



News

National Science & Engineering Competition Runners Up - Jeans Blue

Kent & Medway STEM interviewed the team behind Jeans Blue from Kent College, to talk about their eco-friendly; British based solution to the synthetic indigo dye industry. They won Senior Engineering & Technology Runners Up and were a passionate team keen to share their competition experience with us. To read the full interview please visit:

www.kentandmedwaystem.org.uk/index.php/events/stem-event-info/206/

Advance Notice- Potential 10 Minute Telephone Survey Contact

STEMNET are working with Futurelab at NFER to investigate whether teachers might welcome STEM Ambassador activities delivered over the internet (eg using Skype or similar); they are also looking at school IT systems to see what might be supportable in practice. As part

of this research, they will be contacting a number of schools in the area to discuss possibilities. This work should hopefully identify new ways of working and new opportunities. We wanted you to be aware of this development even if your school is not contacted directly.

IET Diamond Scholarships

Closing Date: Thursday 27th June 2013

For students starting university in the autumn of 2013 on an IET accredited BEng/MEng engineering or technology degree course, scholarships of £1,000 per year are available. For full details and requirements please visit: <http://tinyurl.com/powr3a7>

The Faraday Product Innovation Challenge

Closing Date: Friday 28th June 2013

Last chance to enter! Are your students innovators? The competition is open to UK students aged 11-14 who have a great idea for a product or invention that improves communications. The student with the best idea will be crowned Faraday Student Innovator of the Year 2013, winning an iPad for themselves and £500 for their school to help support STEM activities. For full details please visit:

<http://tinyurl.com/l4lppck>

Apply Now to Host a Free IET Faraday Challenge Day in your School

Closing date: Friday 12th July 2013

Delivered free of charge by the IET, the Faraday Challenge Days are STEM activities designed for students aged 12-13 years. Each Challenge Day should be made up of 6 teams of 6 students aged 12-13, which can be either all from your school or 1 team from your own school and teams from five other local schools. Don't delay, apply today! Prizes available include trophies for the school and all expenses paid trip to the national final. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/202/

Innovative Teaching Competition for European Antibiotic Awareness Day

Closing Date: Sunday 28th July 2013

Have you got an innovative approach to teaching antibiotics that you could share? To enter, send a video recording, YouTube link or written lesson plan with photos of how you inform your students about antibiotics, to e-bug@phe.gov.uk Prizes are sponsored by the British Society for Antimicrobial Chemotherapy (BSAC) and the Society for General Medicine with the winner in each category taking home £100 for themselves and £500 for their school along with free annual school corporate membership to the SGM. Two runners up in each category will receive £50 each and £150 for their school. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/secondary/competitions-grants

WISE Awards 2013- Celebrating Women & Girls in STEM

Closing date: Wednesday 31st July

Ceremony: Thursday 14th November

Nominating for a WISE Award is simple: individuals and organisations can nominate themselves or nominate a person or organisation they believe deserves a WISE Award, there are 10 categories to nominate for including WISE Girl which recognises, celebrates and supports girls and young women who have shown outstanding potential in STEM (under 18 years.) There is no charge for entering. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/213/

The Range Rover Evoque WISE Scholarship 2013

Closing date: Saturday 31st August 2013

Jaguar Land Rover and WISE have got together to encourage more girls to consider engineering careers by offering a scholarship of £1000 per year for 3 years towards the cost of studying the subject. The scholarship also includes a summer work experience placement at Jaguar Land Rover, individual membership of WISE and access to WISE mentors. The successful applicant will also be a WISE and Jaguar Land Rover ambassador for the duration of the scholarship. For full details please visit: www.kentandmedwaystem.org.uk/index.php/secondary/competitions-grants

Chemistry Photography Competition

Closing Date: Friday 11th October 2013

Photographic entries must show and explain: 'What chemistry means to me' - Pictures can be taken at school or in the community in which you live or the countryside and need to show what is good about

EVENTS FOR TEACHERS

Come and play musical quarks! -Using Lego to Teach Physics

Date: July TBC Online Webinar, Free

School of Physics and Astronomy at Queen Mary, University of London are running a free CPD webinar this July to celebrate the launch of new physics resources. They've put together a comprehensive pack based on using Lego to teach tricky physics concepts. The content covers a number of curriculum areas including radioactivity, fission and fusion, the quark model and particle physics. For full details and to book your place please visit: www.kentandmedwaystem.org.uk/index.php/news/newspage/215/

HortAg Forum 2013: Growing the Next Generation of Plant Scientists

Tuesday 2nd July 9:00 – 3:30pm at East Malling Research Conference Centre, Kent £25

Plenary speakers will outline the challenges in meeting the current shortfall in plant scientists in the UK

and improving the image of careers in plant science. The conference will include workshops on experiments that can easily be performed in the classroom (primary and secondary level) and we will provide free kits for teachers to take home and carry out experiments at their school. For full details and to book your place please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/199/

chemistry, its use in society, why it is interesting, useful and exciting. Prizes (to be shared equally between the student entering and their school): 1st -£300, 2nd- £150, 3rd - £50. For full details please visit: www.kentandmedwaystem.org.uk/index.php/secondary/competitions-grants

Hot Water - make a really short film about water!

