Autumn 2012



# CATALYST Cambridge Science Park Newsletter

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New recycling technologies from Enval / Award-winning success for Spiral Software / Linguamatics and the text mining revolution / Viewpoint from Tony Clayton, Travel Plan Plus / Parklife news



Innovation Centre, unit 23, home to over 30 companies, for a full list of occupants go to www.cambridgesciencepark.co.uk

### **New Arrivals**

#### ANT Software

ANT is a provider of software solutions and services to TV device vendors, broadcasters and operators with millions of units deployed worldwide.

www.antlimited.com

#### **Cogent Environmental**

Cogent Environmental is a global provider of state-of-the-art environmental and process monitoring products, technologies and services.

www.cogentenvironmental.co.uk

#### Discuva

Discuva is a drug discovery company focused on the creation of next-generation targeted antimicrobials against newly emerging and drug-resistant bacterial pathogens.

www.discuva.com

#### iSotera

iSotera's mission is to stimulate the adoption of High Frequency Alternating Current (HFAC) power distribution, in particular for ultra-efficient lighting

www.isotera.com

#### Linguamatics

Linguamatics is a provider of innovative natural language processing (NLP) based text mining for high-value knowledge discovery and decision support.

www.linguamatics.com

#### Rapita Systems

Rapita Systems develops software tools for on-target verification, optimisation and code coverage of critical real-time embedded systems.

www.rapitasystems.com

#### Spiral Software

Spiral Software provides tools and services that enable clients to make the best possible choices in trading and refining crude oil. www.spiralsoft.com

The Cambridge Science Park is managed by Bidwells on behalf of Trinity College.

Cambridge Science Park tenants can post news, events and jobs free on www.cambridgesciencepark.co.uk

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### **PARKLIFE** connections

#### Cambridge AWiSE (Association for Women in Science &

**Engineering)** is a multidisciplinary membership networking organisation composed of individuals from institutions, businesses, associations and other organisations all of whom share the common goal of advancing the interests of women in science, engineering and technology. Cambridge AWISE holds regular meetings and events; for details see the website or get in touch.

Web: www.camawise.org.uk Email: info@camawise.org.uk

**Cambridge Enterprise**, a wholly owned subsidiary of the University, responsible for the commercialisation of Cambridge intellectual property. Cambridge Enterprise delivers its mandate through three overlapping business units: technology transfer services, consultancy services and seed fund services. Activities include management and licensing of patents, proof of concept funding and support for University staff and research groups wishing to undertake consultancy work.

Web: www.enterprise.cam.ac.uk Email: sarah.collins@enterprise.cam.ac.uk

**Cambridge Network** is a membership organisation. We bring people together – from business and academia – to meet each other and share ideas, encouraging collaboration and partnership for shared success. With over 1,000 corporate members, including start-ups, SMEs and global corporations, Cambridge Network represents the majority of the technology businesses in Cambridge.

Web: www.cambridgenetwork.co.uk Email: Claire.Ruskin@cambridgenetwork.co.uk Tel: 01223 300148

**One Nucleus** is the largest membership organisation for life science and healthcare companies in Europe. A not-for-profit company with members across the world, its mission is to maximise the global competitiveness of its members. Its core activities include networking events (from eight to 800 delegates), training, a Group Purchasing Consortium which saves its members £3 million per annum, special interest groups and an international strategy.

Web: www.onenucleus.com Email: info@onenucleus.com

Science Technology Network (STN) is an online database service that provides global access to an integrated network of the most important and comprehensive chemistry, sci-tech and patent databases from the world's most respected producers.

Web: www.stn-international.com

**Travel Plan Plus (TP+)** is a project joining employers in Cambridge in a network to promote more sustainable travel to work and on business.

Web: www.travelplanplus.org.uk

## **Closing the recycling loop**

#### **TECHNOLOGY BY ENVAL SET TO OPEN NEW RECYCLING OPPORTUNITIES**

From fruit juice pouches to liquid carton containers, Enval is a company with a novel recycling technology that targets currently unrecyclable waste streams. Helping to reduce waste and minimise carbon footprints for manufacturers and consumers alike, Catalyst spoke to Business Development Director David Boorman about the Enval process and the diverse opportunities it offers.

