

# Inventique®

The newsletter of Wessex Round Table of Inventors June / July 2007

17-20 October BIS 2007 www.britishinventionshow.com

## WRTI ANNUAL GENERAL MEETING

(follows Keynote Lecture)

**WEDNESDAY 11 JULY**

at 8pm, room HC05

Herbert Collins Building  
Southampton Solent University  
East Park Terrace  
Southampton SO14 0RP

Contact: [secretary@wrti.co.uk](mailto:secretary@wrti.co.uk)

Tel: 01420 562 378

Map: [www.streetmap.co.uk](http://www.streetmap.co.uk) (SO14 0RP)  
[www.wrti.org.uk/events](http://www.wrti.org.uk/events)

## LAST CHANCE...

### ● ASSESSING AN INNOVATIVE IDEA

WRTI MEMBERS can now book a free initial 30-minute meeting with a panel of Southampton Solent University staff (including a project manager and at least one product designer or other specialist), to discuss their invention or ideas.

Three 30-minute sessions, funded by the WRTI, are available this Wednesday 11 July at 16.00, 16.30 and 17.00, subject to availability.

● For an appointment, e-mail Richard Penson at: [membership@wrti.co.uk](mailto:membership@wrti.co.uk).

### ● FREE HALF-DAY SEMINAR OFFER

Chilworth Business Club and Apex Business Associates present a free half-day seminar 'How to Increase your Sales with Marketing Tactics that Work' this Wednesday 11 July.

Commencing 10am at 2 Venture Road, Southampton Science Park, Southampton SO16 7NP

● Karen Morgan Tel: 023 8076 3795  
[info@southamptonhub.com](mailto:info@southamptonhub.com)

## Everyone's welcome!

PUBLIC LECTURE BY 'BRANDS' GURU ROBERT OPIE

**T**HE WRTI ANNUAL PUBLIC Keynote Lecture takes place this Wednesday 11 July at 6.30pm at Southampton Solent University, and comprises a talk entitled 'I Wish I'd Thought of That: 200 years of consumer inventiveness,' by consumer historian Robert Opie. Admission is free.

An entertaining and informed speaker, Robert will outline an ABC of inventions from aerosols, biro and cellophane, showing how inventors have made their mark on the way we live today – and also the many opportunities existing in a society concerned with energy, conservation and environmental issues, within which packaging plays such a crucial role.

Robert Opie's reputation was established when he saw the need to record and archive the history of the products around us, creating the world-renowned Robert Opie Collection. Starting with a packet of Munchies when he was just sixteen, the Collection now extends to all aspects of daily life: toys, comics, magazines, newspapers, technology, travel, royal souvenirs, fashion and design.

Featuring over 12,000 original items from the Robert Opie Collection, the Museum of Brands, Packaging and Advertising opened in London in 2005, having

originally been housed in the Museum of Advertising and Packaging, Gloucester, for seventeen years and achieving charitable status in 2002.

"Whilst families tend to save mementoes from special occasions, it struck me that little was being done to keep the everyday material," says Robert, who has written many books on his subject. "When the thousands of pieces of this social history are assembled, the picture becomes clearer as to the remarkable journey we have all come through".

### Open access

The WRTI welcomes members of the public to its Annual Keynote Lecture. Free on-site car parking (via the entrance alongside East Park Terrace ambulance station) is available after 4pm, and complementary refreshments are available from 6pm.

The club's members-only AGM follows at 8pm. ■

● The Museum of Brands, Packaging and Advertising

2 Colville Mews, Lonsdale Road  
Notting Hill, London W11 2AR

Tel: + 44 (0) 20 7908 0880

[info@museumofbrands.com](mailto:info@museumofbrands.com)

[www.museumofbrands.com](http://www.museumofbrands.com)



THE MUSEUM OF BRANDS, PACKAGING AND ADVERTISING

Wessex Round Table of Inventors meet at 6.30pm on the second Wednesday of each month at Southampton Solent University, East Park Terrace SO14 0RP

## VIEW FROM THE CHAIR

I HAVE LONG THOUGHT that we inventors allow investors to set the rules (and, incidentally, treat us quite poorly) on the basis that 'he who pays the piper calls the tune'.

