# **KIT CLUB NEWS!**

Sheila to leave TSN in the summer
New Kit - Magnets & Springs available now
Kit Club rules - we need you to get tougher, else we'll have to!

After over 4 year's tremendous service to TSN, we were sorry on the one hand to hear of Sheila's decision to leave TSN but delighted on the other hand that she has been successful in her application to pursue a doctorate in Applied Educational Psychology. The Kit Club has grown considerably under her guidance, and we are indebted to her for all her hardwork during these 4 years and particularly recently for her diligence and enthusiasm running the National Kit Club project. These are big shoes to fill, but it means we need a new resources officer, see advert below.

Two issues continue to make our life difficult - the return of incomplete kits and late returns. We need you to check more thoroughly the contents of the kits before returning them and please ensure that they are returned on time. The time taken to chase kits is taking more & more of Sheila's time and we are having to consider a yellow card system for regular offenders! If you book a kit, and circumstances transpire against you using it, please do let us know - someone else may well want it!

A wide variety of magnets and springs ideal for teaching this Yr3 QCA unit & more have been added to the Kit Club repertoire,

Full kit information is available at *www.tsn.org.uk*, under Kit Club, or contact tsn.kits@bbsrc.ac.uk or telephone Sheila McCarter on 01603 450619

### Job Opportunity

We are seeking an enthusiastic and creative administrator to fill the part-time post of Kit Club officer. The post-holder will be responsible for taking bookings of kits, maintaining a database of these bookings and checking the integrity of the kits before they are offered to another school.

We are seeking a well-organised individual capable of independent work who possesses excellent inter-personal skills and has a rigorous attention to detail. The ideal candidate is someone who has a keen interest in education or who has previous experience of science education. This part-time post (0.6 time) is a fixed-term appointment for 12 months in the first instance to begin in September 2006 and remunerated at a rate of £16020 p.a. (pro-rata).

Letters of application and a current *curriculum vitae* and the names of two referees should be sent to Dr. Phil Smith, at the address below. Informal enquiries by telephone are welcomed (01603 450304). Closing date for applications is 30<sup>th</sup> June 2006, interviews will be held on 24<sup>th</sup> July.

#### Dates for your diary ....

4<sup>th</sup> July - Science Learning Centre (primary)course at JIC *"News ideas for teaching Plant Science*" 2-9<sup>th</sup>Sep - BA Festival of Science, Norwich

Oct - TSN Annual Meeting 2006 20<sup>th</sup> Oct - Closing date for partnership grant applications (Royal Society)

#### Teacher Scientist Network

Coordinator: Dr. Phil Smith John Innes Centre, Norwich Research Park, Colney, Norwich, NR4 7UH Telephone +44(0)1603 450304, Fax +44(0)1603 450015, Email ts.network@bbsrc.ac.uk,

CLOSED ! ALL TSN OFFICES WILL BE CLOSED

BETWEEN 2<sup>nd</sup> & 10<sup>th</sup> SEPTEMBER KITS NOT AVAILABLE FOR COLLECTION UNTIL 13TH SEPTEMBER

#### New Members - Welcome

Teachers

Ms. Fiona Edwards, Hewett School Mr. David Arkieson, Sheridan House School Mr. Chris Jones, Wymondham College Mrs. Jenny Roberts, Heartsease Middle School Mr. Peter Lacey-Hastings, Brockdish Primary School

Mrs. Gillian James, Hillside Avenue Primary School Miss. Anna Malloney, Woodside First School Mr. Nick Read, Peterhouse Middle School Dr. Dale Southall, Old Hall School Mr. David Park, Hethersett High School Dr. Wendy Pitt, King's School, Ely Mrs. Maggie Stickney, Northgate High School Mrs. Beverley Lewis, Archbishop Sancroft School

#### Scientists

Dr. Kathryn North, John Innes Centre Dr. Caroline Wolfe, Institute of Food Research Dr. Carole Thomas, John Innes Centre Mr. Matthew Hicks, John Innes Centre Dr. Liz Nicholson, John Innes Centre Ms. Rachel Wells, John Innes Centre Ms. Amy Gasper, Institute of Food Research Miss. Sarah Heaton, Institute of Food Research

www.tsn.org.uk

#### Newsletter of the Teacher Scientist Network



#### TSN secures further funding

Since the last newsletter we are delighted to report that our sponsors of the last 12 successful years, the Gatsby Charitable Trust, have agreed to fund a further 12 months of TSN activity in Norfolk. During this time we will be seeking longer term funding solutions as Gatsby have indicated that due to a change of focus by their trustees they will not continue to fund TSN after this time.