"This is a technology that was first developed in the labs at the University of Cambridge about 15 years ago," explains David. "It was originally an idea of Professor Howard Chase, then Head of the Department of Chemical Engineering, who had developed a process called microwave-induced pyrolysis. Professor Chase supervised Carlos Ludlow-Palafox during his research into the process for his PhD studies. Carlos spent the next three years investigating the physical and chemical characteristics of the process.

"At the end of that period, both Howard and Carlos wanted to see the fruits of their research turned into something that could be useful commercially. So they set about developing a business plan and creating a design for something they could do with this interesting process.

"At that research stage they were using plastic pellets as a test subject, but they soon started thinking about other waste streams. Specifically, they were looking for waste products that were unrecyclable through lack of technology to treat them, in contrast to ones where the recycling rate is low because we are not very good at collecting them or separating them.

"The first waste stream that came to their attention was medicine blister packs – several major players in the pharmaceutical industry had come to the Chemical Engineering labs to ask about the possibilities for using the technology to recycle them. Unfortunately, this proved to be a non-starter because the plastic used in these packs, PVC, breaks down at high temperatures to produce hydrochloric acid and this couldn't be coped with using the lab-scale equipment in the University environment.

"Despite this false start, the medicine blister packs were a catalyst: they got Howard and Carlos thinking about recycling other kinds of materials where aluminium and plastic are bonded together. Typically these materials have been hard to recycle, but they were convinced that their microwaveinduced pyrolysis technology could target these kinds of waste streams."

"It takes five to six times more electricity to source aluminium from ore than it does to recycle aluminium-based materials using the Enval process"

In 2005, a business plan was drawn up and submitted to the Cambridge University Entrepreneurs' Business Plan competition. The plan won, giving the team the chance to present their technology to a series of Cambridge hi-tech investors. The positive feedback prompted Cambridge Enterprise, the organisation that is geared towards commercialisation of research generated at the University, to support the project, including providing finance to build a waste-paper-basket-sized demonstrator. Impressed by the demonstrator model, a number of angel investors and two local funds provided further finance to develop the concept further from a lab-scale model to a pilot plant and Enval as a company was created in 2006 to continue this work.

Originally operating the pilot plant at the Cambridge Science Park Innovation Centre, the need for larger premises and increased automation led the team to move the pilot project to Luton, while still maintaining their headquarters on Cambridge Science Park.



Above// David Boorman (Business Development Director) and Carlos Ludlow-Palafox (Chief Technology Officer) in front of Enval's microwave-induced pyrolysis pilot plant at its engineering facility in Luton

Up and running since 2009, the pilot plant is capable of recycling about 100kg of material per hour. The success of this project led to a new round of investment in late 2011 to develop Enval's first commercial-scale plant, which is due to open later in 2012.

"Securing the capital to fund this commercial-scale plant was a really significant milestone for us and we're in the process of building it right now," explains David. "Our business model is not aimed at us being operators of this process. We want to sell our process to waste handlers to operate the technology themselves. But to do this, we need to show them that it works at a commercial scale, which is why we are building the first demonstration unit to own and operate ourselves.

"We think there is a huge potential for the technology, because there is an increasing range of products which use aluminium and plastic laminate packaging, and there is also a growing pressure on manufacturers to show that their products are recyclable and sustainably sourced.

"For example, many manufacturers are using aluminium-plastic laminate pouches to store products such as petfoods, soft drinks or other foods. It's a really useful containment method for the manufacturers because the pouches can be transported to the factory on rolls without any air in them and then formed, filled and sealed on site – when you use cans, you are obviously transporting a lot of air on the way to the factory and therefore a lot of empty space. Pouches are also a more flexible material, so once filled, more of them can be squashed into a box.

"But despite these advantages, the issue for manufacturers is that both governments and consumers are demanding product packaging that is recyclable. And for this type of packaging, which is basically a layer of aluminium sandwiched between two very thin layers of plastic, there is no commercially viable recycling technology currently in wide-scale use.