There appears to be a general view that it's perfectly acceptable that we go cap-in-hand to venture capitalists and suffer the humiliation of standing to attention in front of the money men, while they demand degree-standard business plans, audio-visual demonstrations and market-ready prototypes. And then demand a huge percentage in equity.

Successful ideas and inventions – market-ready or not – are the hidden gems that create new wealth once they are unearthed. But diamonds don't dig themselves up or cut and polish themselves, so why are inventors always asked to make all the running?

I suppose my questions to potential investors, business angels and venture capitalists are these: Why do you wait for us to come to you? How many great opportunities are you either missing or closing your eyes to? What if we have great ideas but are poor presenters and speakers (a not-uncommon failing even among financial experts)? How many of our great ideas do you pass over because we don't know how to find you, don't use Powerpoint, or simply haven't made a slick-enough presentation?

The only meaningful question should be: How successful could the idea being discussed become if it is properly developed and exploited?

Inventors' clubs are not only for inventors, but also for entrepreneurs and investors; we make you all very welcome when you come and join our groups. Please accept this open invitation to come and get to know our inventor members and their ideas, and prospect for ideas in the raw. Or throw in a market need and see what comes back from us. You just might get in at the start of something big...

Sincerely, Richard

**RICHARD LITTLE, WRTI Chairman**

**INVENTORATOR** Mick Gordon

# INPEX Americana

ONE MAN ENAMOURSED OF THE AMERICAN WAY

**A**S INVENTOR OF the KlenzPod™ dispenser, I have recently returned from the INPEX show in Pittsburgh, and thought you might be interested to hear what I thought about it.

In my experience, this is probably the best show in which to participate in terms of making commercial contacts. Given the current Exchange Rate, it is not massively expensive to attend, either.

As you may know, the majority of the greatest inventions of the twentieth century came from individuals – not corporations. INPEX brings such innovators and companies together under one roof.

Companies such as Bosch, Everlast, Hasbro and Office Depot host corporate product reviews, searching for products to add to their product lines and giving inventors' feedback; one-to-one sessions can be booked with them. Such meetings would ordinarily take forever to get organised, but exhibitors at INPEX can book them as a matter of course, which is really quite unique.

INPEX hosts an 'Inventors University' for exhibitors, which offers morning seminars before the show opens at midday, dealing with topics such as licensing, patenting, manufacturing in China etc.

## Football isn't king

The Palexpo International Inventions Exhibition in Geneva (see *Inventique*, May 2007) has a far greater number of visitors than INPEX, but the American show is only open to the general public on its last day, the other three days being exclusively reserved for attendance by invited corporate visitors and trade buyers.

This year, therefore, fewer than 1,500 people attended INPEX – but the quality of attendee cannot



**KlenzPod won the Best Invention of Europe award and the Personal Care Products gold medal at INPEX.**

be questioned. I met senior executives from major corporations, business owners, procurement agents and many others during the first three days – including those from the world's largest provider of hand-care liquids and dispensers, and others – with whom I now have an active dialogue.

Targeted at an increasingly health-conscious American public, my Klenzpod™ wet-wipe dispensing system was extremely well received at INPEX 2007, being awarded a gold medal in the Personal Care Products category and winning the European Invention of the Year award.

I should state here that in my view the methods of judging at these shows are pretty subjective; awards probably mean much more to the inventor than to the investor. Better, therefore, to concentrate your efforts on creating a sound business plan than on collecting medals which may help to open a few doors but are not going to help you win contracts. ■

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● WRTI member Mick Gordon is the founder director of Sound Approach Limited.

Contact: [mick@klenzpod.com](mailto:mick@klenzpod.com)

# Máire's magic moment

**M**ÁIRE MCLOONE was named British Female Inventor of the Year at the British Female Inventors and Innovators awards ceremony held at the Café Royal, London on 24 April.

Dr McLoone, a lecturer and Royal Academy of Engineering Research Fellow at the Institute of Electronics, Communications and Information Technology, Queen's University, Belfast, received the award after inventing a product that enhances security mechanisms to protect the public from identity theft, hackers and cyber-criminals.