We are extremely grateful to the trust for their sustained support over the last 12 years, a period which has seen TSN grow into a well-respected science education charity that now has almost 200 teacher members, over 80 scientists and at least 45 individuals who just want to be kept informed of what we are up to. Most importantly we will continue to provide what our members ask for, so we are always keen to hear from you!

This edition of TSNews is something of a Festival Special - we are less than 80 days away from the start of the BA Festival, Norwich 2006; page 2 of the newsletter gives more details. But the last 6 months have also seen a bumper turn-out at the Annual Meeting, a Primary Science Workshop, a Master Class focussing on the physical sciences and a public lecture. Read-on! On the back page you'll find the latest on our Kit Club.

#### Partnership Forum, Monday 4<sup>th</sup> Sept: 16:00 - 18:00, UEA

A debate/discussion forum exploring the future of teacher-scientist partnerships. "*Twenty-first century science with today's scientists*"

What are the restricting factors on partnership activity and just how relevant are they today? With changes in the new curriculum how best can the science community support education.

Updates of speakers for this session will appear on the TSN website. Those of you with experience of TSN partnerships are invited to contribute to the debate and have your say.

This event is part of the main festival programme. There is a search facility for the main programme on-line at *www.the-ba.net/the-ba/Events/ FestivalofScience/* which helps you pick out events that may interest you according to keyword, day of the week or event type.





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#### The Final Countdown - around the festival in less than 80 days ...

#### Young Peoples Programme: Events for 8 -13 yrs and 14 - 19 yrs: 6 - 8th Sept. inc.



Helping hands - Helen (TSN) looking after the 8-13 yrs. booking hotline

A collection of hands-on workshops, science shows, debates and opportunities to meet scientists. TSN has assembled the collection of events for the 8-13 yrs programme whilst the 14-19 events have been organised centrally by the BA. All schools should now have received their programme detailing all the events, but we have enclosed personal copies for our TSN members with this edition of TSNews.

If this looks too daunting, fear not, contact Helen (8-13) or Steph (14-19) and they will be more than happy to help plan a day at the Festival for your pupils.



Helping hands - Steph (BA) looking after the 14-19 yrs. booking hotline

#### Supporting Attendance ...

#### TSN & UEA win grants from John Jarrold Trust and Anguish's Educational Foundation

We realise that attending such events is often prohibited by costs, particularly for those schools & their pupils from areas of social deprivation. We are most grateful therefore that recent grant applications by TSN & UEA to the John Jaroold Trust and Anguish Educational Foundation were warmly received with grants of £1000 from both organisations. Apply in writing to TSN for support for your school, although please note preference will be given to applications from schools who wouldn't normally have the opportunity to attend such events (geographical restrictions are imposed by the respective charities, further details on the TSN website, www.tsn.org.uk under 'news & events' ). Closing date for applications 30th June 2006.

#### Making Faces: The Forum, daily, all of Sept.

Making Faces is a major art event for Norwich, generously funded by the WellcomeTrust(*www.makingfaces.org.uk*) TSN is one of the partners in the project.

Starting in the week of the Festival and continuing until the end of Sept., and housed in The Forum, the exhibition will showcase the commisioned work of 3 internationally recognised artists in response to their interactions with a panel of UK scientists working in various areas of 'face biology'. The works will be displayed within a context that examines current issues of how we interact with, identify, connect to, manipulate and reconstruct faces.

One objective of the exhibition is to engage a broad section of the public in the issues raised by recent research in the area of face biology, particularly craniofacial development and the neural mechanisms underlying face perception and identification. The exhibition may benefit students following A/AS studies in Psychology where face recognition is being studied.

## Other highlights ...

Hands-on Exhibition, UEA, daily: 09:30 - 15:30 (inc. Sat. 9th)

Teachers Evening, 6<sup>th</sup> Sept: 17:30 - 19:30, UEA: free evening showcasing resource for teachers (see back page of the programme)

Saturday 9<sup>th</sup> Sept, UEA: a handpicked selection of shows from the Young Peoples Programme (p19).

Daily Webcasts: Log-on & join in www.sciencelive.org



Interesting in their own right, the existence of both 'Making Faces' and 'Eye Spy' (almost next door to each other!) provide some fascinating insights into the current science behind recognition and the implications for biometrics.