Above// Enval's engineering facility in Luton

"Our process specifically targets these kinds of materials. We've had funding from some of the world's biggest food companies such as Nestlé and Kraft because they are committed to supporting technologies that are targeting currently unrecyclable materials that they use extensively.

"All sorts of packaging can be recycled by our process – drink pouches, petfood pouches, toothpaste tubes, coffee bags, babyfood pouches, liquid carton packages (such as Tetra Pak, ideally once the cardboard has been depulped) and so on.

"The process is particularly valuable when the carbon footprint of aluminium is considered – it takes five to six times more electricity to source aluminium from ore than it does to recycle aluminium-based materials using the Enval process. And aluminium can be recycled many, many times without degrading, so secondary aluminium commands a premium price. It really is a fantastic new opportunity, which has already generated a lot of interest among manufacturers and waste handlers alike."

Not only does Enval's process target previously unrecyclable materials, a by-product of the recycling process is a high-calorific-value gas that can be used to generate the energy required to power the microwave plant. Given the company's green credentials, it's not surprising therefore that Enval also offers consultancy services on sustainability issues.

"We provide life-cycle analysis work for some tier-one companies, assessing the carbon footprint of their manufacturing processes. For example, we did a project with Unilever looking at their global manufacturing of toothpaste tubes – right through the chain from how their electricity was generated to make the tubes through to how they were disposed of after use. From understanding these processes in depth, we help manufacturers see how they can make their packaging more sustainable across global markets by building in sustainability at the design stage of the process."



Above// Enval's pilot plant operated at the Luton Engineering Facility

With a successful revenue-generating consultancy service in action and a demonstrator commercial plant for its recycling technology soon to be opened, the future looks bright for the team at Enval for 2012 and beyond. Throughout the many changes and developments, Enval's Cambridge headquarters has provided a stable base from which to grow and develop.

"With the imminent opening of the commercial-scale plant, we're embarking on a voyage of discovery"

"It's very important for us to be on Cambridge Science Park," says David. "It provides us with a prestigious address that is recognised worldwide and it means it's easy for us to maintain our strong links with the University. With the imminent opening of the commercial-scale plant, we're embarking on a voyage of discovery in the months and years ahead. This is a great place from which to manage that journey."

www.enval.com



Above// Enval's pilot plant operated at the Luton Engineering Facility

### **Programmed for success**

#### SPIRAL SOFTWARE CONTINUES TO GROW ON CAMBRIDGE SCIENCE PARK

Winner of the Queen's Award for International Trade in 2012, Spiral Software has helped transform the oil industry's use of software, providing novel capabilities to help clients make the most efficient use of every drop of crude oil. Catalyst spoke to Chief Executive Officer Dr Matthew Webster about its innovative technology, the journey so far and some exciting new market opportunities ahead.

Set up in 1998 by three Cambridge graduates after they completed their PhDs, Spiral has grown organically until it now employs about 60 people. It has achieved this without taking on debt or external investors: an unusual approach, but one that has made it easier to weather the fluctuations in the economy.

Over 14 years, the company has moved from serviced offices in Castle Park onto its own space on Histon Road, then larger offices in Chesterton and most recently doubling its area in a move to a 1,400m<sup>2</sup> suite at Building 101 on Cambridge Science Park. The building is now fully occupied by Spiral Software and neighbours Grant Thornton, Citrix and Philips Research.

#### "Over half our turnover each year is dedicated to research and development"

"As a technology company, we believe strongly in the need for continuous innovation, and over half our turnover each year is dedicated to research and development," says Dr Matthew Webster.

"In addition to our new supply chain toolset, we are working on new technologies for oil exploration and production, as well as tools to help our clients produce next-generation biofuels – an area which we believe will have growing importance. The business context on Cambridge Science Park is ideal for this and will hopefully help us find many opportunities for collaboration in the coming years."

Spiral's tools support oil companies across the full range of their operations, from exploration through refining and on to product blending. Its aim is to help its clients increase the accuracy and confidence of decision-making at every point, allowing them to understand crude oil at a molecular level, maximising the useful products from each barrel, minimising safety risks and energy consumption, reducing emissions and assuring that their products meet or exceed environmental requirements.

