

STEM Ambassador Newsletter

Welcome to the June newsletter for STEM Ambassadors in the West of Scotland. There are not many weeks to go now until the end of term so most of the requests we have are for Challenge Days and Competition Finals as well as general requests in readiness for the new academic year in 2011/12. Dates are very tight for the final few requests so please let us know as soon as possible if you can help out. This last term has been very quick with the schools being off for many holidays, so it has been a bit hectic trying to fit in all the Ambassador visits. Thank you to all the Ambassadors who have risen to the challenge when specifically asked to go to a school (usually at short notice) and for the fantastic work all the Ambassadors are doing in schools. The programme is getting very well known now and we are delighted at the volume of requests from schools who have not requested Ambassadors before. Thank you to everyone!

The West of Scotland K'NEX Challenge Final will be held on 15th June and we have 19 teams taking part, aiming to win a place in UK Final in London in September. If you would like to be a judge at this Final, or come along and observe, please see details overleaf.

This will be the last newsletter until just before the schools go back in August so I wish you all a happy (and, hopefully, sunny) summer and look forward to starting the new academic year with our army of enthusiastic Ambassadors!

Glasgow Science Festival – Science Sunday 5th June 2011

Science Sunday takes place in the Fraser Building at Glasgow University on 5th June from 10am-4pm.

There will be loads of workshops, shows, displays and hands-on activities from the Glasgow Science Festival team and specially invited guests. Discover black holes, blood and bodies. Explore the rainforest and meet some of the animals who live there (boa constrictor, tarantula and tree frogs). Make your own masks, molecules, fingerprint key rings and butterfly feeders. Find the skeleton in an archaeological dig, track birds with the RSPB and take part in real research. Includes the amazing Bubbles show and much, much more...

www.glasgowsciencefestival.org.uk



REQUESTS for HELP

Please see below requests from schools and STEM Providers for Ambassador help. The **requests which have additional information available are clickable** to take you directly to the appropriate section. If the school is not clickable, this is all the information we have currently on the request. To go to "Other information" [click here](#).

If you can help please email us at ambassadors@physics.gla.ac.uk or phone on 0141 330 6396 and we can liaise with the school on your behalf.

SCHOOL / EVENT	DATE	REQUEST
Glasgow Science Centre	All year long	Meet the Expert Events, see section for details
KNEX CHALLENGE		
West of Scotland Final, Glasgow	15 th June (12-2:30pm)	Judges for Final at St Francis Centre, Glasgow G5
LAB IN A LORRY		
Bannerman High School, Glasgow	7 th June	Help with Physics Experiments on board lorry
Castlemilk High School, Glasgow	8 th , 9 th June	Help with Physics Experiments on board lorry
Greenwood Academy, Irvine	22-24 th June	Help with Physics Experiments on board lorry
Lochgilphead, Argyll & Bute	28 th June	Help with Physics Experiments on board lorry
Tarbert Academy, Argyll and Bute	29 th June	Help with Physics Experiments on board lorry
YOUNG ENGINEERS & SCIENCE CLUBS		
Celebration of Engineering and Science, Glasgow	10 th June	View Young Engineers and Science Clubs in action at their annual Celebration Event
BUSINESS DYNAMICS		
Lenzie Academy	9th June	Help with Business Awareness Day
Boclair Academy, Bearsden	15th June	Help with Business Awareness Day
Kirkintilloch High	20th, 21st June	Help with Business Awareness Day
GENERAL REQUESTS		
University of Glasgow	Before end of June	Gaelic speaker with science background required for electricity workshop
Largs Academy, Ayrshire	7 th June	Help with IOP Ashfield Music Festival day
Whitehill Secondary, Glasgow	9th June	Help with Scubes Renewable Energy boxes required at Science4Survival Day.
Gryffe High School, Renfrewshire	10 th June	Help with Climate Change/ Energy session during ECO day
Holmston Primary, Ayr	Week of 13 th June	Looking for help with Health Week activities
Carrick Academy, Maybole	August 2011 onwards	Looking for help with various topics, see section
Kirkintilloch High School	August 2011 onwards	Careers talks on numerous subjects – see section
Darvel Primary, East Ayrshire	August 2011	Help with science related topics – see section

Lab in a Lorry, all over Scotland

Lab in a Lorry is an interactive mobile laboratory, run by the Institute of Physics, which gives 11-14 year olds the opportunity to explore science through open-ended experiments. Volunteers guide the students through the experiments (oil and viscous liquids, sound and resonance, light scattering and colours, climate change and energy sources, optoelectronics) and makes sure everyone gets to be involved through hands on experience.

As an Ambassador you will oversee an experiment for the day. You receive training on the Lab beforehand and the organiser sends you all the background material in advance. Ambassadors commit to a minimum of one full school day but you are welcome to come along for as many days as you like. Please see the Requests table above for schools and dates in our area. If you would like to be involved please get in touch with us – you don't have to be a Physicist to take part! ([back to list](#))

Celebration of Engineering & Science – Young Engineers & Science Clubs

The Celebration of Engineering and Science is the annual flagship event for SCDI's network of over 420 Young Engineers and Science Clubs across Scotland. This year's event will host new Junior Saltire Prize Awards and Junior Green Energy Awards, sponsored by Skills Development Scotland. The First Minister will present the awards. The event will be held at the Glasgow Science Centre.

