



## News

From left to right: Mark Byles from Harvey Grammar School who was Shortlisted for the STEM Teacher Award 2012, Caroline Byles, Kent & Medway STEM's Hellen Ward, Jon Tickle and STEM Net's Dr Ajay Sharman

# STEMNET Awards for inspiring the next generation of scientists and engineers announced at the House of Lords ceremony.

Wednesday 21 November, 2012

Mark Byles the inspirational Head of DT and STEM lead at Harvey Grammar school was nominated for his work both within his own school and with other local schools. Mark has been involved in a large range of STEM activities including organised CPD training with STEM Club networks as well as the Rocket Car Challenge.

A teacher from Peterborough, a robotics company from Cambridge, and a civil engineer from Reading were also unveiled as some of the UK's most inspirational people for motivating young people in Science, Technology, Engineering and Maths.

They were amongst the five winners at the National STEMNET Awards 2012, supported by the Science and Technology Facilities Council (STFC) and the Department for Business, Innovation and Skills.

As part of the award, all winners receive a trip to CERN – home of the Large Hadron Collider – courtesy of STFC. Throughout September, members of the UK's huge network of people dedicated to inspiring young people in STEM nominated themselves or others.

During this time STEMNET received over 150 nominations and were overwhelmed with the dedication to engaging young people in STEM subjects displayed by individuals and organisations across the UK.

## Nominate a Colleague

**Design and Technology Association Excellence Awards 2013 - Closing date: Friday 21st December 2012**

Do you have an outstanding D&T colleague who deserves recognition? The Design and Technology Association Annual Excellence Awards are open to anyone working in the field of D&T education and are designed to recognise outstanding contributions at all phases, from teachers, technicians, researchers, suppliers and consultants to academics. There are 6 different award categories plus 4 sponsored awards including The James Dyson Foundation Design and Technology Teacher of the Year Award.

The 14th Design and Technology Association Excellence Awards are due to be held on Friday 8th March 2013 at The Institution of Engineering and Technology, Savoy Place, London. The closing date for nominations for the 2013 Awards is Friday 21 December 2012. To find out more visit:

[www.data.org.uk/index.php?option=com\\_content&view=article&id=1239&Itemid=806](http://www.data.org.uk/index.php?option=com_content&view=article&id=1239&Itemid=806)

## COMPETITIONS, CHALLENGES & GRANTS

### STEM Leaders Awards: Special Awards 2012/13

**Closing dates: March/June/May 2013**



### Special Awards

Special Awards are awards that have a particular focus. They are sponsored by various organisations with prizes attached. Awards open to Primary (5-11), Secondary (11-16) and Advanced (17-19) levels include:

- IMechE Special Leaders Award  
**Closing date 1st March 2013**
- Primary Engineer Special Leaders Award  
**Closing date 29th March 2013**
- Bloodhound SSC Special Leaders Awards  
**Closing date 28th June 2013**
- Tomorrow's Engineers Special Leaders Award  
**Closing date 29th March 2013**
- Schoolscience Special Leaders Award  
**Closing date 3rd May 2013**
- IET Special Leaders Award  
**Closing date 3rd May 2013.**

To find out more please visit:

[www.leadersaward.com/index.php/features](http://www.leadersaward.com/index.php/features)

### Technology Design and Innovation Challenge

**Closing date: May 2013**



The TDI Challenge offers school and college students a unique opportunity to showcase their project work to an industry that relies upon the creativity and innovation of its designers and engineers. No extra-curricular work is required. There is no limit to the number of entries any school or college may submit. Twelve finalists are chosen by a panel of industry judges to give a presentation at a world class manufacturing facility. Students, and their teachers / parents, will be treated to a guided tour, lunch and prize-giving ceremony, to be held in summer 2013. Receive recognition for your school plus the chance to win prizes, this year's prizes included iPads and digital cameras – take the Challenge!

Entries will open in January 2013 For further updates visit [www.mta.org.uk/TDI](http://www.mta.org.uk/TDI)

### 60 Second Science, Engaging with the 'YouTube Generation'

**Closing date: Sunday 5th August 2013**

60 SecondScience is a fully online International Video Competition sponsored by the Department of Education (DEECD-Innovation Next Practice Division), Victoria, Australia. The competition

## UPCOMING EVENTS

### Ellen MacArthur Foundation Rethinking the Future through the Circular Economy

**Thursday 6th December 4.30pm-5.30pm. St Catherine's Catholic School for Girls, Bexleyheath, DA6 7QJ. Free.**

The challenge of our times: the circular economy has gained global recognition as governments, educators and business leaders turn the challenges of resource scarcity, energy security, waste and pollution; into a business opportunity. Education for a changing world providing an exciting framework for students to gain the key skills businesses will need to rethink their future Free hands-on workshop for D&T, Science, Geography, Business Studies and EPQ teachers. Free resources: Introducing our new free ready-to-go classroom activities. To reserve your place please email:

[mark@ellenmacarthurfoundation.org](mailto:mark@ellenmacarthurfoundation.org)

For more information see: [www.ellenmacarthurfoundation.org/events/35](http://www.ellenmacarthurfoundation.org/events/35)

is Free to Enter and links directly to required student outcomes over a number of Science, Citizenship and ICT Learning Standards. \$10,000 in cash prizes is distributed each year, as determined by a prestigious International panel of judges. There are Divisions which cater for students of different ages.

