change.  
Now all businesses have to step up.

“The science is clear: If we don’t act now, the world will surpass 3°C as early as 2100, with devastating consequences.”

World Business Council for Sustainable Development

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) – the United Nations body for assessing the science related to climate change – boldly delivered some bad news.

At its current trajectory, our atmosphere is expected to warm up by 1.5°C by 2040 and this, it says, is the greatest threat to civilisation in thousands of years. What’s more, our transition to a zero-carbon economy is not even close to where it needs to be if we are to change course. Given that the IPCC’s report was compiled by over 90 global experts referencing over 6000 sources over two years, it’s almost certainly time to sit up and take notice.

#### The Tipping Point

Until recently, 2°C has been the magic number; the level of global warming which must not be surpassed if humanity does not want to risk long-lasting or irreversible changes such as the loss of some ecosystems. However the opportunity to achieve this has already diminished. Global industrial emissions of carbon dioxide were predicted to have risen by 2.7% in 2018, marking a second year of undesirable growth and reaching an all-time high.

It is perhaps no coincidence that extreme weather is costing thousands of lost lives and billions of dollars annually with flooding, storms and drought in Asia and South Africa coupled with raging fires and hurricanes in the US, Canada, Greece and Sweden and drought and cyclones affecting Central Africa.

The magic number above which we must not go has now been reduced to 1.5°C by the IPCC. With clear benefits to people and natural ecosystems, limiting global warming to 1.5°C compared to 2°C could go hand in hand with ensuring a more sustainable and equitable society, it says.

Although environmental causes and effects remain hotly contested and percentage points analysed and re-analysed, the bottom line is that every point of a percent matters and, whichever way you look at it, we are probably already past the tipping point. Global infrastructure is ill prepared for increasingly extreme weather, highlighting an urgent need to find low carbon and climate adaptation solutions to boost resilience in the short term – and reduce risks ongoing.

#### The Business Case

Making the case for investing in sustainability at Board level has never been easy; the perception being that greening a business comes at the expense of profits. However, a YouGov survey of corporates in July 2018 signalled a significant shift. The research found that 65% of respondents chose environmental challenges as one of the biggest trends affecting business growth in the next five years, second only to technological change and ahead of economic policy.

The Carbon Disclosure Project’s global director of corporations and supply chains, Dexter Galvin, commented at the time that these survey responses served as remarkable evidence that a tipping point in the shift to a green economy was on the horizon. He said: “Companies are increasingly aware of the risks of dangerous climate change and the business opportunities in taking action. This study shows that companies putting science at the heart of their environmental ambitions are already feeling the benefits.”

For businesses with increasingly complex supply chains that span the globe, taking on the challenge to decarbonise the global economy could certainly pay dividends. Holding warming to below 1.5°C will mean a workforce less exposed to extreme weather disruption, supply chains less at risk and a global economy that is more resilient.

The key to addressing this? Science and business working hand-in-hand.

Companies putting science at the heart of their environmental ambitions are already feeling the benefits

Innovating on climate and looking for funding? Tech incubator Y Combinator, famous for kick-starting companies like AirBnB and DropBox, is now pouring millions of dollars into funding and challenging innovators on climate change. It says:

“Phase 1 of climate change is reversible by reducing emissions, but we are no longer in Phase 1. We’re now in Phase 2 and stopping climate change requires both emission reduction and removing CO<sub>2</sub> from the atmosphere. Phase 2 is occurring faster and hotter than we thought. If we don’t act soon, we’ll end up in Phase 3 and be too late for both of these strategies to work.

It’s time to invest and avidly pursue a new wave of technological solutions to this problem – including those that are risky, unproven, even unlikely to work. It’s time to take big swings at this. As a start in this direction, we are going to present four categories [ocean phytoplankton, electro-geo chemistry, cell-free systems and desert flooding] focused on removing CO<sub>2</sub> that we think deserve more research and attention and which YC would be excited to fund. These ideas press on the limit of what’s possible, and we’re not sure which side of that line they’re on. We know there are a lot of ideas out there, and we want to take an expansive approach to this challenge.”