"In the past, refineries could process the same crudes year in year out and still produce the products that the market demanded," explains Dr Webster. "Over time, however, the challenges facing the industry have grown in every direction. Many of the largest crude oil reservoirs are starting to come to

"Supply chain management, in oil and other sectors, is a very exciting arena for us"

the end of their lives, meaning the familiar and easy-to-process feedstocks of the past are less available. Globally, we are still finding more crude oil each year than we use, but the new reservoirs that are being discovered tend to be smaller and more challenging to process than traditional feedstocks.



Above// Dr Matthew Webster, Chief Executive Officer

"Meanwhile, the environmental specifications on both products and operations are increasingly stringent. As just one example, while previously diesel fuel could have up to 1% sulphur content, the recognition of its environmental impact has reduced the amount allowed in diesel for road use to less than 10 parts per million (ppm), or 0.001%. Future legislation aims to reduce this to less than 1ppm. This needs to be achieved from crude oils that contain much more sulphur than before, and employing innovative refining processes that capture this sulphur cleanly while minimising emissions from the refinery itself.

"At the same time, with the recognition of crude oil as a finite resource, there is a need to minimise wastage and maximise the production of highvalue, sophisticated products from crude oil which are necessary for modern plastics and pharmaceuticals. Refineries can apply an ever more sophisticated range of technologies to maximise the useful products generated from each barrel of crude oil – our software is helping them to do this."



Above// an oil refinery (iStockphoto)

Spiral's approach is to work closely with their clients, applying modern mathematics and information technology to extend the knowledge envelope of their industry, identifying how new methods can help them improve performance and efficiency. Its software now plays a key business role for over 85 client companies, across more than 350 sites worldwide – including all the oil majors.

"Our tools use cutting-edge mathematics, but maintain a friendly and intuitive user experience: the idea is to let users apply their own expertise without needing them to become experts in the mathematics or the software," says Dr Webster. "So much of the business value comes from the results being transparent and easy to communicate between business areas, encouraging collaboration between users and letting companies make the best overall decisions."

Spiral's development team believes that much of this benefit relies on providing interactive workflows, where users can enjoy an uninterrupted chain of thought while exploring different scenarios. This requires a focus on software performance, pushing them to look at not only ingenious algorithms and efficient data structures, but also the best use of parallel, distributed and cloud computing to provide sufficient calculation power behind the scenes.

In 2010, Spiral announced a new suite of supply chain management tools for planning and scheduling, which have been designed from the ground up as sector-generic. Applicable to all process industries, they open up completely new markets, from the food and beverage sector to pharmaceuticals.

Supply chain tools help companies make the best decisions in running complex manufacturing processes, from selection of raw materials through to the decision on which products to make and where they need to be delivered. While the first sector to which it is offering these tools is its existing customer base in the oil sector, Spiral will shortly be expanding its scope to applications as diverse as agriculture and education.

"Supply chain management, in oil and other sectors, is a very exciting arena for us," says Dr Webster. "We are approaching the whole problem in a novel way, very different from the existing tools on the market, and we believe we can offer a revolutionary step in ease of use, speed and risk assessment." In 2012, Spiral was honoured to receive the Queen's Award for International Trade: it has had continuous export growth for six years, with overall sales growing over 40% in 2012.

"Over 90% of our revenue comes from export sales, and we have been fortunate to continue with rapid growth even in the face of the global economic downturn," says Dr Webster. "We are honoured that the Queen's Award has recognised our team and other UK companies who are achieving success in a difficult business context."

#### www.spiralsoft.com

"Our tools use cutting-edge mathematics, but maintain a friendly and intuitive user experience"



Above// the Spiral Software office on Cambridge Science Park (image courtesy of Spiral Software)

## Mining for information gold

#### LINGUAMATICS AND THE TEXT MINING REVOLUTION

In a world of information overload, Linguamatics is helping global businesses and organisations to make better decisions through its unique text mining software platform, I2E. Catalyst spoke to Chief Operating Officer Roger Hale and Head of Marketing Sue Ziobro about the company's technology, its diverse applications and the road ahead.

