

KIT CLUB NEWS!

Carol Hince is new resources officer

Kit Club couriers

"oh, I never got round to using it" Anon, 2006

Your phone call to borrow kits from the TSN Kit Club will now be greeted by a new voice, that of Ms. Carol Hince, formerly of Hethersett Old Hall School. Carol began in post immediately after the BA Festival of Science and is looking forward to meeting Kit Club regulars and new faces.

Do you have problems getting kits to/from the John Innes Centre? - have you thought about using a friend, partner, neighbour or colleague to collect on your behalf? Lots of people work across the Norwich Research Park and we want to make it as easy as possible for you to access our kits.

"oh, I never got round to using it" will make many of you cringe. Please, please, please on behalf of the **68 other schools who are members of the Kit Club**, if you don't think you'll use a kit, get it back to us as soon as possible, or cancel your booking - someone else could be using that kit.

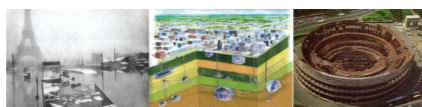
Full kit information available at www.tsn.org.uk, under Kit Club, or contact tsn.kits@bbsrc.ac.uk - email is our preferred method of kit booking. Alternatively telephone Carol Hince on 01603 450619, Wednesday - Friday inc.



Above: Carol's heart skips a beat in her new post as TSN resources officer; below, part of a new kit to help teach 'Life Cycles'



GIFT 2007



For the fourth year running we are delighted to promote the opportunity for our high school teachers to attend the GIFT conference which is of particular interest to teachers of the Earth Sciences and will take place at the Austrian Center Vienna between Monday 16th April 2007 and Wednesday lunchtime (18th April). This year's topic is *"Geosciences in the City"* in which the topics of geology, climate and environment of large urban areas will be addressed.

Full details and application forms are downloadable at <http://www.atmosphere.mpg.de/enid/gift> and via a link from the 'News & Events' page of the TSN website (<http://www.tsn.org.uk>). This event is highly subsidised by the European Geosciences Union and has been positively received by all previous UK attendees (see TSNNews 21, 'What a GIFT') although the timing of next year's event, which is controlled by the timing of EGU General Assembly, does coincide with the first few days of summer term. Closing date for applications to attend GIFT 2007 (to be sent direct to TSN):- 1st December 2006.

Dates for your diary ...

2006:

8th Nov - TSN Annual Meeting 2006

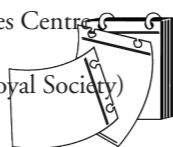
24th Nov - RCUK/SLC Astrophysics CPD course, John Innes Centre

2007:

09th Feb - closing date for Partnership Grant applications (Royal Society)

09 - 18th Mar. - National Science & Engineering Week

16 - 18th Apr. - GIFT 2007 (above)



Membership update ...

TSN continues to grow with over 200 active teachers on our mailing list, 90 scientists and 45 associated people. Since TSN began in 1994, over 300 teachers and over 200 scientists have been involved in the scheme.

New Members - Welcome

Teachers

- Mrs. Fiona Kempton, Greshams Prep. School
- Ms. Rachel Hope, Stalham High School
- Mr. David Houlton, Broadland High School
- Ms. Lucy Austin, Costessey High School
- Dr. Sammia El-Labany, Hethersett Middle School
- Ms. Susan Bates, Coltishall Primary School
- Mrs. Evelyn Kasumba, Herman Middle School

Scientists

- Ms. Lieve Laurens, John Innes Centre
- Miss Carla Clé, John Innes Centre
- Dr. Corinne le Quere, ENV, UEA
- Mr. Graeme Weatherill, ENV, UEA
- Ms. Inmaculada Gomez Garcia, John Innes Centre
- Ms. Hanneke Luijting, ENV, UEA
- Ms. Melanie Dunk, Institute of Food Research

Teacher Scientist Network (TSN)

Telephone +44(0)1603 450304, Fax +44(0)1603 450045, Coordinator: Dr. Phil Smith

Email ts.network@bbsrc.ac.uk, Chairman: Prof. Keith Roberts

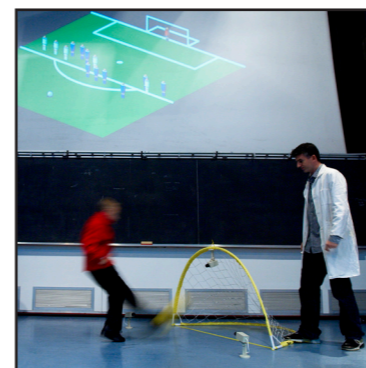
www.tsn.org.uk

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TSN News

"Cool, wicked, fantastic ... what a buzz!"