"I was honoured to be named winner of both the ITEC innovation award and the overall Female Inventor of the Year award at the recent BFIIN ceremony," said Dr McLoone. "I highly recommend the BFIIN showcase and conference to anyone with a novel idea they wish to commercialise."

News of Dr McLoone's award

was welcomed by Professor John McCanny, head of the School of Electronics, Electrical Engineering and Computer Science at Queen's, who said: "This is a very prestigious award which recognises the outstanding quality of Dr McLoone's innovative research."

"Máire is an excellent role model for women inventors and has been highly recommended for her work in promoting science, engineering and technology for many years. This award is further recognition of her excellent work."

## The winning habit

Dr McLoone won the national Women's Engineering Society Award in January. She had previously won the Science, Engineering and Technology Student of the Year Award 1999 and the Vodafone Award at the Young Engineer for Britain Awards. She is an author and has written 35 international



conference and journal papers.

The BFIIN awards event, now in its ninth year, is organised by the Global Women Inventors and Innovators Network (GWIIN), a global network which aims to increase the number of innovative women embracing enterprise. ■

[www.gwiin.com](http://www.gwiin.com)

[www.ecit.qub.ac.uk](http://www.ecit.qub.ac.uk)

[www.equalitec.org.uk](http://www.equalitec.org.uk)

## DEPARTMENT FOR INNOVATION, UNIVERSITIES AND SKILLS

**On 28 June the government created the new Department for Innovation, Universities and Skills, tasked with ensuring that Britain has a highly-skilled workforce, a dynamic business community which seizes new technology & innovation opportunities, and a world-class science base.**

**The Department, headed by Secretary of State John Denham, will promote effective investment in research,**

**science, innovation and skills, putting these at the heart of the Government's competitiveness strategy.**

**Secretary of State John Denham said: "I am hugely excited by the challenges that lie ahead. It is thrilling to lead a department with the mission to ensure every person in this country has the opportunity to reach their full potential and highest ambitions."** ■

● [www.dius.gov.uk](http://www.dius.gov.uk) [www.dti.gov.uk/innovation](http://www.dti.gov.uk/innovation) [www.bnsc.gov.uk](http://www.bnsc.gov.uk)

## NEWS IN BRIEF

### ● HOT TOPIC SEMINAR

The next Hot Topic Seminar – Portsmouth University's popular series of monthly business lectures – takes place on Wednesday 18 July at 6pm in the Richmond Building.

In a talk entitled 'Securing your business data in a wireless environment', network security specialist Jamie Bodley-Scott, who is UK and Ireland operations manager with appgate.co.uk, will cover holistic security strategies for mobile phone, laptop, PDA and

computer security, and access control in a wireless environment.

● **Contact:** [allyson.hunt@port.ac.uk](mailto:allyson.hunt@port.ac.uk)

● **CHILWORTH BUSINESS CLUB** and Hampshire County Council host a free lunchtime seminar entitled *The Next Generation of Business Information in Hampshire* on Thursday 19 July at 2 Venture Road, Southampton Science Park, Southampton, Hants S016 7NP.

● **Karen Morgan** Tel: 023 8076 3795 [info@southamptonhub.com](mailto:info@southamptonhub.com).

● **HAMPSHIRE COUNTY COUNCIL** is developing a new generation of community-focussed learning and leisure spaces called Discovery Centres. Winchester, the latest, is due to open in November.

Discovery Centres provide access to a range of resources and facilities including meeting rooms, performance and conference spaces, ICT learning suites and specialist Business Zones.

**Helen Brewer** Tel: 01962 826 650 [helen.brewer@hants.gov.uk](mailto:helen.brewer@hants.gov.uk)

**T**HE VENUS FLYTRAP  
*Dionaea muscipula* is a bog-living plant from the Carolinas in the USA. It preys on insects and other small animals which venture onto its trap leaves and trigger their closure (top right) by disturbing sensitive hairs on the surface of the leaf. High-speed video recording shows that the leaves routinely shut in 1/25 of a second. Such speed of movement is uncommon in plants and so has attracted attention and theories for many years.