Find out more at [carbon.combinator.com](https://carbon.combinator.com)

#### The New Normal

It is no longer sufficient to simply report on environmental impacts. Corporate responsibility has moved beyond transparency towards action and here, science-based targets are rapidly becoming the ‘new normal’ for businesses looking to gain a competitive advantage.

Hundreds of businesses have seized the opportunity to get ahead in the zero-carbon transition by committing to the Science Based Targets initiative (SBTi). These companies are developing innovative new business strategies that are aligned with the Paris Agreement’s goal of limiting temperature rise. These are ambitious, bold and far-reaching targets requiring, for example, companies to reduce emissions not only from their own operations, but also across their entire value chain.

The YouGov research referred to earlier found that whilst the most common reason for setting such targets was to boost brand reputation, around a third (29%) of firms committed to the SBTi were already seeing bottom-line savings, especially from increased use of clean energy. And not only is SBTi helping companies save money; it is also driving innovation, according to almost two-thirds (63%) of respondents. Other benefits cited were strengthened brand reputation, improved investor confidence and resilience against regulation.

All the time that public resources are being allocated to environmental damage limitation and reparation, the availability of funding for preventative scientific exploration will continue to decline. So now, more than ever, it is business’s responsibility to step up to the global warming challenge and make this investment.

By ramping up their efforts and working collaboratively with the same unified global goal, business leaders and leading scientific researchers can close the gap between where we are and where we need to be. They can also send a clear signal to other companies, governments and institutions across the globe, that they too should be matching this ambition.

Amazing breakthrough technologies emerge towards the end of a decade. Is 9 the magic number that defines the decade ahead?



1919

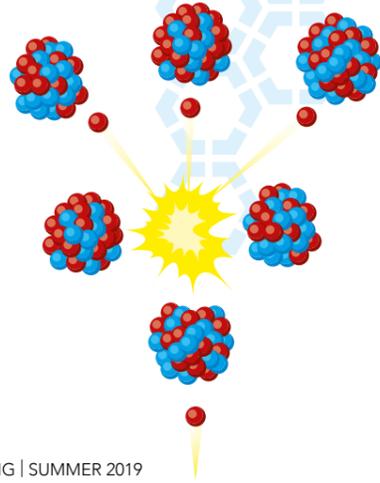
**Transatlantic flight**

British aviators John Alcock and Arthur Brown make the first non-stop transatlantic flight in less than 16 hours from St. John's, Newfoundland to County Galway, Ireland. They fly a modified First World War Vickers Vimy bomber powered by two Rolls-Royce Eagle 360 hp engines.

1939

**Nuclear fission**

German Otto Hahn and Fritz Strassmann discover that the splitting of an atomic nucleus into approximately equal parts, either spontaneously or as a result of the impact of a particle, releases a large amount of energy. The theory behind the process is explained and published.



1949

**Modem**

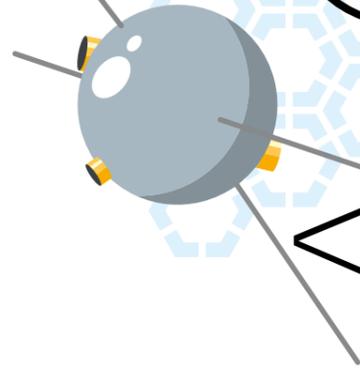
Originally conceived to transmit radar signals, the first modem is discovered by researchers in the US enabling computers to 'talk' over ordinary voice lines. The creation is named because it MODulates digital data into sounds and DEModulates received sounds into digital data.



1959

**Weather forecast**

An important part of the USA/USSR space race, Vanguard II becomes the first weather satellite in space. Launched to measure cloud cover distribution for the US Navy, it is expected to provide information on the density of the atmosphere for the lifetime of its orbit (about 300 years).

