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BFIIN Chairman's Award Winner 2007 www.bfiin.com

The newsletter of Wessex Round Table of Inventors December 2007

2-8 December

EUROMOLD 2007

www.euromold.com

Next WRTI meeting WEDNESDAY 12 DECEMBER

Guest speaker Bernard Brooks of Business Link (businesslink.gov.uk) will give a talk on obtaining R&D and other grants for innovation, followed by an Inventors Clinic. Room HC 017, Herbert Collins Building, Southampton Solent University, commencing at 6.30pm.

● Non-members wishing to attend should e-mail: secretary@wrti.co.uk or tel: 01420 562 378
Map: www.streetmap.co.uk (SO14 0RP)
www.wrti.org.uk/events

£25,000 business awards

THE CLOSING date for applications to the third WestFocus Enterprising Business Awards for small business owners wishing to grow and add value to their businesses looms on Friday 14 December.

Ten winners of the 2007 awards will gain access to a £10,000 service support fund and be enrolled onto six-month business support programmes worth £1,500 based at Kingston University, where they will meet like-minded business owners to discuss the issues facing their businesses, and receive input from entrepreneurial experts.

Award winners, who must be based in London or the south east and have been trading for three years, leave with a Postgraduate Certificate in Enterprise & Innovation and a plan of action to overcome identified obstacles hindering business growth. ■

● Full details and the application form: www.westfocus.org.uk/entrepreneurship

BFIIN off to Cardiff

MARCH DATE FOR FEMALE INNOVATORS AWARDS

ENTRANTS FOR the tenth annual British Female Inventors and Innovators Network Awards, hosted by the Wales Innovators Network in Cardiff on 10-11 March 2008, have until Friday 25 January to submit their product or process ideas.

With awards on offer in more than a dozen different categories – including communications and electronics, education, international trade, industry, IT and product design – the search is on for the UK's most talented and creative female innovators hoping to clinch the prestigious British Female Inventor of the Year title.

"The 2008 event will reflect the huge diversity of innovations we receive," said founder Bola Olabisi, who has also launched awards in Asia, Africa and Latin America as well as other parts of Europe.

"BFIIN welcome ideas from women of all backgrounds, whether scientists and engineers working on patented inventions or women with no previous R&D experience who have dreamed up a gadget at home."

Previous award winners include Dr Maire McLoone, inventor of a product protecting against cybercriminals, Morag Hutcheon with her Pre.vu music sampling device, Jayne Lawton for the Grobox, and Deborah Leary,

inventor of anti-contamination stepping plates for use at forensic crime scenes. ■



● Entry forms from:
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InnovationIntoAction 2008



WALES INNOVATORS NETWORK

The BFIIN Awards are being held under the auspices of the Innovation Into Action show, Wales Innovators Network's unique 'innovation brokerage' event where buyers and investors looking for new products, ideas or technologies can meet and discuss commercial opportunities directly with the developer at the showcase exhibition and networking lounge.

It claims to be the first and so far only event organised with the express purpose of bringing these two groups together to discuss collaborations and make deals. ■

● www.innovationintoaction.co.uk

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

WHETHER TO patent, and what and where in the world to file, is advice to seek from professionals. But remember they only make money if you *do* file, and patenting gets evermore expensive. Be sure your business can stand the cost, even if sales take longer to arrive.

You may think you know the Unique Selling Points of your product and precisely who will buy it and why, but ask the first customers who helped you develop it, and others in your market. They may have a completely different view which could strengthen your sales pitch or opens up new opportunities, and an affidavit from them will add to your credibility

The more target markets and routes to market you have, the better your chances will be. Stable businesses needs at least three legs, so pick three to pursue from the start if you can.

So often we find that by the time a product is ready, the original market looks less lucrative. But new uses may have emerged that more than compensate: these can provide the growth opportunities that attract discerning investors and assure you of a sound long-term business.

Speed is of the essence, especially if you have opted not to patent. Even if you want to retain control of everything yourself, it still pays to look at manufacturing partners and licensees as one of your options, albeit with caution. What you learn can outweigh the risk of pulling in a competitor.

The faster you get to your full market, the safer you'll be. There's no point having a huge order book if you can't deliver: if the demand is there and you cannot meet it, competitors will emerge like flies.

