



Success Stories

Network event at South Foreland Lighthouse, Dover

We had an excellent turn out at our latest networking events. The photograph is from the South Foreland Lighthouse on the white cliffs of Dover where we had a meeting in early October.

Teachers and STEM Ambassadors from a wide range of industries were able to network over tea and cakes in Mrs Knotts tea room.

Teachers and ambassadors were able to explore the venue whilst sharing ideas and enthusiasm for STEM. Networking events are always free; they are a great opportunity to discuss out of school learning and meet STEM Ambassadors and other teachers.

In March 2013 we will have more networking events with the focus being more about Technology; they will be located in other areas of the region. Please keep an eye out for future events or contact Tsige Sherington on **01227 782662** or email kentandmedwaystem@canterbury.ac.uk for more information.

STEMNET Awards

Congratulations to **Mark Byles** from **Harvey Grammar School** who is shortlisted for the STEM teacher award.

The STEMNET Awards aim to recognise the UK's most inspirational people for motivating young people in Science, Technology, Engineering and Maths. The Science and Technology Facilities Council (STFC) again kindly offered a trip to CERN for the winners of each award. Winners will be announced at The STEMNET Awards 2012 Ceremony which will take place at the House of Lords on Wednesday 21st November, hosted by Lord Sainsbury.

LOCAL COMPETITIONS

Roper Place Design Award

Award categories and year groups include best design of textile, rug, carpet, wallpaper, furniture or lighting for Year 9 to Year 12. An independent panel of academic judges will decide the individual first, second and third prize for each category. The £1000 school prize will be awarded to the school that submits the most consistent high quality work across all the categories.

Deadline to show interest: Monday 5th November 2012.

Deadline for email entries: Thursday 31st January 2013.

For more information please email: kentandmedwaystem@canterbury.ac.uk



NATIONAL AND INTERNATIONAL COMPETITIONS

Create the Trophy competition

The Queen Elizabeth Prize for Engineering is a new global engineering prize that will reward and celebrate an individual (or up to three individuals) responsible for a ground-breaking innovation in engineering that has been of global benefit to humanity. The QEPrize is an iconic prize that promotes and celebrates the story of modern engineering.

It requires an iconic trophy that embodies the spirit of modern engineering and the values of the QEPrize. Using the latest programming and design technology QEPrize have built a unique digital application to design, build and create the trophy for the QEPrize.

Entries are now open until Friday 9th November. The competition is addressed to young UK residents between 16 and 24 with interests in Science, Engineering, Design, Art and Architecture. All entries must be made online and the top entries will be 3D printed into prototypes to allow the selection panel to view the creations with their designers before selecting the winner.

The final trophy will be presented by The Queen to the winner of the Queen Elizabeth Prize for Engineering at Buckingham Palace in May 2013. The winner will also receive £5,000.

www.qeprize.org/trophy

Biology Challenge

Aiming to encourage interest in biology beyond the school curriculum and stimulate curiosity in the natural world. The competition is open to pupils in Year 9 and Year 10 in England and Wales, Year 10 and Year 11 in Northern Ireland and S2 and S3 in Scotland. Teachers have until 19 December 2012 to register students to take part in the 2013 competition.

Please see

www.societyofbiology.org/documents/view/1103

to download a Biology Challenge registration form.

The University of Nevada CAD Challenge

Open now until 30th November the University of Nevada are running a challenge for which UK schools are eligible. The challenge is to create a 3D design using a free browser-based CAD tool. Designs will be judged on complexity and physical fidelity.

For more information see:

www.cadchallenge.net

International Schools Essay Competition 2013

'Who is responsible ... are we ready to take responsibility for the future of our planet?'

Registration for the 2013 International Schools Essay Competition is now open to schools and teachers. We want to hear what schoolchildren think different groups in society should be doing to help solve our growing environmental, social and economic crises. Do people's rights and responsibilities differ around the world and if so, how? The Grand Prize Winner (plus a parent and teacher) will receive a free trip to either the UK or the Seychelles. The entry deadline is 22 March 2013 and all shortlisted schools will be invited to attend an International Schools Debate and Prize-giving event in the UK (26-27 June 2013) or the Seychelles (July 2013 - dates tbc).

For more information see:

www.livingrainforest.org/explore/schools-debate/

Diamond Jubilee Scholarships

The Diamond Jubilee Scholarships are named in honour of the IET's patron, Her Majesty the Queen, and aim to help address the STEM skills shortage in the UK. Students who meet the minimum criteria will be entitled to an IET scholarship of £1,000 per year for the duration of their degree course.

Entry opens in January 2013 for more information see www.theiet.org/ambition

UPCOMING EVENTS

A Unique Opportunity to Take Part in CPD Workshops

Hosted by Dame Ellen MacArthur and award-winning D&T teacher Steve Parkinson, Teardown Lab provides an introduction to circular economy thinking and relates this to product design.

During the session, you will have the opportunity to disassemble everyday products and explore how they could be re-designed for a future of finite energy and resources.

Date: Tuesday 11th December 2012 | 4.00pm - 7.30pm

Venue: The Skinners' School, St John's Road, Royal Tunbridge Wells, Kent, TN4 9PG

For more information see: www.ellenmacarthurfoundation.org/events/35

National Science + Engineering Competition

The National Science + Engineering Competition seeks the best of the best from every area of STEM. The Competition is open to 11-18 year olds in the UK and the best entries will be invited to showcase their project at The Big Bang: UK Young Scientists and Engineers Fair in March.