"In the 21<sup>st</sup> century, there has been an explosion of information available in digital formats and it just keeps growing," explains Roger from the new Linguamatics headquarters at 324 Cambridge Science Park.

"But how do we make sense of this deluge of information?" he continues. "Many businesses and organisations know that the information they need to help them become more successful is out there, it's just buried very deep or spread across a vast area – or both! A Google search, for example, just looks for keywords and can throw up tens of millions of pages. Who has the manpower to go through all of these and extract what is of value?

"This is where our text mining software comes in, a process which we've been working on since we were formed 11 years ago. Basically, we're able to mine huge amounts of unstructured text to find answers that aren't easy for other tools such as search engines to find. We then present those answers in a relevant and structured way. For a human to do the same job, it would typically take upwards of ten times as long, and in some cases just be too time-consuming to attempt at all.

#### "To have a presence on Cambridge Science Park that is visible to the world means a lot to us"

"The reason our software works so well is because it's based on natural language processing (NLP) techniques. What that means is that our software is programmed to understand the relationships between words and meanings, and the way language is structured. So rather than just a keyword search, our software can search for complex concepts, ideas, relationships and data which require a certain level of 'intelligence' to extract. It is designed to understand the vocabularies and terminologies of particular fields, and also the subtleties of everyday speech, so it can go much further than any traditional search engine could."

The exponential growth of online information seems to point towards the need for more intelligent methods to search for the content which is of most value to us – as individuals, organisations, businesses and as societies. Linguamatics has created a particularly valuable market within the pharmaceutical, biotech and healthcare sectors, where information abounds but, especially in times of recession, man hours are limited.



Above// Linguamatics company photo, January 2012

"We have nine of the top ten global pharmaceutical companies as customers of ours," Sue explains. "That's pretty amazing given that we are a Cambridge company that started up just 11 years ago. It's been a voyage of discovery to get to this place and we didn't initially focus on this sector, but it's an area in which we've found our software has really strong value in lots of different ways.

"For example, we help drug discovery companies in the target ID and selection process. Researchers use our text mining technology to establish target ranking and efficacy – they're telling us that it can make the process of literature review much more precise and it uncovers relevant papers that would not have been seen using previous methods when they tended to focus on sources they already knew.

"Our I2E text mining platform offers advantages in terms of speed, accuracy, breadth of coverage and, as a result, cost savings when researchers are reviewing information for many different reasons – searching for safety toxicity information, investigating clinical trials, or working in biomarker discovery. We're working with the US Food and Drug Administration, which is probably the biggest organisation of its kind globally, and I think it's a clear signal of our global reputation in this area."

Alongside pharmaceutical and drug discovery companies and organisations, Linguamatics is increasingly exploring the field of healthcare as a growing and valuable new market, as Sue goes on to explain. "We believe it's a big area of opportunity for us because governments all over the world are moving their healthcare information into digital form. Increasingly, data about people's health will be captured electronically, but a lot of it won't be quantitative or structured information. So that's where text mining and natural language processing comes into its own.

"For example, when a healthcare worker goes into the hospital ward or into someone's home and writes up their report on the patient – these kinds of records obviously represent a huge amount of unstructured natural language information which covers large populations. We can help the healthcare providers retrieve what is important to answer a specific guestion in a fraction of the time it would take to analyse manually.

"Ultimately, our technology is about helping customers make better evidence-based decisions. Given that one of the biggest and growing problems facing most economies and most healthcare systems is allocating



limited resources to maximise the health of an ageing population, this is a really important issue. So our platform is hugely valuable in helping providers make better decisions and make the most of their budgets, so that patients can be treated more effectively."

Linguamatics' text mining software is also being used across diverse industry sectors to provide business intelligence and media analysis from wideranging information sources. One notable example was the study conducted across social media to gauge voting preferences for the UK general election in 2010.