The price you sell at is related not to cost but to what your customer is prepared to pay. It's not easy to put up prices, but I once doubled a price first quoted, the customer agreed, and that led to 20 years of profitable business.

Before fixing your price, be sure customers are motivated to pay the maximum. Next month I'll talk about how best to do so.

Sincerely, Peter

PETER HEBARD, WRTI Chairman

INVENTORATOR Liz Jackson

Dreams to reality

PERSONAL PREPARATION IS THE KEY TO SUCCESS

WHEN YOU are preparing to take the plunge and start a business, there's a lot to think about, but the most important of all of those things is to think of *you*. It is your business that you are going to run; all of the successes, mistakes, actions and everything else are going to be yours. So it is vital that you are personally prepared for what can be the best thing you'll ever do.

One of the best pieces of advice I ever heard was Henry Ford's aphorism: "If you think you can, or you think you can't, you're right." You have to think big to achieve business success.

Consultants tell you to set SMART goals: specific, measurable, achievable, realistic and timely. I sum this up in one word: rubbish! Set huge goals and then really go for them. Shoot for the stars, get those goals firmly set in your mind and regularly visualise yourself achieving them. Whoever said you can't dream? Just dream big dreams.

I remember when I lost my sight

just after starting up Great Guns Marketing: an occupational therapist came to see me and told me to forget about running a business. Massage therapy or piano tuning would be 'more appropriate' avenues for me, apparently. I think I've proved that therapist wrong.

What stops people setting huge goals? Often it's because they might fail. But what's wrong with failure? I often fail, but I learn much more from that than I do my successes. Failure is a learning experience, so treat it that way. In America, they embrace failure and love it for what they learn from it – and this could be why they lead the world in entrepreneurship.

The other reason people don't set huge goals is that it's scary – but didn't you ever pay to go on a fair-ground ride or watch a scary film with the lights off? We pay money to be scared! Just learn to enjoy the thrill of setting huge goals and the fear of getting out of your comfort zones and going after them. ■

Concluded next month

© Liz Jackson 2007

● Liz Jackson founded Great Guns Marketing (greatgunsmarketing.co.uk) in the lounge of her rented Basingstoke flat in 1998 with a £1,000 grant and a £4,000 loan from The Prince's Trust. One year later she lost her eyesight. She now employs 120 people with a turnover exceeding £2m.

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KlenzPod wins another top award

WRTI MEMBER Mick Gordon's KlenzPod product won the 'Most Innovative Invention' award at the Inventors & Entrepreneurs Exhibition held at Millenium Point, Birmingham on 20 November and hosted by Inventors-Showcase.com.

KlenzPod™ is a personal hygiene cleansing system for both medical and commercial use, and has won awards in both the UK and USA, where Mick is in discussion with major distributors.

● mick@klenzpod.com www.KlenzPod.com

New QuickPitch tent

BU INNOVATIONS and graduate designer Franziska Conrad have signed a contract with leading camping brand Gelert to develop a new model of the successful QuickPitch festival tent first launched in 2006.

QuickPitch is an innovative pop-up tent that takes just seconds to erect and requires no poles. The contract is for Fran's new double-skin design; she also becomes Gelert's official face of the new tent.

BU Innovations Ltd, a wholly-owned subsidiary of Bournemouth University, helped protect the



A larger range of QuickPitch tents is planned for 2008.

intellectual property rights of the design and secure Gelert as a commercial partner and licensee.

QuickPitch has quickly gained commercial and critical success, and was proclaimed the coolest festival tent by Clive Garrett, editor of Camping magazine. ■

● www.bournemouth.ac.uk

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
www.businesslinkwessex.co.uk/events

● YELLOWFIN WAIVES THE RULES

A revolutionary marine propulsion system that adapts to changing sea conditions is proving a success for Southampton entrepreneur Anne Duncan, recent winner of the Queen's Award for Enterprise Promotion, who announced at September's Southampton Boat Show that her Yellowfin company has agreed deals with engine distributors Finning and Gregory Poole worth £11m.

Anne's husband, Ian, developed Yellowfin's 'variable surface drive' technology, which uses counter-rotating propellers and enables a vessel to turn on its own axis.

'It took five years of research and brings automation to the boating industry,' Anne said.

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info@yellowfin.com www.yellowfin.com

PREPARING FOR INVESTMENT, SELLING YOUR BUSINESS AND OTHER EXIT STRATEGIES

SUSSEX INNOVATION CENTRE

WEDNESDAY, 12 DECEMBER 2007

Preparing for investment? Selling your business? Corporate venturing? Then, this seminar is for you...