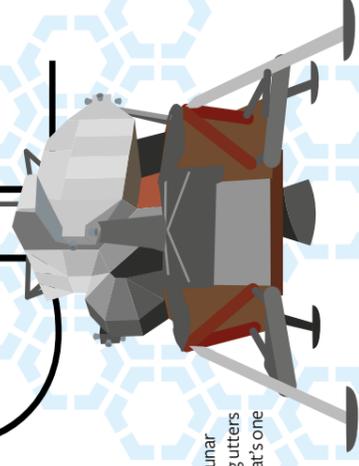


# A CENTURY OF CHANGE

1969

**Moon landing**

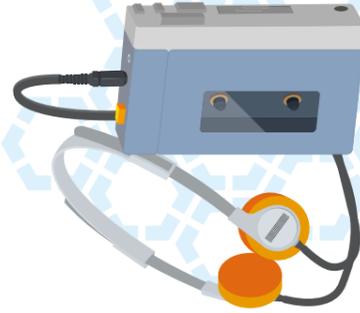
Americans Neil Armstrong and Buzz Aldrin land Eagle, the Apollo 11 Lunar Module, in the Sea of Tranquility on the Moon. On landing, Armstrong utters the now famous phrase 'the Eagle has landed', and six hours later, 'That's one small step for man. One giant leap for mankind'.



1979

**Mobile music**

The first Sony Walkman, the TPS-L2, goes on sale in Japan allowing owners to carry their personal music with them. The Walkman and their iconic headphones introduce a revolution in listening habits and popular culture at large.



1989

**Worldwide web**

Briton Tim Berners-Lee submits a proposal to CERN for developing a new way of linking and sharing information over the internet. It was the first time Berners-Lee proposed a system that would ultimately become the World Wide Web.



1999

**Instant email**

The first BlackBerry is introduced as a two-way pager by Canadian company Research In Motion. It is the first device to provide real-time email and its advanced encryption capabilities make it eligible for use by government agencies and state forces.



2009

**Cryptocurrency**

Satoshi Nakamoto (a pseudonym) releases the first version of the Bitcoin software and launches the network of the decentralised peer-to-peer cryptocurrency. A finite supply of 21 million Bitcoins are made available with a market cap of \$71 billion.





**Ilika**

Southampton Science Park company Ilika is pioneering solid state battery technology. Battery and energy harvesting technology are seen as key challenges that need to be addressed to enable the full potential of the Internet of Things (IoT) to be unlocked.

Ilika's unique lithium-ion battery – which uses a ceramic ion conductor instead of using the usual liquid or polymer electrolyte – offers multiple benefits to electronic engineers working in industrial, automotive and medical sectors. These benefits include a lifespan of up to a decade, easy integration into circuit components, low leakage, non-flammability in wide temperature ranges, and energy efficiency in a small footprint.



# NEWS FROM

UNIVERSITY OF  
**Southampton**



## Breakthrough optics

The University's pioneering contribution to optical fibre technology has been named as one of the UK's 100 best breakthroughs for its significant impact on people's everyday lives. The ingenuity of Southampton Professor Sir David Payne and the university's world-leading Optoelectronics Research Centre (ORC) is to be included in the UK's Best Breakthroughs list of the last century.

Optical fibre inventions enable the internet to span the world, navigate airliners, cut steel and are found on the moon, Mars and International Space Station. Now, through the development of hollow-core fibres (the next generation of optical fibres), the ORC is bringing data transmission rates within touching distance of the speed of light.

## Healthier supermarkets

The impact of product placement in supermarkets on the diets of families will be investigated by researchers at the University in a study led by Dr Christina Vogel, Senior Research Fellow in Public Health Nutrition.

"The race is on to find innovative ways to curb childhood obesity and hit the government's ambitious goal to halve childhood obesity by 2030," said Dr Vogel. "We'll be focusing our research on women as they do most of the food shopping and because mothers' diets are closely linked to their children's food habits; also national statistics show that 50 per cent of women aged 25 to 34 years in England are overweight or obese."

Matt Downes of supermarket Iceland which is participating in the study added: "We know that childhood obesity is a growing issue and the retail industry has its part to play in tackling this. The outcomes of the study will provide insights for the wider retail industry around the impact of store merchandising on purchasing decisions, and in turn the diets of our customers."

## Leading AI

The University will be at the forefront of developing the next generation of experts and leaders in Artificial Intelligence (AI) thanks to a £100M investment from UK Research and Innovation.

Southampton's School of Electronics and Computer Science and the Zepler Institute for Photonics and Nanoelectronics will create the UKRI Centre for Doctoral Training (CDT) in Machine Intelligence for Nano-electronic Devices and Systems (MINDS). The Centre will bring together a mixture of complementary expertise from within the University and from industry to focus on the benefits of future AI systems and their application in a wide variety of domains.

