



Spring 2010

Microfocus

don whitley
scientific

excellence in microbiology



First Installation of Whitley A35 Workstation

The first Whitley A35 Anaerobic Workstation to be installed in the UK went to New Cross Hospital in Wolverhampton. The unit was delivered at the end of March and staff in the microbiology laboratory are very happy with their purchase.

Laboratory Manager Juliette Large told us:

“ The Whitley A35 is ideal for us. It allows us to have access to the chamber so much more quickly than in the past when we either had to gas sleeves or use the airlock. Now we can deposit samples or retrieve them in seconds without compromising conditions inside the chamber - a major advantage in such a busy hospital laboratory. We also like the colour touch-screen display panel. It's easy to use and clearly shows all the environmental parameters in one place.”

Sales of the A35 Workstation have really taken off even though it was only launched at the IBMS Congress in September. The innovative, sleeveless entry system, patented by DWS, appears to be a feature that really appeals to those who have spent years being encumbered by gloves or sleeves. It is also worth considering for those who are looking at reducing running costs as the A35 uses eight times less gas when entering the workstation compared with a conventional porthole system.

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Rodwell Autoclaves Now Available from DWS

New from DWS is a range of autoclaves diverse enough to provide a solution for any size of laboratory. Solid, robust and reliable, these autoclaves are designed for practical purposes: safety, efficiency and ease of use.

Microprocessor controlled with a smartcard access system, Rodwell autoclaves can store 25 different programmes. The safety locks and detection systems employed ensure operator safety at all times.

Capacities range from 40 to 770 litres and models are available in benchtop, under-bench, freestanding and two door versions. Models are also available as electrically heated, electrical with vacuum, steam heated and steam with vacuum.

DWS offers comprehensive service, maintenance and UKAS calibration on all Rodwell autoclaves to ensure the full effectiveness of this important piece of laboratory equipment.

For further information on this comprehensive range, please call our sales office on 01274 595728 or email sales@dwscientific.co.uk.



Carole May of Camerons and Dave Dobson of DWS

Camerons Brewery Autoclave Installation

Camerons Lion Brewery in Hartlepool recently received their new Rodwell Ambassador 158E autoclave. Their previous autoclave was 30 years old so they were thrilled to have a brand new machine. Andrew Whitley and Dave Dobson, two of our service engineers at DWS, carried out the installation.

Overseas Successes for the Whitley A35 Workstation

The Whitley A35 Anaerobic Workstation is selling well internationally.

For a relatively new machine we have received orders from countries across the world: Japan, United Arab Emirates, USA, Spain, Italy, Australia and New Zealand.

However, the largest market to date for the A35 appears to be our nearest neighbour - Ireland, where we have sold three units already: two to Queens University, Belfast and one to Mid Western Regional Hospital, Limerick. Sincere thanks go to our Irish distributors Davison and Hardy.

People News



Tom Walton

Tom Walton

Tom has been promoted to Service Manager and will be responsible for a team of six service engineers who operate throughout England, Scotland and Wales. Tom also helps our international distributors with any servicing issues they have. Tom has worked at DWS for eight years.



Marion Knese

Marion Knese

Marion has been appointed to the sales team at Meintrup-DWS Laborgeräte in Germany. Marion will be office based for the first six months whilst she undergoes extensive product training.

Baby News:



Noah Davison

Alison Davison

On Sunday 24 January, Alison Davison, our Graphic Designer, gave birth to her third child, a baby boy – Noah.



Max Naylor

Russell Naylor

On 3 February, Production Engineer Russell Naylor became a proud, first-time father with the birth of his son Max.

DWS goes greener

In order to do our bit for the environment we would like to send as many of these newsletters by email as possible. If you received this newsletter by snail mail then that's because we don't have your email address. If you would prefer to be greener and receive this publication by email in future, please let your sales representative know or send your email address to:

sales@dwscientific.co.uk with 'Microfocus' in the subject line.

