

# KIT CLUB NEWS!

Volunteers wanted

Popular Planetarium

Booking ahead is best

TSN is seeking one or two lively volunteers to assist with the Kit Club. It would require a commitment of about 6 hours over 1 or 2 days and involve rigorous checking of returned kits, some Excel database entry and responding to emails and answerphone messages. A teaching background would be preferred, as would some availability during school holidays. TSN will cover your travel costs to/from our base at the John Innes Centre. Do you know anyone who might be interested in helping us out? If so, please get in touch with Phil directly on 01603 450304 or at [phil.smith@nbi.ac.uk](mailto:phil.smith@nbi.ac.uk)



The portable Planetarium has spent its Autumn travelling far and wide across Norfolk schools thanks to TSN. We took receipt of the dome for its Autumn term in the county and have filled everyone of the weekly bookings since the end of September. We have also had to turn away people and so look out for announcements of next years 'residency' which will kick-off with a training course/refresher for those who have borrowed it in the past.

Finally, just a reminder that to be sure of getting the kit(s) that you need for a particular half-term you are best booking ahead. We still have good availability for a number of kits in the New Year. Bookings are made by phone or email and we do our best to accommodate all requests subject to kit availability. By maintaining this personal contact, and not using an online system, we are often able to accommodate last-minute or short-term requests. Please remember to also get in touch if your plans change and you no longer require the kit, chances are someone else might. Give us a call ....

Information about ALL TSN kits at [www.tsn.org.uk/KitClub.htm](http://www.tsn.org.uk/KitClub.htm)

or contact [tsn.kits@nbi.ac.uk](mailto:tsn.kits@nbi.ac.uk)

Alternatively telephone The Kit Club on 01603 450619

(answerphone available)

## NSEW 2013 - Funding, free stuff & more

Getting bigger every year, National Science and Engineering Week is a nationwide celebration of science, coordinated by the British Science Association. The theme for 2013 is invention and discovery. There are free activity packs on their website, descriptions of classic demonstrations and chances for you to register your events or find other ones to attend during this 10-day science extravaganza. Go to [www.nsew.org.uk](http://www.nsew.org.uk) for more details.

## Dates for your diary ....

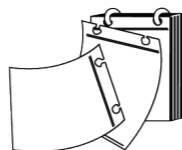
5<sup>th</sup> Feb. 2013 - Health and Life Sciences Careers Convention (Y10's)

6<sup>th</sup> Feb. 2013- TSN Annual Meeting (p.3)

15-24<sup>th</sup> Mar.- National Science and Engineering Week

17<sup>th</sup> May - Fascination of Plants Day, JIC school event

Jun/July - AMGEN Bruce Wallace programme molecular biology programme



## Teacher Scientist Network (TSN)

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Chairman: Prof. Keith Roberts, OBE

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## Shorts ...

It's not too late to enter your students (7-19 yrs) in the 6<sup>th</sup> Annual UK Schools Computer Animation competition run by the University of Manchester. Animation 13 is a free-to-enter competition designed to enthuse young people about Computer Science <http://animation.cs.manchester.ac.uk>

Registration for the 2013 International Schools Essay competition is now open to schools and teachers. "Who is responsible .. are we ready to take responsibility for the future of our planet? The organisers want to hear what schoolchildren think different groups in society should be doing to help solve our growing environmental, social and economic crises. Clearly there is potential here to take a very cross-curricular approach and think about science's role in tackling these issues. Maybe our EcoBoxes will stimulate some great essays? The entry deadline is 22<sup>nd</sup> March 2013, more details & registration at [www.livingrainforest.org/exploreschools-debate](http://www.livingrainforest.org/exploreschools-debate)

## Norfolk CHEMnet

The RSC held its 2nd Norfolk CHEMnet gathering, again hosted by TSN, in November. This time the group met at the Institute of Food Research and heard from Dave Hart about some of the present day applications of chromatography in a research laboratory. The plan is for termly meetings - if you would like to be involved contact Sue Thompson directly ([ThompsonS@rsc.org](mailto:ThompsonS@rsc.org))

## New Members - Welcome

Teachers

Miss Martina Maidment, The Parkside School  
Miss Kathryn Shepherson, Caston Primary School  
Miss Liz Cassidy, Open Academy, Norwich  
Miss Diana Rackman, Open Academy, Norwich  
Mrs. Emma Chapman, Bignold Primary School  
Mrs. Bobby Kelly, St. John's RC Infant School, Nch.  
Mr. Simon Underhill, Wicklewood Primary School  
Mr. Andrews Aalders-Dunthorne, Mendham & St. Edmund's, Hoxne Primary Partnership  
Mrs. Jennifer Chilenge, The Bawburgh School  
Mrs. Maria Kelly, St. Mary's RC Primary School

Scientists

Dr. Livia Scheunemann, John Innes Centre  
Miss Emily Fowler, BIO, University of East Anglia



# TSN News

## Unwrapping ideas for you in 2013



Opportunities to support and guide TSN in the future

Prof. Iain Stewart to speak at Annual Meeting



Health & Life Sciences Student Career Convention, Feb 2013



Master Class: Future of Oil and Gas Industries rescheduled



Plant Day 2013

TSN is looking forward to an exciting collection of offerings in the New Year. In parallel to these high profile events our day-to-day activities of partnering teachers with scientists continues alongside our provision of high-quality science resources via our Kit Club.