Professor Tim Norman, Director of the MINDS CDT said: "We offer a unique environment for research and training that spans artificial intelligence, nano-electronics, embedded devices and their practical application, with a long track record of research collaboration between computer science and electronics."

## Rogue waves

'Rogue' waves are occurring less often, but becoming more extreme, according to a team of engineers and oceanographers from the University and the National Oceanography Centre who together examined over 20 years of data from along the US western seaboard.

Waves are classed as 'rogue' when they are over twice the height of the average sea state around them. From trough to peak, past observations have put some at over 30 metres high, capable of damaging or sinking ships and sweeping people off the shoreline and out to sea. Around the world, rogue waves occur many times each day and are a major issue globally for the shipping industry.

Lead researcher Alex Cattrell said: "The occurrence of rogue waves is difficult to predict, but simply understanding when and how these rare events occur is extremely important for mariners, both in terms of ship safety and economics."



60-foot wave hitting tanker off Valdez, Alaska. Credit: Captain Roger Wilson\_NOAA

The team behind this study hope to do more work in other parts of the world, adding to existing research sources to better understand how we predict when these destructive forces may strike.

# DIRECTORY

## 81G Blue

E: hello@81g.org  
T: 0845 303 0819  
W: www.81gblue.co.uk

## aap3

E: info@aap3.com  
T: 023 8076 2800  
W: www.aap3.com

## Aareon UK

E: uk.bids@aareon.com  
T: 024 7632 3723  
W: www.aareon.co.uk

## AccelerComm

E: info@accelercomm.com  
T: 023 8011 8091  
W: www.accelercomm.com

## Ascend Technologies

E: info@ascendtechnologies.co.uk  
T: 023 8026 6122  
W: www.ascendtechnologies.co.uk

## Atelier Studios

E: hello@atelier-studios.com  
T: 023 8022 7117  
W: www.atelierstudios.com

## Avonglen

E: enquiries@avonglen.com  
T: 023 8076 2570  
W: www.avonglen.com

## Building Engineering Management

E: m.dorgan@bemanagement.co.uk  
T: 07876 350529

## C Squared Visions

E: info@c2visions.com  
W: www.c2visions.com

## Cascoda

E: info@cascoda.com  
T: 023 8011 1797  
W: www.cascoda.com

## Century Link

T: 0845 000 1000  
W: www.centurylink.com

## Chilworth Partnership

E: lynne@chilworthpartnership.co.uk  
T: 023 8011 1813  
W: www.chilworthpartnership.co.uk

## Chilworth Technology

E: info@chilworth.co.uk  
T: 023 8076 0722  
W: www.chilworth.co.uk

## CRITICAL Software

E: info@criticalsoftware.com  
T: 023 8011 1339  
W: www.criticalsoftware.com

## Device Access

E: info@deviceaccess.co.uk  
T: 023 8011 8300  
W: www.deviceaccess.co.uk

## Dynamon

E: info@dynamon.co.uk  
T: 023 8098 5410  
W: www.dynamon.co.uk

## EMIS Health

T: 0870 053 4545  
W: www.emishealth.com

## Englyst Carbohydrates

E: enquiries@englyst.co.uk  
T: 023 8076 9650

## Fibercore

E: info@fibercore.com  
T: 023 8076 9893  
W: www.fibercore.com

## Filament

E: andy.feltham@filament.uk.com  
T: 020 3176 1267  
W: www.filament.uk.com

## Fresh Relevance

E: hello@freshrelevance.com  
T: 023 8011 9750  
W: www.freshrelevance.com

## Grant Thornton UK

E: gtsouthampton@uk.gt.com  
T: 023 8038 1156  
W: www.grantthornton.co.uk

## Gresham Tech

E: info@greshamtech.com  
T: 020 7653 0200  
W: www.greshamtech.com

## HiLight Semiconductor

E: sales@hilight-semi.com  
T: 023 8097 0330  
W: www.hilight-semi.com

## Horizon Power & Energy

E: enquiries@horizon-pe.com  
T: 01962 217007  
W: www.horizonpowerandenergy.com

## Humaware

E: info@humaware.com  
T: 01730 269725  
W: www.humaware.com

## i2O Water

E: info@i2owater.com  
T: 023 8011 1420  
W: www.i2owater.com

## Ilika Technologies

E: info@ilika.com  
T: 023 8011 1400  
W: www.ilika.com

## iMeta Technologies

E: enquiries@imeta.com  
T: 0845 241 4145  
W: www.imeta.com

## India Business Group (IBG)

E: a.singh@theindiabusinessgroup.com  
T: 0844 313 3133  
W: www.theindiabusinessgroup.com