"We text-mined Twitter prior to the election to conduct a sentiment analysis, basically trying to gauge which way people would vote," says Sue. "Obviously there was a vast amount of information to process, but we predicted the actual outcome so accurately that our study was mentioned in both the *New York Times* and the *Wall Street Journal*, which was great in terms of our global visibility. An article on text mining was also published in *Time* magazine this year. Personally I was thrilled – it really seems that text mining is being understood more widely and people are becoming more and more aware of the opportunities it offers.

"Of course, we've known about its potential and its value for more than a decade now. But we're not complacent. We're developing new partnerships with other technology providers where we see that their expertise could add value to what we offer our customers.

"For example, we're working with Accelrys, another Cambridge Science Park company, to create a solution that incorporates its workflow management software platform with our text mining technology. We're also working with software specialists ChemAxon to expand our capabilities in the chemistry market. As a company, we're constantly looking at where and how we can grow, and developing successful partnerships is a key part of this strategy."

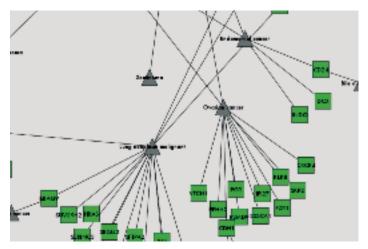
Eleven years since its inception, Linguamatics seems to have arrived at a new stage in its evolution, evidenced physically by its move onto Cambridge Science Park in May 2012. Roger goes on to explain the significance of the new location.

"Ultimately, our technology is about helping customers make better evidence-based decisions"

"We're thrilled to be here," he says. "To have a presence on Cambridge Science Park that is visible to the world means a lot to us. Personally, it makes me feel we've arrived and that we are now validly in the right place to grow and develop as one of the Cambridge hi-tech success stories, in the same way as ARM or CSR have done before.

"Alongside our Cambridge headquarters, we've also got a sales and service office in the US in the Greater Boston area. Altogether we're about 50 people, 15 of whom were recruited in the last 12 months. So we're still small, but we're growing both here in the UK and in the US. That in itself is fantastic for any company to say in this current economic environment. So there's a lot happening for us right now, but we wouldn't have it any other way."

#### www.linguamatics.com



Above// Finding cancer biomarkers (biological fingerprints) using Linguamatics I2E

## PARKLIFE

#### KIDSUNLIMITED DAY NURSERY HELPS TO DEVELOP SCIENTISTS OF THE FUTURE

The kidsunlimited day nursery at Cambridge Science Park is helping to promote the development of scientific and environmental interest in children through a range of activities and programmes.

Taking place all year round, kidsunlimited's ku:gardening programme helps children develop their understanding of the world around them. The children learn about topics including health and nutrition, animal life cycles, recycling and looking after the environment.

Lisa Rowland, Nursery Manager said: "Many of the children we look after have parents who are

scientists or work in the hi-tech sector – maybe that's why they're so naturally curious in everything around them!

"We work hard to channel that curiosity and feed their enthusiasm. For example, we've created our own pond for the pre-school children and they love learning about the development of a frog and the changes that occur throughout its lifecycle. I'm sure we are looking after some of the budding scientists of the future here!"

www.kidsunlimited.co.uk



Above// children learn and play in the kidsunlimited garden (photo taken by kidsunlimited)

#### **GUIDED BUSWAY CELEBRATES FIRST BIRTHDAY**



Above// Cambridgeshire Guided Busway, image courtesy of Travel Plan Plus

The Cambridgeshire Guided Busway celebrated its first birthday on 7<sup>th</sup> August, transporting passengers on 2.5 million trips in just 12 months.

The 25-mile Busway, the longest of its kind in the world, connects passengers between Huntingdon, St lves and Cambridge, with services run by Stagecoach and Whippet Coaches.

Cambridgeshire County Council Cabinet Member for Growth and Planning, Councillor Ian Bates, said: "I am delighted that the Busway has proved to be such a success over the last 12 months and I'm confident it will be equally popular in years to come.

"The Busway has defied the critics who said it would never succeed, by attracting more than 2.5 million passengers, which is 40% above the predicted number of passengers for the first year, while at the same time helping to reduce traffic on the heavily congested A14."

