

TECHLINK

a newsletter for science technicians

No: 63 December 2006

I apologise for the slight delay but there have been a few changes!

The science centre has moved from Turner Road to the Norwich Professional Development Centre at Woodside Road where there is a training room and storage cupboard for basic equipment. The science strategy team consisting of Adrian Tebbutt, Mike Land and David Glenn will be able to help if you have any difficulties and can be contacted on the PDC number of 01603 433276.

I have taken early retirement and am now working for Children's Services for one day a week. I will still be doing the health and safety audits, the radiological protection work and be the CLEAPSS contact, so hopefully we can still maintain the contact. My home email is on the next page and this will ensure a quicker response as most of the time I will be working from home.

CLEAPSS Microscope Servicing Course

Before I retired I arranged the above course which successfully took place in the new training room at Woodside Road. Several technicians asked for this training, and fortunately, the twelve required to make the course viable attended.



Please try to apply if you see a training course you need. Just one person can make the difference between a course running or not, and having to disappoint 4, 8 or 11 technicians.

The British Association

If you missed the British Association Science Week you missed a good opportunity to see children and adults enjoying science.

I was able to visit various lectures and demonstrations. I watched children fascinated by a Fish Eagle flying inches above their heads and being told to turn their backs on a Barn Owl which then surprised them by its silent flight. Of course, they liked the gruesome bits, like the fact that if the eagle ate their teacher it would only regurgitate the hair, toe-nails and finger-nails!

There were lots of other hands-on activities and opportunities to try things like flight simulators, air powered motors and digital microscopes.

A good week and well organised by the Norwich Research Park and the Teacher Scientist Network.

FREE interactive access to the stars

Try <http://www.telescope.org/> this site is pupil centred and has teacher resources. Run by Bradford Robotic Telescopes in Tenerife and the University of Bradford Department of Cybernetics.

Second-hand books

Copies of Physics for OCR A by Heinemann and Balanced Science 2 second edition by Cambridge are on offer from Wymondham College. Contact the technicians on 01953 609000.



every child matters
a brighter future for Norfolk's young people

If you have access to the Internet the Technicians Discussion Group is there to help. You have to register but once done the world is at your fingertips! Be aware however that some responses may be from abroad and some may be from Independent schools, so different rules will apply to different establishments. Also be very cautious if asking for safety advice, not all of the replies are as accurate as they should be, although they are trying to be helpful. CLEAPSS is still the best source and should be your first port of call. Below are some examples of good advice and the type of subjects discussed.

We asked the question "Do you help out with practical lessons in the classroom environment?" So here are the results. 18% of those who took part said that they regularly helped out in the classroom because it was part of their duties. 63% said that they occasionally took part, if they had the time - the decision was theirs to make (or perhaps they were asked by the teacher). Finally 19% said that they never went into the classroom because they did not feel it was part of their duties.

Try shining a bright (projector) light on to a CD disc to produce a demonstration spectrum? This was demonstrated on the Sky at Night.

Hay Infusion - Use the link below to the MISAC web site for a hay infusion sheet. A much better version of this will be published in 2007.
<http://www.microbiologyonline.org.uk/forms/hay.pdf>

Disposal of Human Remains

Medical schools will usually only be interested if the human skeleton is in good condition. If it is, you may be able to SELL it for a lot of money! CLEAPSS recommend contacting a local crematorium and most seem to help out. The link below should take you to the Human Tissue Authority web site which lists all of its codes of practice.
http://www.hta.gov.uk/guidance/codes_of_practice.cfm
I think there is a problem with the HTA web site at the moment as I cannot log on to it to check that this link is still current? Assuming that it comes back on line in due course, COP 5 is the one that is relevant to your situation. Click on that and then scroll down to page 18

which should bring you to Appendix A that relates to "tissues of unknown origin". Paragraph A3 is quite clear and I reproduce its statement below.

"NHS Trusts should offer to help any local school or college wishing to dispose of existing holdings and help to arrange disposal on their behalf in accordance with this code."

So, if local crematoria won't help, try a local hospital; contact the consultant in charge of histopathology. Hopefully, if you use this information in an approach to a hospital, you will be successful. If you still find that the hospital is unhelpful, you might be able to call in the big guns at HTA to have some influence!

Different Soils - Better to mix in lots of sphagnum moss peat to lower the pH. Addition of acids may not have the desired effect.

Fluorescing Lotion - GLS Educational Supplies (0800 9172246; www.glsed.co.uk) sells "germ powder" item 374371; £22.15) and UV lamp, item 377253; £19.99. However, there is no indication in the catalogue about how much you get for your money! A cheaper alternative which perhaps isn't quite so exciting is to use body glitter gel. The gel = mucus, the glitter = cold virus. Go to www.microbiologyonline.org.uk and download the file 'Cold Wars' for details and student worksheet. On the home page, click on 'SGM' button, then 'Resources' and then 'Secondary'. Voila!

Finally a tip from down-under

To make cylinders of agar (of whatever version - starch, NaOH/phenolphthalein) simply make agar solution as per requirements, allow to cool until about 55°C, slowly pour agar into pvc tubing of appropriate diameter which has one end plugged with tape/ stopper/blue tac. Allow agar to set then it can be blown out (taking into consideration appropriate safe procedures), or place tubing in warm water to melt the outside and then allowing gravity to let it fall out. If the length of agar in the tube is not too long it will come out easily, I do up to about 40cm. This is much less wasteful and time consuming than using cork borers. Cheers, Dale Carroll, Laboratory Technician, Geelong College, Australia.