E-Shot News

We also have a free once or twice monthly e-shot news service that you may be interested in signing up for. You can sign up for news from just your particular industry, ie:

- Clinical microbiology
- Industrial microbiology
- Contract microbiology services
- Cell culture research

To sign up for this service, log on to our website and complete the form at www.dwscientific.co.uk/register.php and we'll send you the latest product information, press release or news of industry events.

New Product News

Petri-Flow™: Dishes on Demand

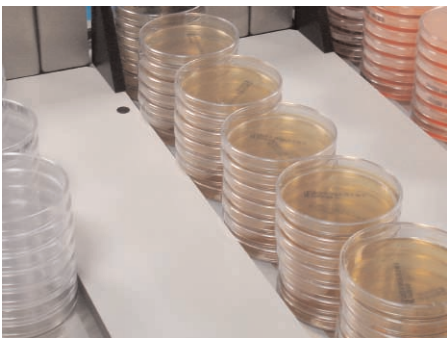
Petri-Flow™ provides a solution for busy laboratories by automating the flow of Petri dishes from receipt of sample to analysis.

From a base unit conveyor system a variety of options can be added to tailor Petri-Flow™ to your particular requirements. For example, you can add printers, agar dispensing systems, analysis/dilution/inoculation workbenches, barcode scanners, run-off benches, stackers, buffers, sorters, mixing and cooling units.



A Petri-Flow™ installation

Petri-Flow™ has been designed for easy cleaning and comes complete with a built-in belt cleaning attachment. With applications in food, clinical and water laboratories this system can be adapted to accommodate any constraints on space or budget.



Petri-Sort™



Analyst at work on Petri-Flow™



APS One

APS One Pourer/Stacker

APS One is the new pourer/stacker that can process 800 plates (18ml) per hour but is incredibly compact in size. Instead of tall towers of Petri dishes, the APS One has been designed with a wider carousel to house additional plate stacks. This makes the carousel much easier to load and unload for the technician and provides a much improved, level surface of agar. The APS One is able to accommodate all brands of 90mm and 50mm Petri dishes and the carousel holds 550 plates as standard with an optional store bringing the total capacity up to 800.

See Page 5 for a customer's experience with the APS One.

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The Importance of Oxygen Control in Cancer Research

For many years we have worked closely with Dr Roger Phillips of the University of Bradford's Institute of Cancer Therapeutics. The following wording is an extract of an article he wrote. The full text can be read on our website.

It is now well established that hypoxia is a characteristic feature of many solid tumours. Hypoxia or low oxygen tension results from a deficiency in oxygen reaching the tissues. In tumours, the main factor causing this is an inadequate blood supply. Hypoxia appears to be strongly associated with tumour progression and resistance to therapy, and has therefore become a key research area in the study of tumour physiology and cancer treatment. As a result, controlling oxygen tension is an important part of experimental design in modern cancer research.



Dr Phillips working in his DWS Hypoxystation

The history of hypoxia

The first observations regarding the role of hypoxia in tumour cells were noted at the beginning of the last century when Schwarz indirectly demonstrated that hypoxia increased tumour resistance to radiation therapy¹. He noted that compression of skin to decrease blood flow reduced the effect of radiation on the cells. Further work by Crabtree and Cramer² and later by Mottram³ demonstrated that lowering the oxygenation of tissues made them more resistant to damage caused by ionizing radiation. However, it was in the 1950s that Gray and colleagues provided the first real evidence of a hypoxic microenvironment in human tumours and proposed that hypoxia had a role in the pathogenesis and progression of cancer⁴. Since this pioneering work, the role of hypoxia in cancer has broadened significantly and is now appreciated to affect every major aspect of cancer biology.