#### SPIRAL SOFTWARE RECOGNISED WITH QUEEN'S AWARD FOR ENTERPRISE

The export success of Cambridge Science Park new arrival Spiral Software was recognised earlier this year as a recipient of one the 2012 Queen's Awards for Enterprise in the category for International Trade.

The business awards, which are considered by many to be the most prestigious awards for commercial success in the UK, were presented in April across three categories: International Trade, Innovation and Sustainable Development.

Spiral Software, which provides software and consultancy services to the oil industry, has had continuous export

growth for six years, with overall sales growing over 40% in 2012. Chief Executive Officer Dr Matthew Webster said: "We are honoured to receive this prestigious award, which recognises the work of our team and other UK companies who are achieving success in a difficult business context.

"Over 90% of our revenue comes from export sales, and we have been fortunate to continue with rapid growth even in the face of the global economic downturn."

www.spiralsoft.com



spiral

#### EIGHT19 SPINS OUT INDIGO PAY-AS-YOU-GO SOLAR TECHNOLOGY

On August 21<sup>st</sup>, Eight19 announced the launch of Azuri Technologies Limited to develop its internationally recognised Indigo 'pay-as-yougo' solar technology for off-grid markets. Eight19 will concentrate on development of its printed plastic solar technology and Azuri will focus on expanding the Indigo product family and market reach.

Eight19, which was established in September 2010 to develop research from Cambridge University into a new generation of printed plastic solar modules, has over the last year developed Indigo, a revolutionary pay-as-you-go product range for off-grid customers in emerging markets. Indigo has generated international interest, including winning the World Business and Development Award at the Rio+20 UN Climate Conference in June, and the product is currently deployed in Kenya, Malawi, Zambia, South Sudan, Uganda and South Africa.

Due to the unprecedented growth of Indigo, the Eight19 board has taken the decision to spin out Indigo into Azuri in order to facilitate its rapid expansion. The entire Indigo activity has transferred to Azuri, and Simon Bransfield-Garth will remain CEO of both companies.

www.eight19.com www.azuri-technologies.com



Above// Indigo 'pay-as-you-go' solar units in South Sudan (image courtesy of Azuri Technologies)

#### **NEW CEO FOR CAMBRIDGE CONSULTANTS**



Above// Alan Richardson, CEO, Cambridge Consultants (image courtesy of Cambridge Consultants)

Alan Richardson has taken on the role of Chief Executive Officer (CEO) at Cambridge Consultants, a leading technology design and development firm based on Cambridge Science Park. Mr Richardson replaced Dr Brian Moon, who announced his retirement in July after 11 years as CEO.

Mr Richardson joined Cambridge Consultants in 1984 and has been Deputy CEO since 2007. Prior to being appointed to the board in 2002 as Chief Technology Officer, Mr Richardson was involved in building the firm's business in electromagnetic sensors. Mr Richardson said: "Naturally I'm delighted to take up this position for one of the best-known and globally respected product development and technology firms. Having been appointed Deputy CEO in 2007, I feel that I am now ready to lead the firm through its next stage of growth and success.

He added: "Brian has played the pivotal role in our success for the past decade, and I am grateful for everything he has done to hand over such a strong and successful business."

www.cambridgeconsultants.com

#### LAB21 SECURES £5 MILLION FUNDING TO SUPPORT INTERNATIONAL GROWTH

Lab 21 Limited, a global specialist in personalised medicine and clinical diagnostics, announced a £5-million funding package with Clydesdale Bank in July this year.

The deal will see the bank provide Lab21 with initial funding of £5 million to support the firm's plans for growth, with the potential for further financial support for their rapid growth plans. Lab21 has its headquarters on Cambridge Science Park and also has a US base in Greenville, South Carolina.

The transaction was supported by Clydesdale Bank's Growth Finance team, which delivers

financial support specifically aimed at highgrowth, venture-capital-backed businesses with strong intellectual property.