Two years of planning, a hectic old summer and as we stepped into September it finally arrived, the beast known as the BA Festival of Science. Hailed by the BA as hugely successful, the people of Norwich, Norfolk and beyond greeted the Festival with open arms. Many events sold-out whether on campus or in the city but it wasn't until the Wednesday of Festival week that a real buzz descended on the campus with the arrival of almost 1000 school children which grew to almost 2000 on the Friday. We dedicate a good deal of space in this edition of TSNNews not just to its memory but to using the festival as a springboard to sustained science activities in our schools for the rest of the year. Whether you had the chance to come to the Festival or not, we hope 2006/07 can be a year of science, and we hope we can help. Read on ...



What people said ...

the BA
festival
of science
2-9 sept 06

'as an enrichment programme and a stimulus it was priceless'

'So much physics being absorbed so painlessly'

'Do we have to get back on the bus - I don't want to go now'

'that was totally awesome!'

'so good I went back on Saturday'

'it was worth the long journey'



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FESTIVAL SUSTAINABILITY - see over for ideas & support

Science beyond the Festival



For National Science and Engineering Week 2007, which runs from the 9 – 18th March, the DTI (Department of Trade and Industry) are providing limited extra funds for a number of schools within the UK to organise their own science and engineering events as part of the week.

This small grant scheme is open to all state schools and aims to attract teachers and schools who would otherwise find it difficult to take part in National Science and Engineering Week. Priority for these grants will go to schools with a high proportion of pupils from a disadvantaged background or with a high proportion of black and minority ethnic pupils.

There will be two rounds of applications. The deadline for the first round will be Friday 24th November 2006 and the deadline for the second round will be Friday 26th January 2007. Grants will be up to £150 per school. Further details at www.the-ba.net/nsew or contact a member of the team on nsew@the-ba.net or on 020 7019 4963/37

Partnership News - Mark Smedley (JIC) and Fiona Edwards (Hewett School)

My involvement with TSN started following a successful encounter with a Nuffield Scholar who introduced me to her 'A' level Biology teacher Mrs Fiona Edwards, now my TSN partner from Hewett School, Norwich. In the autumn of 2004 we applied for a National Science Week Award to enable sixth form students from Hewett to attend "DNA Day" in March 2005 at the John Innes Centre; a day of molecular biology experiments, seminar and discussion. The event was such a success that we repeated it in 2006; feedback from the students was excellent, very positive, one student even called me "awesome" which is

BA CREST is the only UK-wide, fully accredited science enrichment scheme. Through BA CREST, young people aged 11-19 explore the real nature of science and technology by doing their own creative problem solving through mini research projects. There are three levels – bronze, silver and gold awards. *At higher levels, students are linked with mentors in industry or higher education who help them develop and carry out their project work.*



BA CREST Awards supports the new programme of study for science at GCSE 'How Science Works'. BA CREST can also be used to deliver work-related learning and accredit GCSE Design and Technology coursework and extra curricular project work.

For further information visit: www.the-ba.net/crest



CREST FOR PRIMARY SCHOOLS...

From September 2007, CREST Awards will encompass children from 5 years old through to 19 years old. CREST * Investigators will provide motivating science activities to foster and cultivate investigative skills in children of primary age. For further information visit: www.the-ba.net/resourcesforlearning

Could you use CREST in conjunction with your scientist partner ?

TSN backs Norwich City for Science

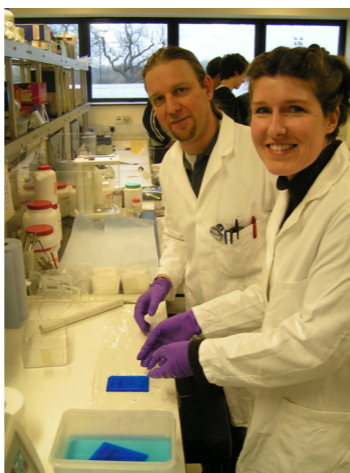
Immediately after the Festival there was a renewed call for Norwich to receive 'City for Science' status from Dr. Ian Gibson, MP for Norwich North and former chair of the House of Commons Select Committee on Science & Technology. The financial benefit of such an award would be a tremendous for the region and investment in science and technology would have an obvious knock-on effect to our regions' schools, with more specialist science colleges (Norfolk currently has 8 specialist science colleges). TSN fully backs this call and we have put ourselves forward to work with Dr. Gibson & colleagues to promote the Norwich Research Park as a centre for scientific and educational excellence with TSN an example of best practice in linking the two communities.

unheard of being a scientist!