Over 50 schools will showcase their engineering/science/technology projects and compete in a series of hands-on three-minute STEM challenges set by 25 SCDI members. An exciting and action-packed day for 500 or so young people, teachers and companies is in store!

SCDI would like to invite STEM Ambassadors to visit the Celebration to view the tremendous work undertaken by the Clubs and to spectate at the STEM Challenges. The best time to view the action will be between 10am and 12 noon. If you would like to attend please get in touch with Julie Fleming at julie.fleming@scdi.org.uk ([back to list](#))



Business Dynamics

Business Dynamics aims to bring business to life for young people. Volunteers from companies introduce pupils to the opportunities and challenges of business as well as improving their key skills in preparation for the world of work. In our area, the following schools are holding Business Awareness days and would like Ambassadors to help with the sessions. Ambassadors talk about their expertise and role within their company in relation to the topic, and then run a business exercise based on that topic, to help pupil participation and learning. Full information will be sent to you before the event.

([back to list](#))

University of Glasgow

The Hunterian Museum at Glasgow University is putting a project together working with the Gaelic department. They are looking for STEM Ambassadors who speak Gaelic to help facilitate an electricity workshop, which they will film and put on the school intranet website, Glow.

The workshop will take place in the University with a class from the Glasgow Gaelic school in late June. Full training will be given. If you are interested in taking part let us know. ([back to list](#))

Largs Academy, Ayrshire

On 7th June Largs Academy will be involving 3rd year physics students in the Ashfield Music Festival event, an Institute of Physics project. The schools is looking for Ambassadors to come along and help enhance this event, sharing with pupils their expert knowledge, and help encourage them to continue their physics studies at Higher and further education.

The Ashfield Music Festival is an activity designed to develop skills in work-related learning and inspire more students to study physics post-16. The activity is a simulation, based on the scenario that a council (Ashfield) wants to create a new music festival. Students develop skills in enterprise and learn how physics applies in this context by taking on one of six roles: project manager, health and safety advisor, construction manager, electrical engineer, sound engineer and lighting engineer. They are supported by real-life scientists (Ambassadors) and must use a mixture of physics-based knowledge, creativity and skills associated with enterprise in order to win the contract to build the main stage. With a theme chosen to engage students and illustrate the broad relevance and potential application of physics, Ashfield Music Festival is a one-day, off-timetable activity that has been fully trialled in schools.

If you would like to take part please let us know. ([back to list](#))

Whitehill Secondary, Glasgow

Whitehill Secondary is hosting a Science4Survival day on Thurs 9th June. This day has been designed and piloted at the Gaelic School by Dr. Christine Peters (a STEM Ambassador), who now has a Royal Society of Chemistry grant to take this to Whitehill Secondary. The day will be for 26 teams of three P7 and three S1 pupils. The scenario is that they are all aboard a science research plane bound for Antarctica, which has to crash land on a tropical island.

In addition to the Survival activities planned, the organisers are holding renewable energy workshops using the **SCube** kits loaned from Science Connects. These are very easy to use kits which have a solar panel and various components which can be connected together to assess the amount of energy generated from the solar panel. The school would like a couple of Ambassadors to help with the SCube workshops and guide the pupils through the experiments.

If you would like to be involved with the SCubes during this day, please contact us. ([back to list](#))

Gryffe High School, Houston, Renfrewshire

Gryffe High is hosting an Eco Day for P7/S1 pupils on Friday 10th June. The school is having a host of activities for pupils on all Eco Themes from Biodiversity to Litter.

Each pupil will attend 5 sessions (groups of 18-20) - the first at 9.15am and finishing at 12.15pm.

The school would like to have a session on the theme of Climate Change/ Energy with an Ambassador who is an expert in the area. Any activity (debate / presentation / interactive role-play) would be great. They are open to all ideas! There will be prefects on hand to help with the pupils.

The teacher has noted that Gryffe's request fits in very well with the theme of the day at Whitehill Secondary: Science4Survival Day so it is great to see schools creating events along the same lines.

If we can get some Ambassadors for Gryffe it would be great – this is one of our new schools to Ambassadors.

If you would like to assist please get in touch with us. ([back to list](#))

Carrick Academy, Maybole, Ayrshire

Carrick Academy is very interested in the prospect of visits to the school by STEM Ambassadors to enthuse pupils and help them to see the relevance and importance of Science in their lives.

The teacher is looking for as many visits as possible in the next academic year, starting in August. The main topics of interest are Telecommunications, Electricity, Medical Physics, Electronics, Forces, Energy, Radiation and Space.

The ages of the Physics students range mainly from 15-18 but the teacher is also be interested in Ambassadors working with pupils aged 11-14.