Sandra Hope, Director, Growth Finance at Clydesdale Bank, said: "This is certainly a rapidly growing and innovative healthcare company at the forefront of its field. It has a 21<sup>st</sup> century vision for medical care, and its prospects for growth are matched by the management team's determination to succeed."

www.lab21.com



Above// Lab21 headquarters on Cambridge Science Park (image courtesy of Lab21)



## VIEWPOINT

**TONY CLAYTON, TRAVEL PLAN PLUS COORDINATOR** 

Travel Plan Plus (TP+) is an award-winning project founded in 2009. We have a simple but important aim: to encourage more people to travel to work and on business by greener and healthier transport options such as walking, cycling, car sharing, public transport – or sometimes removing the need to travel at all!

Many of you will already be aware of TP+ because of the large-scale, interactive events we run. This year, 'Get Cycling' offered visitors the chance to have some fun and try out many different types of bicycles while 450 people came to 'GO Electric' – the first event of its kind in Cambridge – which showcased electric cars, vans, motorbikes and bicycles. Hopefully all of you are receiving our TP+ newsletter via your employer with information and advice on travel choices – if not, do get in touch.

We operate from an on-site Commuter Centre in the Cambridge Science Park Innovation Centre located near the Trinity Centre, which is open to the public. We run our very popular free electric pool bike scheme from the Centre. People borrow the bikes to travel to business meetings, to try a cycle commute to work and even to pop home to feed the cat! Booking is quick and simple, so if you've not tried them yet, do give them a go.

"For me, being located on the park ensures I understand at first hand the issues our commuters face each day"

TP+ is all about trying to ensure that companies and commuters have all the travel information they need to make informed choices. For instance, many are unaware that simply by being located on Cambridge Science Park, they are able to get great discounts at more than 20 Cambridgeshire cycle shops, on train season tickets and on services from adult cycle training providers.

For me, being located on the park ensures I understand at first hand the issues our commuters face each day. I am always keen to hear commuters' own stories and frustrations to see if there is anything we can do to help – so do come along for a chat and a cup of tea.

In these challenging economic conditions, it's important to maximise the efficiency of all resources in all areas. We believe that efficient and sustainable travel is a crucial part of this picture. It reduces costs, makes employees happier, healthier and wealthier (reducing absenteeism and improving productivity), lessens pressure on car parks and lowers congestion. And of course fewer cars on the road means less  $CO_2$  emitted, so if the car is your only option, what about sharing a car journey? You can find your perfect car share match for free at www.camshare.co.uk.

Like many of the hi-tech companies we work with, we believe our approach is innovative and results-driven. We run the annual Travel to Work survey, which provides each participating employer with results for their own company. Our 2011 survey showed that since 2009 we have helped increase cycling to work by 6% to 23% and reduced drive-alone commuting by 8% to 50% in the area. Such impressive change over a relatively short period shows the TP+ approach is working. These figures are significantly better than the national average and show the commitment many companies have already made in making travel to work more sustainable. Look out for the next survey which takes place in October 2012.

"Since 2009, we have helped increase cycling to work by 6% to 23% and reduced drive-alone commuting by 8%"

But of course, at Travel Plan Plus we want to improve on these already excellent results! So we're continuing to run events throughout the year that promote healthier and greener travel, focusing on different travel options such as walking, cycling or car-sharing. We also provide direct support to individual businesses by helping them develop their own travel initiatives, including running bespoke sessions which look at the particular commuter issues their employees face. We're looking to get even more involved with companies on Cambridge Science Park and help them develop more sustainable transport options – so do get in touch if you've not spoken to us yet.

Our website is a one-stop shop for travel information to the area, including tools and services to support businesses and commuters. You can also follow us on Twitter (@travelplanplus) for updates and information.

There's a lot we can be proud of relating to our travel infrastructure in and around Cambridge Science Park – for example, the Guided Busway has supported approximately 2.5 million journeys in its first 12 months alone and the new Science Park rail station will be along in the next couple of years. But we know that people need help to access new travel options and there's a lot more we can do together. Get in touch to find out how.

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TP+ is a Cambridgeshire Travel for Work Partnership project on behalf of Cambridgeshire County Council. It reports to a steering group made up of local businesses and site managers. Its work potentially reaches around 7,500 commuters working at Cambridge Science Park, Cambridge Business Park, the St John's Innovation Centre, Cambridge Regional College and Taylor Vinters solicitors.