Underlying our years of supporting science in Norfolk and Suffolk by bringing real-life science into the classroom has been teacher feedback, ensuring that we provide what you need and want. In these

financially challenging times for all having this feedback becomes even more critical. Do contact us at any time if you think we might be able to work with you or help you. Find out more about how you can help the TSN Kit Club on the back page of this edition of TSNNews as we seek to build a small but dedicated team of volunteers to help run this popular service. Do you receive updates about TSN news & events by email, are you following us on Twitter (@TSNphil) and when did you last check-out our website?

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## Health and Life Sciences Career Convention, Year 10's



TSN is grateful to Norfolk County Council for supporting and sponsoring its ideas for the 2013 Health and Life Science Career Convention that will be held at the John Innes Centre on Tuesday 5<sup>th</sup> February. Via a collection of hands-on activities and a 'meet-a-scientist' question time event we will provide a unique opportunity for year 10 students to learn about both

the opportunities for careers in this area and meet real people who have chosen to pursue a variety of careers.

Book your places now - places are limited to 35 per school so as teachers you will need to select those students that you think will benefit most from this unique experience. The event starts at 10:00 and will finish by 14:00. We also have available grants to help with transport costs - we hope to see as many schools as possible represented.

PLEASE NOTE: TSN traditionally works with all schools, but due to funding restrictions on this grant, we are only able to offer places to schools within the county of Norfolk.



## Partnership Activity: Scott Pritchard (Trowse Primary School) and Danielle Monk (JIC)

It's early days for this partnership but I asked both for their first thoughts about partnership working because this can often be the most daunting bit for anyone thinking of getting involved.

Danielle wanted to do something fun during her PhD that would get her out of the lab and take her passion for science into the real world. Currently beginning her second year, she was particularly interested in working with school children so that she "could encourage their natural curiosity about how the world works." Danielle signed-up to TSN in her first year and waited ...

After factoring in geography and age-group preferences, Phil set-up an induction meeting for Danielle with the science co-ordinator at Trowse Primary School, Scott Pritchard. His first contact with TSN had been at his previous school utilising our popular kit boxes. "When Phil offered me the opportunity to start a partnership with a scientist I was really excited having been too far out to take advantage of this opportunity previously."

Danielle and Scott quickly identified an effective way of working together in partnership that you can read more about on our website. Here's a résumé of their feelings about partnership working beginning with Danielle, "I find the partnership really advantageous as it allows me to focus on ways to make science fun and exciting,

without worrying about the best way to plan lessons or fit experiments into the curriculum, which Scott is very good at." Similarly Scott is very positive about their partnership. It's brilliant to have Danielle's far-reaching knowledge and creative ideas in the classroom. I also think it is valuable for the children to see a scientist from a real life context and increase their awareness of science beyond the classroom. I hope we have many more fantastic years to come ..."



Following the huge success of our first International Fascination of Plants Day in partnership with the John Innes Centre in 2012, its back ... we are doing it all over again - on Friday 17<sup>th</sup> May 2013.

Once again, this event clashes somewhat with SATs week but we hope it won't put you off, it didn't in 2012. In fact many people used it as a 'reward' for pupils offering an exciting half-day away from school.

Get the date in your diaries now and further information will follow via our email news list and visit our website, [www.tsn.org.uk/FoPD.htm](http://www.tsn.org.uk/FoPD.htm)

## TSN Governance

At a recent TSN AGM, our long-standing chairman, Prof. Keith Roberts, announced his wish to step down. Keith established TSN in 1994 and was elected to chair in 2002 when TSN became constituted. He has championed the importance of public engagement by scientists, particularly in the arena of science education, throughout this time.

TSN is a company limited by guarantee with charitable status. Our formal constitution includes 3 directors (including our chair and company secretary). Day-to-day running of TSN is delivered by the Coordinator with key guidance provided by our Steering Group. These representatives, from both the education and science communities, are members of the charity. The role of the Chair is to provide leadership and direction to the board of Trustees. The Chair's aim is to enable the board to fulfill their responsibilities for the overall governance and strategic direction of TSN.

Steering Group meetings are termly and there will be occasional email/telephone communication outside of these times.