To read more of this article, please log on to our website at www.dwscientific.co.uk/oxygencontrol.php

1. Schwarz G. Über Desensibilisierung gegen Röntgen-und Radiumstrahlen. Münchener Med Wochenschr 1909;24:1-2.
2. Crabtree H. G., Cramer W. The action of radium on cancer cells I. II. Some factors determining the susceptibility of cancer cells to radium. Proc. R. Soc. Ser. B., 113: 238-250, 1933.
3. Mottram J.C. A factor of importance in the radiosensitivity of tumours. Br J Radiol 1936;9:606-14
4. Thomlinson R.H., Gray L.H. The histological structure of some human lung cancers and the possible implications for radiotherapy. Br J Cancer 1955;9:539-49

APS One CASE STUDY



M Gaudin with his APS One

“We were pleasantly surprised by the speed and efficiency of the APS One. It is very reliable and can carry out a complete culture media dispensing cycle without supervision. The large plate loading capacity makes it ideal and it's a true walk-away pouring system. The double pump accessory makes this automated filler very practical for large volumes: 10 litres of media in just 40 minutes without any need to reload the carousel with empty dishes. Another innovative aspect of the APS One is the pouring quality: smooth, level media in the Petri dishes without any “wave” effect. The risk of contamination of sterile distributed media is radically reduced because the opening of each plate is limited to 4 seconds per Petri dish when pouring.”

M Gaudin, Bacteriology Laboratory, CH Rennes, France

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A Profile of John Baines: our musical calibration manager

Don Whitley Scientific's calibration manager, John Baines, has a musical talent that not everyone is aware of. He is bass guitarist/vocalist in a band called 'Wild Geese'. The band travel far and wide with their mix of traditional Irish and Scottish music - as far afield as the USA, and have even played the famous London venue 'The Mean Fiddler' (on the next stage to Carly Simon). John has been with the band for 20 years and these days they are in great demand to play at weddings and Céilidhs.

John's work as Calibration Manager involves the calibration of autoclaves and media preparators to UKAS standards. He also carries out validation work, which involves trying to prove (or disprove) that items at the bottom of bags and not just in the chamber of the machine actually get to the correct temperature.



John takes great pride in his work but does find that labs often see calibration/validation work as something they have to have done if they are a UKAS laboratory. In today's economy we are all struggling to keep costs down but John believes there are some things you cannot compromise on. Some laboratories don't realise that there is a quality of workmanship issue to consider. It's the same old adage: you get what you pay for. He adds: *"Over the years I've been to labs where they think they are sterilising properly but when I look into it, I've found many cases where only the outside of the bag has been sterilised and not actually the contents. Lab Managers are obviously very concerned when they discover this. Sometimes a lot of their work then has to be redone wasting precious resources."*



John likes to take the time to explain the paperwork to customers so they understand what's happening, and perhaps what isn't happening that should be. The graphs can be a bit complicated but John believes lab managers need to know that equipment is operating as it should.

Recently John has been doing more work supporting laboratory monitoring equipment. Of this up-and-coming area John says: *"Much of the new monitoring equipment is computerised and this takes me away from traditional engineering and into the realms of computer networking. I'm really enjoying the challenge as software and technology become ever more entwined and ever more sophisticated."*

John has worked for DWS for 10 years and is married to Sally, our Service co-ordinator.

2010 EXHIBITION / CONFERENCE DATES

Don Whitley Scientific has already confirmed attendance at the following exhibitions/conferences. If you are visiting any of these events, come to our stand for the latest news on our product range. Log on to: www.dwscientific.co.uk for continuously updated exhibition information.

- Rapid and Alternative Microbiology Methods, 11 June, Campden BRI
- Yorkshire Cancer Research Annual Scientific Meeting, 22 June, Harrogate
- Association of Radiation Research, 28-30 June, Oxford
- SfAM Summer Conference, 6 July, Brighton
- Biochemical Society Autophagy - From Molecules to Disease. 8-12 September, Cirencester
- Microbe 2010, 24-25 September, Sheffield

For more information on any of the products featured in this newsletter, please contact us:

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