10:00 - 11:00am

Preparing for investment and sale of a business, including corporate venturing

~ John Kingsley, Baker Tilly

Legal aspects of receiving investment and selling a business

~ Alex Chester, Mayo Wynne Baxter

Alternative exit strategies

~ Mike Herd, Sussex Innovation Centre

11:00 - 12:00

Q & A with presenters



For more information, please contact:

Paul Jordan

tel 01273 704424

email paulj@sinc.co.uk

Free registration at: www.newproductnetwork.co.uk/register.php

THE LOCUST IS A migratory insect. Typically 15-20% of the weight of the mature adult female locust (right) is made up of eggs. These eggs are relatively dehydrated so that the locust doesn't have too heavy a payload to carry on migration, and only absorb more water after being laid in the ground: the female digs a deep hole so that the eggs can develop in dampness.

I became interested in the how the holes were dug. At the end of its body the female locust has a pair of lever-like valves which look a little like the jaws of a grab, except that the tips point in the wrong direction (right). For years people thought that the locust pushed these valves into the ground and then scraped away, pushing the earth to either side of the hole.

But then a friend said that he had been studying the eggs in a

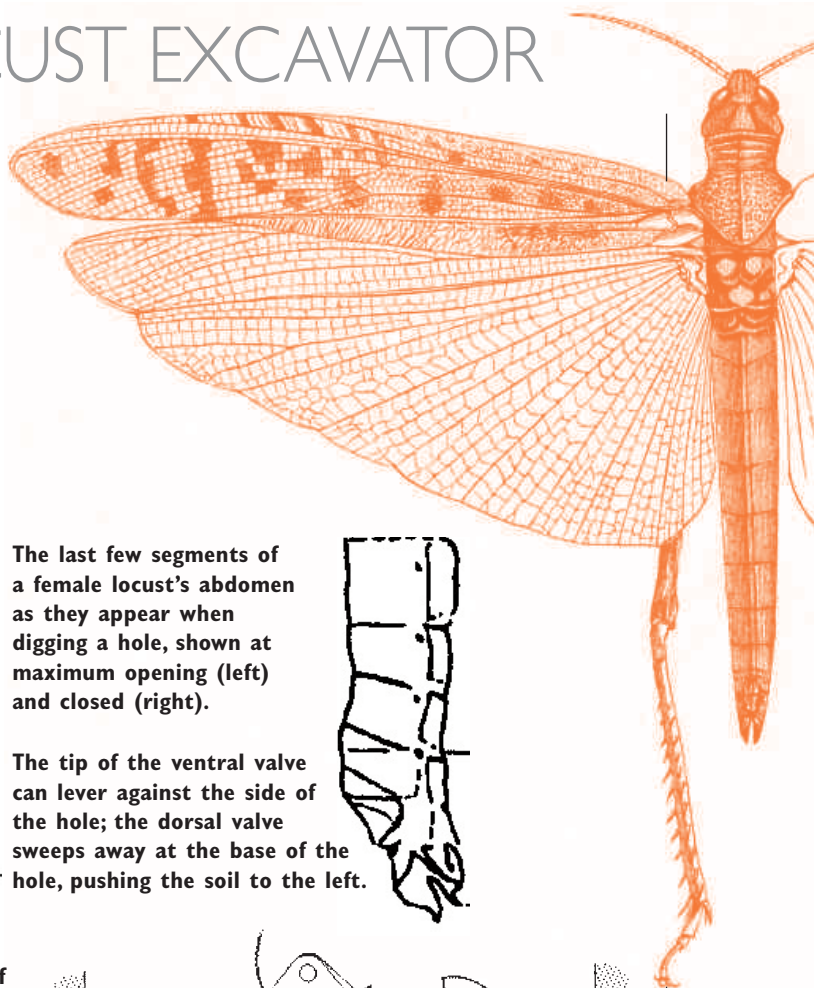
In accordance with Professor Vincent's commitment to the principles of Open Access, the ideas presented here are freely available. In demand as a lecturer and consultant to industry, he welcomes consultation or research enquiries by companies and entrepreneurs.

population of locusts by pulling the animals apart, counting the eggs, and throwing the dismembered bits down on the ground. To his surprise the isolated bodies were digging themselves into the ground, without the benefit of the rest of the locust to push them in!