## Inflowmatix

E: info@inflowmatix.com  
T: 07801 715636  
W: www.inflowmatix.com

## ITDev

E: info@itdev.co.uk  
T: 023 8098 8890  
W: www.itdev.co.uk

## Jacobs

E: contactus@jacobs.com  
T: 023 8011 1250  
W: www.jacobs.com

## Karoo Design

E: info@karoodesign.com  
T: 023 8011 1586  
W: www.karoodesign.com

## Kelda Technology

E: info@keldatechnology.com  
T: 0333 433 0783  
W: www.keldatechnology.com

## Korusys

E: enquiries@korusys.com  
T: 0844 504 1680  
W: www.korusys.com

## Made & Worn

E: support@madeandworn.co.uk  
W: www.madeandworn.co.uk

## Mambo-Tox

E: info@mambo-tox.co.uk  
T: 023 8076 2580  
W: www.mambo-tox.co.uk

## Mantella

E: sales@mantella.co.uk  
T: 023 8098 4902  
W: www.mantella.co.uk

## Marine South East

E: admin@marinesoutheast.co.uk  
T: 023 8011 1590  
W: www.marinesoutheast.co.uk

## Materialise UK Southampton

E: info@orthoview.com  
T: 023 8076 2500  
W: www.orthoview.com

## Meda Technologies

E: martin.adams@meda.co.uk  
T: 020 3287 8744  
W: www.meda.co.uk

## Merck Chemicals

E: reception.chilworth@merckgroup.com  
T: 023 8076 3300  
W: www.merck-chemicals.co.uk

## Mi-Voice

E: enquiries@mi-voice.com  
T: 023 8076 3980  
W: www.mi-voice.com

## MicroGem

E: info@microgemplc.com  
W: www.zygem.com

## Multiple Access Communications

E: enquiries@macltd.com  
T: 023 8076 7808  
W: www.macltd.com

## Nine23

E: enquiries@nine23.co.uk  
T: 023 8202 0300  
W: www.nine23.co.uk

## nquiringminds

E: info@nquiringminds.com  
T: 023 8115 9585  
W: www.nquiringminds.com

## Oat Services

E: ar@oat.co.uk  
T: 023 8076 7228  
W: www.oat.co.uk

## One Pension Consultancy

E: Duncan.Revolta@onepc.co.uk  
T: 023 8076 2590  
W: www.onepc.co.uk

## Optomel

E: info@optomel.com  
W: www.optomel.com

## oXya UK

E: info-uk@oxya.com  
T: 023 8011 9830  
W: www.oxya.com

## Peter Hall

E: peter@peterhall.org.uk  
T: 023 8011 1366  
W: www.peterhall.org.uk

## Photonics & Analytics

E: info@photonics-analytics.com  
T: 023 8000 2087  
W: www.photonics-analytics.com

## Pivotal

E: info@pivotal.io  
T: 020 3740 7410  
W: www.pivotal.io

## PointCloud

E: info@pointcloudnet.com  
W: www.pointcloudnet.com

## Promega UK

E: hilary.latham@promega.com  
T: 023 8071 7319  
W: www.promega.com

## PT Solutions

E: info@ptslimited.co.uk  
T: 023 8011 1844  
W: www.ptslimited.co.uk

## Renovos

E: enquiries@renovos.co.uk  
W: www.renovos.co.uk

## Semantic

E: incoming@semantic.co.uk  
T: 023 8011 1540  
W: www.semantic.co.uk

## Senseye

E: hello@senseye.io  
T: 0845 838 8615  
W: www.senseye.io

## Signly

E: hello@signly.co  
W: www.signly.co

## SJK Scientifics

T: 023 8076 7954

## SKIPJAQ

E: info@skipjaq.com  
W: www.skipjaq.com

## Spectrum IT Recruitment

E: contactus@spectrumit.co.uk  
T: 023 8076 5800  
W: www.spectrumit.co.uk

## Swedish Biomimetics 3000\*

E: info@swedishbiomimetics3000.com  
T: 023 8017 1468  
W: www.swedishbiomimetics3000.com