Because the Venus Flytrap is a non-woody plant, botanists claim it as their domain. The main thing botanists know about non-woody plants is that they rely on high internal pressure (turgor) for their rigidity and shape.

“Eureka!” they cry, “– the trap moves because of changes in turgor!”

But this involves a flow of water, which is at least 100 times slower than the speed of response and closing of the trap...

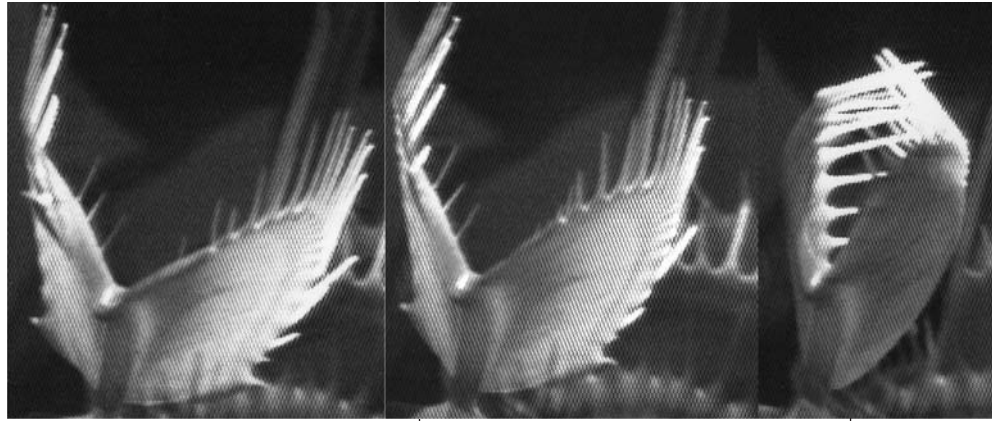
### Reality? Check!

Enter the engineer, who knows that it is possible for a plate to change shape from one curvature to another – equivalent to the Flytrap leaf being open or closed – without any change having taken place in the elastic properties (stiffness) of that plate.

The leaf can therefore be a prestressed bistable structure – in other words a structure which can adopt one of two stable shapes but switches between them in an unstable manner. The action can also be modelled, conceptually, by a simple catastrophe surface (above right). This appears to be the best model, and opens up a number of possibilities.

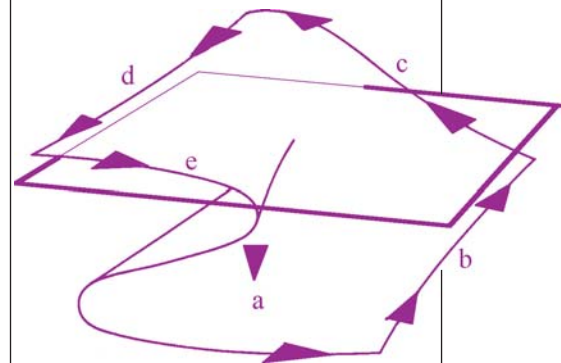
Although the closed leaf can be

**In accordance with Professor Vincent's commitment to the principles of Open Access, the ideas presented here are freely available. In demand as a lecturer and consultant to industry, he welcomes consultation or research enquiries by companies and entrepreneurs.**



**Above: A flytrap leaf closing at 0, 100 and 160 milliseconds.**

**Right: A simple catastrophe model of the Venus Flytrap leaf closing and opening cycle: above the plane the leaf is open; below it the leaf is closed. The pathway b probably represents loss of turgor; the pathway d probably represents re-establishment of turgor. High turgor gives high prestress and hence stored elastic energy. The leaf closes (a) in a catastrophic manner but opens (c) smoothly. Unfortunately, this still doesn't explain how the mechanism works!**



it afford to reinstate the prestrain and generate the necessary elastic strain energy. Unfortunately, although papers have been published, they are incomplete in that they describe only the closing mechanism.

### And the answer is, umm...

The two basic problems which have to be solved are: how do the sensory hairs work (the simplest idea is that they initiate an elastic instability – but how?) and how does the leaf open again?