The amount of work that goes into organising an event is tremendous, but the buzz you get when it goes well is fantastic. It is something of an emotional roller-coaster; a mixture of relief, that things have worked, elation and a great deal of pride because all the hard work is really appreciated. The help & support I receive from lab members on big days like that is invaluable.

I started along the TSN road with trepidation. I don't really like kids much, even though I started out as one, but now I really enjoy it. I'm able to use my technical skills to show the pupils how scientific techniques are applied in a practical manner to solve scientific problems. I don't feel that I'm a very good communicator; so when I see how good Fiona is, I just watch and learn! Fiona has the chance to show the students practical science, and do some

herself (photo) and the practical context is invaluable when explaining things to the pupils in the classroom. Our partnership is definitely helped by the fact we have become good friends and have met socially at several JIC events. For the forthcoming year I hope to get more involved in the classroom; taking my technical skills to the school.



Reminder - Annual Meeting 2006

How rough is your science ?



- a talk by Jonathan Hare (BBC TV, *Rough Science*)
- Giveaway of surplus lab equipment
- Free refreshments

Open to all teachers & scientists, members or non-members, a chance to catch-up with your partner or meet a new one!

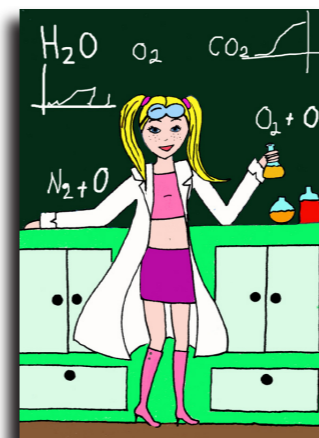
Share experiences, swap ideas and feed back ideas to us.

John Innes Centre conference centre, Norwich, 8th November 2006, 6pm start

Nysgjerrigper! - from the land of the midnight sun

In Norwegian, the name Nysgjerrigper is the equivalent of the English 'curious George' - in other words a person who questions every topic. Nysgjerrigper, the Research Council of Norway's project for primary school children recently explored children's attitudes towards science. Nearly one-third of the new set of drawings depict female scientists in many different research situations compared with no females and lots of lab-only scenarios drawn in the 1990's. The drawings are made by both boys and girls aged 6-13 yrs, and while the 'mad scientist' persists it is refreshing to see a change in the children's attitude.

Given TSN's work in this area in 2000 (see news Archive at www.tsn.org.uk), and still a popular topic when a group meets a scientist for the first time, we are most grateful to Marianne Loken at Nysgjerrigper for allowing us to reproduce a couple of the images here (all 250 images can be viewed at www.nysgjerrigper.no/Artikler_Engelske/1133784661.15 together with a summary article in English). There is also a direct link from the TSN website as this isn't the easiest web-address to reproduce!



Thomas Browne Affair

A talk for schools based on a presentation to the BA Festival of Science, 2006

Illustrated with some bizarre experiments, this talk celebrates the ideas of Sir Thomas Browne of Norwich, 1605-1682. Browne was a true Renaissance man - physician, philosopher, naturalist, moralist and writer. In his *Pseudodoxia Epidemica*, or *Vulgar Errors*, Browne used his literary talent to debunk the urban myths of his day in an entertaining way. In his use of rationalism to attack widespread superstition, Browne stands at the beginning of a tradition of scientist-writers that today includes Carl Sagan and Richard Dawkins.



This talk interweaves passages of Browne's remarkable prose with re-enactments involving audience participation of Browne's experiments. It highlights the contemporary relevance of Browne's aims and method in a time when urban myths (MMR vaccine danger, crystal remedies etc) still abound. It should be of interest to sixth-form level students generally, but especially in the sciences, history and English.

Interested schools should contact Hugh Aldersey-Williams on hugh@hughalderseywilliams.com or 01263 735670.

STOP PRESS!

"FROM HYDROGEN TO HUMANS"
24th November 2006, JIC

East of England Science Learning Centre course in Norfolk for secondary school teachers. Bringing cutting edge science into the classroom - an atomic journey from the Big Bang to Earth

www.sciencelearningcentres.co.uk