Closing Date: Wednesday 30th October 2013

2013 is the United Nations International Year of Water Cooperation and time to make everybody aware of water and why it's so critical to everyday life. Cool it Schools are inviting young people and students between the age of 4 and 25 to make a 'bite-size' film no more than 50 seconds long - the length of a TV advert. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/secondary/competitions-grants

IOP School Grants Scheme

Next Closing date: Friday 1st November 2013

The Science and Technology Facilities Council, the Institution of Engineering and Technology (IET) and the Institute of Physics run a small grants scheme designed specifically for schools and colleges. With deadlines in November 2013, February 2014 and June 2014 for projects taking place the following term. For full details please visit:

www.iop.org/about/grants/school/page_38824.html

ESERO-UK Teacher Conference 2013: Space and contemporary topics in school science

Tuesday 2nd and Wednesday 3rd July at National STEM Centre University of York, Free plus £70 travel bursary

This conference will inspire science teachers to use space as a context to enrich the teaching of biology, chemistry and physics. Supporting secondary science teachers through keynote lectures from high profile speakers, all incorporating links to the new proposed curriculum, and a series of hands on, practical sessions designed to inform, inspire, and support. For full details and to book your place please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/198/

Post 16 teachers - Physics CPD Event – Discover the Cosmos

Thursday 11th July 2013 9.30-4.45pm at Science Learning Centre, Institute of Education, Bedford Way, London Free

The workshop will explore a number of free resources available for bringing Astronomy into the classroom, focusing on how to use selected resources to teach aspects of the GCSE/A-level Science curricula. Copies of the software and suitable data will be provided to all attendees. For full details and to book your place please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/193/

EVENTS FOR STUDENTS

RIBA Sandcastle Challenge - Margate 2013

Saturday 29th June 2013 10am-3pm on Margate Sands, Free

The Royal Institute of British Architects (RIBA) is holding a Sandcastle Challenge. Registration is free and starts at 10am. This would be a great opportunity for a team of DT or engineering students to compete with 5 different prize categories to be judged on. Register in advance and receive a free bucket & spade. For full details please visit: www.kentandmedwaystem.org.uk/index.php/news/newspage/216/

How to Make a Physicist & University Chemistry GCSE & A-level Taster Events

University of Kent- The School of Physical Sciences, Free

Physics GCSE: Thursday 4th July 9:30am-12:30pm or Friday 5th July 9:30am-12:30pm

You are invited to bring students to investigate the topic of energy with an exciting lecture and series of hands on activities within our newly refurbished undergraduate labs. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/200/

Chemistry A-level - Friday 12th July 2013 10am-3pm

Get a taste of university chemistry and learn about the chemistry behind your smartphone screen and more. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/217/

Festival of Code Young Rewired State's Festival of Code Hack-week

5th -11th August 2013 60 UK locations with the finale held in Birmingham The weekend is Free to attend

Mentors needed and places for students still available. Level up coding skills/build digital prototypes to solve real world problems/ work with professional programmers and open government data. Festival of Code consists of a free week-long event in August. You will spend the week building and creating awesome stuff at your local centre before the big finale in Birmingham. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/204/

I'm a Scientist Get Me Out of Here!

Next Event: November 2013

Free Science Enrichment Project: I'm a Scientist is a free online X Factor style competition for scientists, where students are the judges. Your students read the scientists' profiles, ask them questions and have live online (text) chats with them. Students vote for their favourite scientist to win £500 to spend on science communication. All teachers are sent a Teacher Pack with lesson plans and a science debate kit, to help introduce students to the event and reduce the lesson planning required. For full details please visit:

www.kentandmedwaystem.org.uk/index.php/news/newspage/211/

STEM EDUCATION RESOURCES

Get Ready for September 2013- Book Free Equipment Loans

Get ahead and book the K'nex, STIXX or Incredible Machines free of charge from Kent & Medway STEM for 2013/14. To find out more or book a free resource loan please contact kentandmedwaystem@canterbury.ac.uk

What is a STIXX Machine?

STIXX Machines roll newspaper into solid rods which can then be used to construct objects. Popular STIXX Challenges see student teams build towers, bridges, shelters and event go-carts! Kent & Medway have 3 STIXX available for schools to borrow free of charge. All you need to provide is a stack of newspapers. Find out more about STIXX Machines here:

www.darcyturner.com/page1/page1.html

What is an Incredible Machine?

The Incredible Machine is two boxes of wheels, pulleys, switches and novelty items which students use to create a machine. Most popularly used to

teach forces, motion and physics. Look at this report and video to find out more:

www.kentandmedwaystem.org.uk/index.php/events/stem-event-info/117/

Free STEM Ambassador Support

Are you planning a STEM event that would benefit from STEM Ambassador input? STEM Ambassadors are available to visit your school free of charge to give career talks, STEM subject talks, support mock interviews, STEM clubs, lessons and challenges. To find out more about STEM Ambassadors visiting your school please contact

kentandmedwaystem@canterbury.ac.uk