*We are beginning our search for a new chair and would welcome informal enquiries about the role. If not you, then do you know someone who may be interested - possibly a recently retired head teacher for example? We are seeking someone committed to TSN's ethos and mission, who can support the charity towards another 20 years of teachers and scientists working together to support science education in Norfolk and North Suffolk. More details at [www.tsn.org.uk/news.htm](http://www.tsn.org.uk/news.htm)*

The position is non-salaried although TSN will cover any reasonable travel costs incurred by the postholder carrying out the role.



A highlight from FoPD 2012 was Alex Metcalf 'Listening to Trees'

## TSN Annual Meeting 2012, in 2013!!



*TSN is delighted to announce that Prof. Iain Stewart, the well-known Scottish geologist has accepted our invitation to speak at our Annual Meeting on 6<sup>th</sup> February 2013.*

Iain has become something of a regular on our TV screens in the last few years. Following the success of 'How we grew a Planet' he was seen most recently co-hosting Volcano Live.

His enticing talk is entitled 'Fifty Shades of Grey -Communicating Rocks'

and will no doubt be the highlight of the TSN's Annual Meeting to be held at the John Innes Conference Centre. There will also be our annual update of activities, our renowned refreshments and a massive glassware giveaway. This FREE event is open to all - many schools have a bit of a 'team outing' and it is a great opportunity for partners to catch-up and throw around ideas over a glass of wine.

To guide our catering requirements please book your place(s) in advance, please note we expect this event to be extremely popular this year.

## High School Master Class: the future of oil and gas - look out for new date

TSN is attempting to re-schedule its Master Class designed to look at the complex issues and challenges facing the Oil and Gas industries.

The event will be held at the John Innes Centre and feature leading lights from both an academic and industry background. The programme is almost complete and we look forward to you joining with representatives from the University of East Anglia, Schlumberger, Perenco UK Ltd. and Imperial College.

Oil and gas will continue to dominate the energy mix in the UK for the next 25-50 years. It becomes increasingly difficult to extract oil and gas from deeper wells, in more remote locations, at greater cost. This presents challenges that are being tackled by chemists, physicists, geologists and material scientists to name but a few. Recent headlines have declared Shale Gas as a possible boost

to the industry, but is it safe to extract? The Royal Society produced a 100 page report into Fracking in March 2012 and this and other topical issues will be covered during this high calibre event.



Thanks to continued support from the Science Learning Centre East of England we are able to offer each teacher attending £150 to cover their costs, making this high-quality subject-knowledge cpd event effectively FREE to attend. With East Anglia being so closely involved with the Oil & Gas industries this event is particularly relevant to teachers in our area.



## Science Learning Centre

The Science Learning Centre (SLC) East of England is bringing 3 different courses to the John Innes Centre, in the New Year, all hosted by TSN. Two are aimed at science technicians (please share the details with those key members of your team), while the other is designed to prepare primary science coordinators for the new curriculum:

*23<sup>rd</sup> April, Working as a Science Technician: an introduction' (EEC12072)*

*24<sup>th</sup> April, Senior Technicians: Leadership, Training and Management (EEC12073)*

*25<sup>th</sup> June, Preparing for the new science curriculum (EEC 12249).*

Also of note is a 4-day, RSC sponsored, Chemistry for Non-Specialists course at Wymondham College (EEC12063). The cost of the course is £250, and it includes an impact award of £525 and overnight accommodation between Days 1 & 2 of the course. Full details at the SLC website.

For primary science, the SLC are offering 2 courses in Norfolk in March and a third over the border in Suffolk. Essential Science Enquiry (EEC12240) will run on 5<sup>th</sup> March at Neatherd High School, while Stepping Outside: Learning and Thinking Outside the Classroom (EEC12060) will take place at Litcham High School 2 days later. For those closer to Suffolk, Copleston High School (Ipswich) is offering Assessment in Primary Science on 15<sup>th</sup> March.

Full details of all SLC East of England courses are on their website [www.sciencelearningcentres.org.uk/east](http://www.sciencelearningcentres.org.uk/east) where you will also find details of which courses are eligible for Impact Awards. Places may be booked online at [www.slcs.ac.uk/network/courses](http://www.slcs.ac.uk/network/courses) or telephone 01992 503498

## Ecology Posters

The British Ecological Society is celebrating its centenary in 2013. To mark the occasion they have produced a set of four A1 posters illustrating Diversity and Competition for Life on Earth, Food, and Life Beyond Earth. These are free and available direct from BES, see [http://www.britishecologicalsociety.org/educational/centenary\\_wallcharts/index.php](http://www.britishecologicalsociety.org/educational/centenary_wallcharts/index.php) for more details. A schools competition will also be launched next year. Poster sets will be available at TSN's Annual Meeting in February - yet another reason to come along!