If you would like to assist please get in touch with us. [\(back to list\)](#)

Kirkintilloch High School, East Dunbartonshire

Kirkintilloch High is looking to attract guest speakers from different curricular areas to come in around options time (Jan - March 2012) to discuss with S2 and S5 PSE classes academic and career paths, as well as detailing their current jobs - the more interesting the better! The pupils will then be asked to research one of the jobs of a guest speaker and may require to further contact the Ambassadors.

If you would like to be involved with Kirkintilloch next year and start discussing what you can do please let us know. [\(back to list\)](#)

Darvel Primary, East Ayrshire

The school is looking for help from August 2011 onwards on the following topics:

P2 + P2/3 - Growth and Lifecycles P4 - Forces, magnets and springs P6 - Forces and Friction

If you can help with any of the above topics please let us know. [\(back to list\)](#)

The Glasgow Science Centre – Volunteering Opportunities

The Glasgow Science Centre would like to invite STEM Ambassadors to take part in their many "Meet the Expert" weekend events taking place over the next year. If you would like to take part in any of the events listed below please get in touch with us and we will put you in touch with the GSC. Staff from the "Meet the Expert" Team at the Glasgow Science Centre will then arrange to meet with you and brief you on what is required for the event you are volunteering for.

Brain Weekend 30th and 31st July

Do you know lots about the brain? We are looking for brain experts to help us and our visitors celebrate our amazing brains. If you have interesting brain facts and demonstrations you would like to share with our visitors please get in touch with us.

Solve It! Weekend 13th and 14th August

Are you a professional problem solver? We are looking for problem solving experts who would like to join us for Solve It weekend where we focus on the skills needed in maths, science, and engineering and even in every day life. If you have interesting problem solving facts and demonstrations you would like to share with our visitors please get in touch with us.

If you would like to take part in any of the exciting opportunities above please get in touch with us and we will pass your details on to the Glasgow Science Centre. This is an opportunity to get involved with science communication to a wider audience, not only school children [\(back to requests list\)](#)

Other information of interest to Ambassadors...

Practical Action ECO themed posters

Practical Action has created another new resource that you may like to use in schools when undertaking an ECO themed activity.

“100 Small things” is a poster designed to get students to think about what they can do to make a difference to their environment, community and people in the developing world. There are 90 things on the poster and space left for them to add 10 of their own. Divided into the 6Rs of Reduce, Refuse, Recycle, Rethink, Repair, Reuse this FREE large A1 poster can be used as a starting point for a lesson and will brighten up the classroom.

<http://practicalaction.org/100-small-things-to-make-a-difference-poster>

www.practicalaction.org/education has many innovative STEM resources.



Royal Society of Chemistry Activities

This year is the International Year of Chemistry. One of the many activities on offer as part of this is the Global Experiment which is aimed at older primary/younger secondary pupils. The Global Experiment, to be carried out throughout the UK on 8th June, is the most engaging way for schools to be part of the International Year of Chemistry (IYC). It involves four simple experiments to collect important quality measurements of your local water. Once the data's collected, you can submit it through the IYC website, and students' work will join thousands of others in the biggest ever chemistry experiment.

The Chairman of the Glasgow and West of Scotland Local Section of the Royal Society of Chemistry **has a small number of experimental kits for distribution, particularly to primary schools** (one small kit per school.) and is keen for this to be used in conjunction the Global Experiment on 8th June. If you are currently involved with a school and would like a kit for the pupils to use as part of the Global Experiment please get in touch with us asap and we will organise for a kit to be sent to you or the school you nominate. For more information please visit <http://my.rsc.org/globalexperiment>.

A second activity targeted towards older pupils, still under development, is the development of a Chemical Map of Scotland which will detail historic and contemporary links with chemistry. Further details of this activity can be obtained from Elizabeth Stevenson at the University of Edinburgh (e.stevenson@ed.ac.uk)

The CREST Awards is turning 25!

The British Science Association annually runs the CREST Awards scheme and they're getting a bit sentimental about the thousands of students who've received a CREST Award over the years. In fact, they're trying to find award winners from every year of Crest's existence to help celebrate its birthday.



If you have a CREST Award, join the British Science Association's CREST Alumni Network and connect with your CREST roots, hear inspirational stories from students attend National and International events – and from Alumni who have since gone on to have outstanding careers. They will also let you know of other competitions, funding sources and opportunities available through the British Science Association and other partners that may be of interest. Even better, your stories could help inspire a new generation of CREST students!

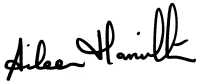
It's FREE to join the CREST Alumni Network (and quick and simple). Visit: www.britishecienceassociation.org/crestalumni to sign-up.

Induction Training

If you have not already undertaken your induction training, the next session will be run on **Tuesday 28th June at 3:00pm** at the University of Glasgow. To register for an induction please email or call us and we will confirm your place. The training will last around 2 hours and will enable you to complete your disclosure form also. The next training after this will be Tuesday 2nd August 2011 at 3pm.

Please do consider all the requests listed in the newsletter. Thank you for all your efforts and please do remember to record your activity at www.stemnet.org.uk or drop us an email with the activity and we will do it for you. Hope you have a superb summer!

Regards



Email: aileen.hamilton@glasgow.ac.uk