# **Eye Spy:** Jarrolds, daily, 2-9<sup>th</sup> Sept.

For an amazing insight into the sophistication of your own eye, visit the interactive exhibit Eye Spy hosted by Jarrolds department store in Norwich and organised with the help of UEA School of Biological Sciences and Panasonic.

A team of scientists will be taking high resolution images of the eyes of visitors to display the beauty of the human iris and explain the different parts of the human eye. How eyes contribute to identity will also be addressed in a simple matching game.

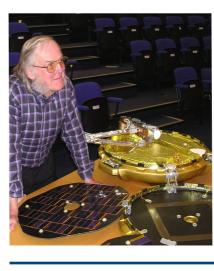
Visitors will see for themselves how their eye is as unique as their fingerprint by using the state-of-the-art Iris Recognition equipment. The exhibit will be open 'instore' and equipped to provide images and iris recognition to visitors, or if numbers are too great, to volunteers from larger groups of visitors (from 10am- 5pm, 2-9th Sept). No images or personal data will be used for any purpose other than for the exhibit, nor retained beyond the end of the Festival.

#### The year so far in words & pictures ...



TSN joined forces with the Rambert Dance Company and Prof. Ray Rivers (Imperial College) to discuss Einstein's 3 theorems by way of a celebration of Einstein year back in October 2005 (L & R below). A bumper turn-out of teachers & scientists enjoyed an entertaining evening which included the usual fine selection of refreshments & surplus lab equipment.

be held in October. The chance for your pupils to take part in the Constant Speed workshop is one of the many workshops offered at this years Festival of Science. With two over-subscribed Primary Science Workshops at the end of summer term, we responded to demand and re-ran the course in October (top).



A Master Class in April on Solar & Planetary Physics followed by a public evening lecture completed a hectic 6 months.

Helen Mason, Stan Cowley, Nick Achilleos and Carl Murray gave captivating presentations with hot-of-the-press data, some only weeks old, and the afternoon practical session featured James Machell from the Bradford Robotic Telescope and further contributions from Helen & Carl. The finale to the Master Class was an evening talk by Prof. Colin Pillinger (pictured left with a full-scale model of the lander) about the Beagle 2 mission to Mars in 2003. Offered as a public lecture, Colin highlighted some of the challenges of going to Mars, some of the possible reasons for the failed mission and most interestingly a look forward to a future landing on the red planet.

### What a GIFT - towards International Polar Year (IPY, 2007)

TSN has been promoting GIFT (Geophysical Information for Teachers) to high school teachers for 3 years now, with previous conferences focusing on Seismology, the Ocean, and this year - the Polar Regions - (in readiness for IPY 2007). This year it was 2 lucky teachers from Cromer High School, Louise Rippingale and Alison Bonnington, who represented the UK and attended the conference in Vienna run by, and subsidised by, the European Geoscience Union. They've had an amazing time learning about the polar regions, with 70 other teachers from Europe and North America. Here's their story ...

Over the course of the conference we were lectured to by invited speakers, all of whom were experts in their field and were truly inspiring. We were given talks about how the Earth's climate has changed over time and how scientists can read the polar ice to provide records of past climate; also included was a talk by the enigmatic Stephane Levin, a French explorer of the polar regions. We were also given lots of information about science, education and outreach opportunities during the 2007 IPY. We were also treated to an after-hours tour of the Natural History Museum by the chief curator. The highlight of the conference however was a talk by nobel prize winner Paul Crutzen from the Max Plank Institute for Chemistry, who made very complicated science seem easy and straightforward to understand!



We were able to forge links with foreign teachers, scientists and explorers and feel confident that we will be able to bring 'real' science into the classroom. Both of us have already begun to apply what we have learnt in our everyday teaching and have been able to provide enrichment to the curriculum for our students. As 2007 is International Polar Year our experiences in Vienna have provided us with lots of ideas to use in the classroom, so look out for lots of special activities from Cromer High School!

Look out for adverts on the TSN website towards the end of the year for details of GIFT 2007 which is likely to have 'geology, climate & environmet of large urban areas' as its topic and will be held in Vienna in April 2007

WE WOULD LIKE TO CREATE AN EMAIL LIST OF TEACHER MEMBERS SO WE CAN ALERT YOU TO LAST-MINUTE EVENTS. PLEASE SEND US YOUR EMAIL ADDRESS