A better understanding of this mechanism and the way in which it is designed and actuated would not only solve a long-standing conundrum, but could also give rise to a series of novel hydraulic actuators and switches with no moving parts, which could remain stable for long periods, yet become unstable and actuated with a very simple stimulus. ■

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bent back into the open position, it has not retained its behaviour as a bistable and quickly closes again. The leaf will, however, open naturally over a period of hours, necessitating a different mechanical pathway around the back of the surface shown above right.

During this opening phase the leaf grows, suggesting that the cell walls have softened and expand due to the turgor pressure. This softening precludes generation and storage of strain energy, which is necessary for the leaf to attain its pre-closure state. It also means that the leaf does not have to cross an elastic instability in order for it to attain its fully-open state. Only when it has completely opened can

*Julian F V Vincent is Professor of Biomimetics at the University of Bath. Biomimetics is the concept of taking ideas from nature and implementing them in another technology, such as computing, design or engineering.*

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[www.bath.ac.uk/Departments/Eng/biomimetics](http://www.bath.ac.uk/Departments/Eng/biomimetics)

"Creativity requires the courage to let go of certainties" – Erich Fromm

# www.wrti.org.uk

## THE INVENTORS WEBSITE

**CENTRE OF EXCELLENCE** Good Company Publicity

## The profile-raisers

TARGETED MARKETING WILL GET YOU NOTICED

**Y**OU DON'T GET a second chance to make a first impression, yet many SMEs, innovators and entrepreneurs spurn the opportunity of presenting their ideas, products and businesses to the world in the best possible manner – because they do not comprehend the nature of marketing and public relations, or appreciate the benefits to be gained.

When good, properly-focussed presentational and journalistic skills are brought to bear on getting a message across – in pitching an idea to investors or manufacturers, announcing a new product to the media, or raising the profile of a company – a professional marketing strategy reaps benefits and value far exceeding the fees involved.

Good Company Publicity are a small but dynamic value-for-money company based in East Grinstead who deal with a client base

including start-ups, sole traders and SMEs across the UK.

Whether it be press releases or press pack creation, researching new platforms for your product announcements or organising press launches, mail shots, graphics or consultancy work, Good Company Publicity have done it all before – they know the editors, the correct prices and who to liaise with in the media to ensure a consistent message goes out, targeted at the right people.

They also clarify the main tasks for the PR and marketing of a company and its products, including ways in which to view the subject and helping to identify the various aspects that need attention. ■

● **Good Company Publicity, Sunbeams, Lowdells Lane, East Grinstead West Sussex RH19 2AY**  
**T +44 (0) 1342 324513**  
**info@goodcompanypublicity.co.uk**  
**www.goodcompanypublicity.co.uk**

### BOOK OF THE MONTH

**The Man Who Knew Too Much: Alan Turing and the Invention of the Computer**  
by David Leavitt

Phoenix 336pp  
ISBN 0753822008 £8.99

To solve one of the great mathematical problems of his day, Alan Turing proposed an imaginary programmable calculating machine. In so doing, Turing became a champion of artificial intelligence, formulating the famous (and still unbeaten) Turing Test that challenges our ideas of human consciousness.



### WEBSITE OF THE MONTH

**www.bgateway.com**

Business Gateway is an excellent on-line resource for small businesses in the UK to search for information and support. Over 400 guides provide explanations of key business issues, such as exploiting your ideas to succeed through innovation.

The site includes a database of 2,500 grant and support schemes, a contacts directory of more than 4,000 organisations and trade bodies, and a network of more than 40 local Business Gateway outlets.

## BUSINESS LINK WESSEX INNOVATION CLINICS

Are you thinking about developing a new product or process? Have you invented something and don't know what to do next? Through its series of free Innovation Clinics, Business Link Wessex provides confidential and impartial guidance on such subjects as investigating an innovative idea, developing a new product or process, working with universities, exploiting inventions and intellectual property rights. Innovation clinics are held in the Bournemouth, Portsmouth and Southampton regions.

● **Advice Hotline: 08454 58 85 58** [innovation@businesslinkwessex.co.uk](mailto:innovation@businesslinkwessex.co.uk) [www.businesslinkwessex.co.uk/events](http://www.businesslinkwessex.co.uk/events)

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