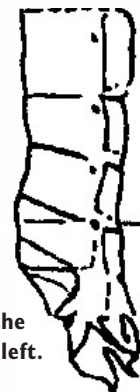
Clearly the valves were not only digging the hole, but were pulling the end of the locust into the soil as well. Accordingly I investigated the mechanism and decided that the ventral valves indeed pull the locust into the ground. As this happens, the dorsal valves sweep away at the base of the hole, compacting the sand to one side.

Together with a student, Charlie Manning, we discovered that the specific excavating energy of the locust ovipositor is about 200 kJ/m³ (compared with 368 kJ/m³

Right: Plan view of an adult locust with spread wings.

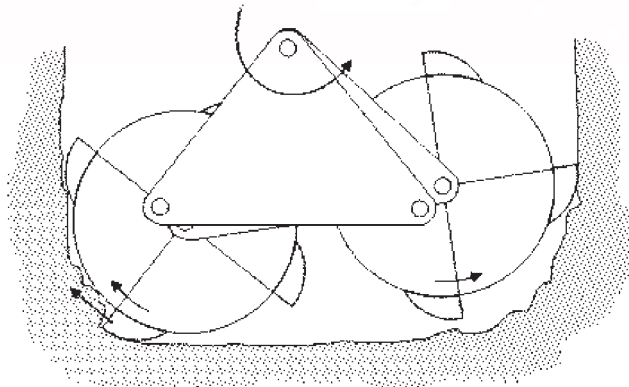


The last few segments of a female locust's abdomen as they appear when digging a hole, shown at maximum opening (left) and closed (right).



The tip of the ventral valve can lever against the side of the hole; the dorsal valve sweeps away at the base of the hole, pushing the soil to the left.

Right: Concept of a dual-digger excavator based on the locust. The device would be steerable by changing the relative speeds of the diggers.



calculated for an existing earth-drilling system). Thus an excavator based on the locust would be both realistic and feasible.

In a contract with the European Space Agency we developed this idea further, modelling the valves in a computer and also in reality, actuating them so that they would dig a hole in a sand-like substrate, pulling the device into the substrate as it went. We designed a dual-digger excavator (above) in which

both diggers will pull the device into the soil; the device would also be steerable by changing the relative speeds of the diggers.

The benefits of using this system for the design of a drill are clear. A self-burying drill requires no external force, making the system ideal for use in the low gravitational forces of the Moon or an asteroid. It can also drill horizontally, thus acting like a mole as well. ■

© Julian Vincent 2007

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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"The philosophers have only interpreted the world, in various ways. The point, however, is to change it" – Karl Marx

www.wrti.org.uk

THE INVENTORS WEBSITE

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CENTRE OF EXCELLENCE



Network news...

MULTIPLE HUBS HELP SPIN OUT YOUR BUSINESS

THE ENTERPRISE HUB Network provides specialist, personalised support to help knowledge-based companies in south east England grow and succeed. Help is free to members; your local Hub advises which services are most useful for your company.

The Network is built around a team of commercial experts based in Hubs across the region, drawing on a wide range of specialists to help entrepreneurs and businesses realise their potential. The Hubs typically help businesses at early or developing stages of growth, helping member companies to go further, faster.

Pioneering businesses

Enterprise Hub Directors all have experience of developing growing pioneering businesses, and can offer help and advice on every challenge a developing business is likely to face. The Hubs also act as conduits to specialist business services offered in the south east.

The Hub Network draws on sector-specific experience with, for instance, a dedicated Food Technology Hub, and a defence and aerospace Hub based at the Qinetiq site in Farnborough.

It's this breadth and depth of experience, together with an unmatched range of connections with business, research institutions and the public sector, that makes us such a powerful partner in developing your business. ■

● **Enterprise Hub Network**
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www.enterprisehubnetwork.co.uk

MAGAZINE OF THE MONTH

HUB: The magazine for the SEEDA Enterprise Hub Network

Free to members, this superbly produced quarterly magazine contains business information, company profiles, market analysis and much more.



WEBSITE OF THE MONTH

www.inventionshowcase.com

Every day that your invention isn't listed on Invention Showcase is another day 250 people won't see your invention. You can also register to receive e-letters publicising new events and opportunities.

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