For more information see:

www.thebigbangfair.co.uk/nsec/news.cfm

Technology4Good Youth Awards

Technology4Good Youth Awards encourage young people to use accessible technology to help make the world a better place. The project can be helping the disabled, elderly, socially excluded etc. Shortlisted groups will receive three months mentoring from some of the UK's top businesses and charities.

Any group aged 14 – 21 living in the UK can apply and tell us about their idea for a product or service that will change the lives of other people in a positive way. The application deadline is 5pm on the 30th November 2012. Our judges will announce the finalists in December.

On 17th April 2013 at Windsor Castle, you will have the opportunity to pitch your idea to a panel of business and charity experts to win £5000 to make the project a reality. The winning pitch will get a cash prize and a Technology4Good Youth Awards trophy. For more information see:

www.technology4goodawards.org.uk/youth

4x4 and F1 in Schools Technology Challenges Twilight Session

The 4x4 in Schools Technology Challenge working together to design and build a radio controlled 4-wheel-drive (4x4) vehicle to set specifications, that can successfully negotiate a specially designed test track that emulates that of real life and what a full scale 4x4 vehicle can do. For more information please visit www.4x4inschools.co.uk. Regional finals are held between May and June with the National Final in July.

F1 in Schools Technology Challenge is an exciting International competition. The challenge is to design and manufacture the F1 car of the future simulating the design and engineering processes employed by a real F1 team. For more information please visit www.f1inschools.co.uk or visit one of our regional finals to see the initiative in action. Dates can be found on the website.

Presentations on both challenges with hands on demonstrations will be on offer at our Twilight session.

Date: Wednesday 21st November 2012

Venue: Salomons Campus, David Salomons Estate, Southborough and Tunbridge Wells, Kent, TN3 0TG Time: 4.00 – 6pm Cost: Free

If you would like to attend the Twilight Session please email kentandmedwaystem@canterbury.ac.uk

The Big Bang Fair 2013

The Big Bang UK Young Scientists and Engineers Fair is the UK's largest celebration of science, technology, engineering and maths for young people. The Fair will take place from **14th – 17th March 2013** at London ExCel.

You can exhibit for either 2 or 4 days, and entry is open to all schools, clubs and youth organisations across the UK. 60,000 people are expected to attend so this is an excellent opportunity to celebrate your achievements, take advantage of our exclusive opportunities and win prizes!

To find out more and to apply for space, please see www.thebigbangfair.co.uk/stemclubs

RESOURCES YOU MAY NOT BE AWARE OF...

Gocracker!

Gocracker! is the website for 12-18 year olds and its purpose is to encourage them to discover the exciting world of science, engineering and technology. If you would like younger people to develop an interest in SET, point them towards:

www.gocracker.com

Measure the Speed of Light using Chocolate

Nuke your chocolate and measure a fundamental physics constant. Remember $E=mc^2$, Einstein's famous equation? The 'c' stands for the speed of light. You don't need fancy equipment to measure it. All you need is a microwave, ruler, bar of chocolate and a calculator.

<http://tinyurl.com/9wyc5e4>

STIXX Machine

Kent & Medway STEM have three STIXX machines to be used by Schools and STEM Ambassadors free of charge.

For more information please email

kentandmedwaystem@canterbury.ac.uk and

for project ideas please visit

<http://tinyurl.com/c5sxfq4> and

<http://tinyurl.com/d36boov>

Making K'Nexions Kits

Kent & Medway STEM has K'Nexion Kits to be used in STEM Club Environments and with support from STEM Ambassadors.

For activity ideas please visit

www.youngeng.org

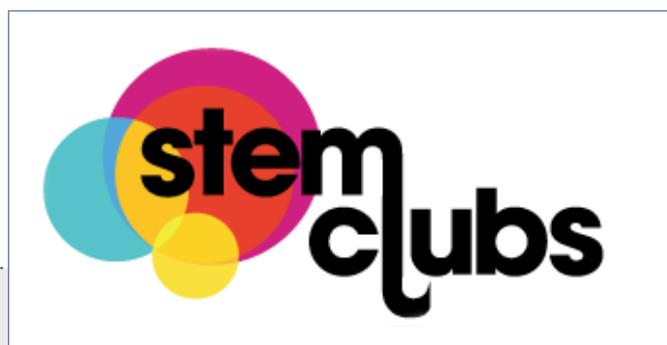
The Incredible Machine

Kent & Medway STEM can provide The Incredible Machine for schools to use. The Incredible Machine is a great way to introduce students to forces hands-on.

They learn with their fingers what the lessons teach them with words- gravity, energy, momentum, mass, acceleration, friction, levers, pulleys inertia... and the best word all IINCREDIBLE!

For more information see

<http://tinyurl.com/9lppomf>



STEM Clubs Network

Whether your STEM club has been established for years, or you are only just thinking of starting a STEM club, the STEM Clubs Network is for you. Managed by STEMNET, it enables you to explore ways of making your STEM club something really special! Through the network, club leaders get the chance to collaborate with other STEM club leaders via the web, via CPD and via other specifically tailored events. A wealth of STEM club-related ideas and resources can be accessed, without cost, online at www.stemclubs.net

To affiliate to the STEM Clubs Network

Simply send an email to join@stemclubs.net stating: Your name (title, first name and surname); School name; School address and we'll do the rest.

STEM AMBASSADORS

In the Kent & Medway STEM region currently there are more than 800 Ambassadors available to work with young people. The occupations of STEM Ambassadors are very wide ranging, including environmental scientists, chemists, civil engineers, marine biologists, medical physicists, pharmacists, apprentices and energy analysts to name but a few. Anyone who uses STEM in the world of work and who is willing and able to enthuse young people about STEM subjects, can apply to become a STEM Ambassador.

CONTACT US

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