- 2013 Deadline: register by 5 August 2013,
- Upload videos by 5 August 2013.

Find out more by visiting:

[www.60secondscience.net](http://www.60secondscience.net)

### IOP School Grants Scheme, up to £500

**Closing dates: Feb/Jun/Nov 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. The aim of the scheme is to provide schools with grants of up to £500 for projects or events linked to the teaching or promotion of physics or engineering.

Eligibility and timing: The scheme is open to all UK educational institutions (schools and colleges) catering for pupils/students in the age range 5-19.

There are three deadlines per year:

- Projects in summer 2013 - 1/2/2013
- Projects autumn 2013 - 1/6/2013
- Projects spring 2014 - 1/11/2013

To apply and for more information please visit: [www.iop.org/about/grants/school/page\\_38824.html](http://www.iop.org/about/grants/school/page_38824.html)

### Hollywood Science Lecture

**Saturday 8th December 2012, 9.45am-13.00pm. University of Greenwich, Medway Campus, Kent. Free.**



The Kent area committee of the Institution of Mechanical Engineers (IMechE) are holding an open lecture on Hollywood science this is a talk by Dr. Jonathan Hare of TV's Rough Science fame.

He will be discussing the science used in some well known films; this promises to be an interesting lecture and is aimed at a wide range of people from 8 to 80 years old. It is free to those who book and is meant to encourage an interest in science and engineering. For more details visit: <http://tiny.cc/w0gqow>

### National Science and Engineering Week: Invention & discovery

**Friday 15th – Sunday 24th March 2013**

National Science & Engineering Week shines the spotlight each March on how the sciences, technology, engineering and maths relate to our everyday lives, and helps to inspire the next generation of scientists and engineers with fun and participative events and activities. This year's theme explores 'invention and discovery'. For funding, ideas and activity packs of how to could get your school/club involved please visit: [www.britishecienceassociation.org/national-science-engineering-week](http://www.britishecienceassociation.org/national-science-engineering-week)

You might like to run a STEM Fair at your school during NSEW, to showcase your club or in-class projects to the rest of the school, parents or local community. The STEM Fairs Toolkit from [www.stemfairstoolkit.co.uk](http://www.stemfairstoolkit.co.uk) is great for helping you do this. Please let us know if you are planning any event and if you would like a STEM Ambassador support by emailing:

[kentandmedwaystem@canterbury.ac.uk](mailto:kentandmedwaystem@canterbury.ac.uk)

# RESOURCES

## STEM Ambassadors – a FREE resource for your school

There are over 750 ambassadors representing a wide range of STEM occupations, companies and organisations across Kent and Medway Region.

Examples of how a STEM ambassador may support you include:

- Giving talks/presentation on a specific topic, or in relation to how they use STEM subjects in the workplace
- Careers 'speed networking'
- Supporting a STEM club
- Supporting events such as Science Fairs, Careers Events or other 'off curriculum days'
- Supporting a practical lesson or after-school project
- Careers talks and Carousels
- Mock Interviews

Please visit our website at [www.kentandmedwaystem.org.uk](http://www.kentandmedwaystem.org.uk) for more information.

### 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 [kentandmedwystem@canterbury.ac.uk](mailto:kentandmedwystem@canterbury.ac.uk) and for project ideas please visit <http://tinyurl.com/c5sxfq4> and <http://tinyurl.com/d36boov>

### National Grid Outreach

The future of National Grid, and perhaps the whole UK economy, depends on young people becoming interested in STEM subjects (science, technology, engineering and maths) and staying interested in them. Due to this, the National Grid has developed a range of programmes to get young people interested in STEM subjects. They offer work experience, opportunities to visit the company and the Engineering Education Scheme, which links Year 12 students to local companies. Their website also has a range of free resources related to the energy industry, science and engineering.

Please visit [www.nationalgrideducation.com](http://www.nationalgrideducation.com) to find out more.

### 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](http://www.youngeng.org)

### Science Museum, Teaching Resources - Activities

From make your own bath bombs to expanding marshmallows, get inspired by visiting:

<http://tiny.cc/80hqow>

### 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](http://www.stemclubs.net)

### To affiliate to the STEM Clubs Network

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

## CONTACT US

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