## Taicaan

E: info@taicaan.com  
T: 023 8076 3796  
W: www.taicaan.com

## Tekever

E: info@tekever.com  
T: 023 8097 0650  
W: www.tekever.com/en

## The Invisible Assistant

E: hw@theinvisibleassistant.co.uk  
T: 07917 682816  
W: www.theinvisibleassistant.co.uk

## The IT Innovation Centre

E: info@it-innovation.soton.ac.uk  
T: 023 8059 8866  
W: www.it-innovation.soton.ac.uk

## Tidal Harness

E: info@tidalharness.com  
W: www.tidalharness.com

## Tonic Analytics

E: info@tonicanalytics.com  
T: 023 8098 2122  
W: www.tonicanalytics.com

## TrackBack

E: enquiries@trackback.net  
T: 0844 470 1701  
W: www.trackback.net

## TrouDigital

E: info@troudigital.com  
T: 023 8098 1110  
W: www.troudigital.com

## U4Global

E: info@u4global.com  
T: 023 8076 0909  
W: www.u4global.com

## Uniq Technology

E: helpdesk@uniqit.co.uk  
T: 01794 377388  
W: www.uniqit.co.uk

## Utonomy

E: Info@utonomy.co.uk  
T: 07787 575487  
W: www.utonomy.co.uk

## Valkyrie Technology

E: info@valkyrietechnology.com  
W: www.valkyrietechnology.com

## Vantia

E: info@vantia.com  
T: 0117 916 7693  
W: www.vantia.com

## VivaMOS

E: dan.cathie@vivamos.co.uk

## VivoPlex

E: enquiries@vivoplex.com  
T: 023 8011 1555  
W: www.vivoplex.com

## Wessex Academic Health Science Network

E: enquiries@wessexahsn.org.uk  
T: 023 8202 0840  
W: www.wessexahsn.org

## Wessex CLAHRC

E: wessexclahrc@soton.ac.uk  
W: www.clahrc-wessex.nihr.ac.uk

## Wessex Institute

E: info@netscc.ac.uk  
T: 023 8059 5586  
W: www.nets.nihr.ac.uk

## Wood Group

T: 023 8011 8800  
W: www.woodgroup.com

## Xim

E: laurence@xim.ai  
T: 07803 950356  
W: www.xim.ai

## Yellow Dot Nursery

E: hello@yellowdotnursery.co.uk  
T: 023 8076 0593  
W: www.yellowdotnursery.co.uk

## Youseq

E: hello@youseq.com  
T: 0333 577 6697  
W: www.youseq.com

## Zenergi

E: bepositive@zenergi.co.uk  
T: 023 8028 6300  
W: www.zenergi.co.uk

# SO

What's next? Where's next?

- Building your profile?
- Commercialising your ideas?
- Making an impact with your research?
- Fast tracking growth?
- Shaping society with your technology?
- A unique community of like-minded people?
- Scaling your operations?

At the University of Southampton Science Park we work hard to retain our enviable reputation as the South's centre of excellence for successful science and technology businesses. From start-up to scale-up, we accommodate, we equip, we nurture and we empower organisations to see beyond today and shape tomorrow.

We do this by fostering a visionary, entrepreneurial culture; by providing flexible yet high quality laboratory, office and meeting facilities in an award-winning healthy and inspiring workplace; by enabling access to a world class talent pool at the University of Southampton; and by facilitating collaborative working at all levels.

We are home to the visionaries who see beyond today, the innovators who shape tomorrow, the science and technology businesses that succeed, the game changers.

Southampton Science Park:  
Where will it take you?



science-park.co.uk



UNIVERSITY OF  
**SOUTHAMPTON**  
**SCIENCE PARK**

[SCIENCE-PARK.CO.UK](http://SCIENCE-PARK.CO.UK)