

UK GOVERNMENT'S £45 MILLION NEWTON FUND IN BRAZIL

The £45 Million Newton Fund in Brazil over 5 years, of which SIN Brazil has strategic oversight with a Newton team of three, offers an excellent platform for UK based scientists to get involved now, during and beyond the Games.

Timely for Rio's water challenge has been a new £3.5 Million Newton innovation industrial R&D call for research on technology solutions for energy, water and waste launched this September by Innovate UK joint with SENAI (Brazil's non-for-profit National Service for Industrial Training network).

Parts of Brazil suffered severe water shortages this year – especially São Paulo. Next year the UK's Met Office together with Brazil's Ministry of Science and three of its institutes with expertise in climate (INPA, INPE & Cemaden) will launch a new £4 Million Newton Fund research call on climate modeling, carbon modeling and natural disaster forecasting.

... its sewage problem has spiralled ...

Improved long-term forecasting could help Brazil predict droughts in advance enabling cities to be better prepared.

ESRC and Brazil's Council of Funding Agencies (CONFAP) have also recently closed a £6 Million Newton research call on

healthy cities and the social science of food, water, energy nexus.

The UK Academies and CONFAP are also offering joint fellowships and mobility grants under the Newton Fund for both UK and Brazilian researchers to spend between two weeks and four years in Brazil to conduct research across all science disciplines.

he offered to share the UK's expertise. We also have funding for a further project on encouraging Brazil to reduce animal testing following an MOU signed by FCO's Chief Scientific Adviser, Prof Robin Grimes and the Minister of Science, Technology & Innovation this August. In November SIN followed this up with a mission for the Home Office's Animals in Science Regulations Unit & the UK's National Centre for the 3R's (Replacement, Reduction & Refinement) to meet with government, industry & researchers.

To contact SIN Brazil or receive their SIN Latam newsletter on R&D & Newton Fund Calls covering Brazil, Chile, Mexico, Peru, Colombia, Costa Rica, Uruguay and Panama, please get in contact at Julia.knights@fco.gov.uk. Also visit newtonfund.ac.uk for info on UK Brazil current research calls.

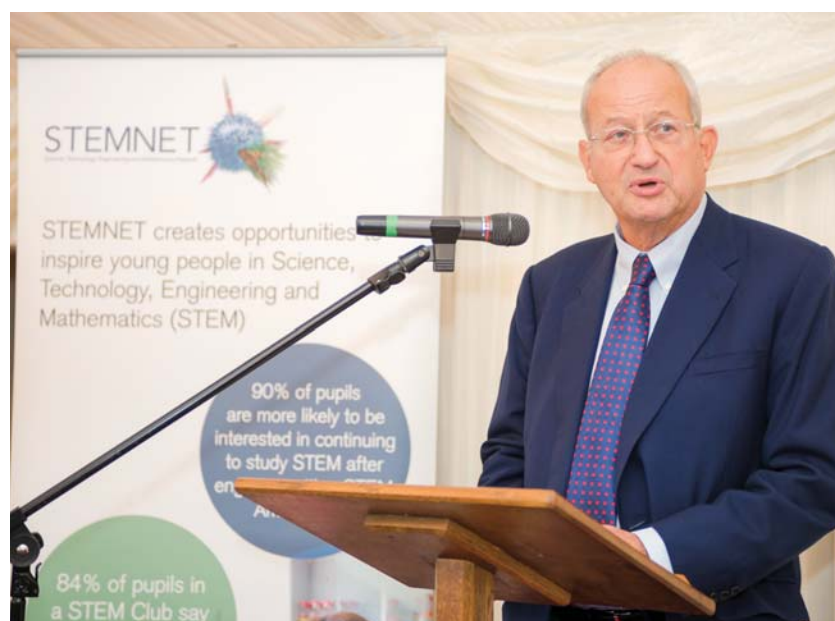
PROJECTS IN ENERGY STORAGE & REDUCED ANIMAL TESTING

SIN Brazil gained funding this autumn for a new project on energy storage. This follows PM David Cameron's recent bilateral with President Rouseff in which

STEMNET AWARDS

Honour those inspiring young people in science, technology, engineering and maths

Winners to visit CERN facility in exclusive trip



The host of the STEMNET Awards, Lord Sainsbury of Turville, welcomes guests, commends volunteers and talks about how increasingly crucial STEM skills are for the United Kingdom.

The winners of the 10th annual STEMNET awards were announced at a ceremony at the House of Lords on October 6th, honouring the UK's most dedicated and inspirational people motivating young people in Science, Technology, Engineering and Maths.

Hosted by Lord Sainsbury of Turville, the Awards were presented in six categories by BBC Journalist Steph McGovern and STEMNET's CEO Kirsten Bodley.

The winners from across the UK are invited by the Awards Sponsors, the Science and Technology Facilities Council (STFC), on an exclusive visit to CERN. Winners will fly to Geneva in December, where they will see cutting edge science in action, as well as meeting top physicists and engineers from across the facility.

Science, Technology, Engineering and Math (STEM) subjects are major contributors to the UK

economy, and ensuring the future generation is passionate about, and skilled in, science, technology, engineering and maths is a key objective of the UK government. STEMNET is the leading organisation in achieving this goal, partnering with schools and employers throughout the UK to create opportunities for young people in STEM.

"We believe in the importance of Science, Technology, Engineering and Mathematics as areas that are inherent to success," said Kirsten Bodley, Chief Executive at STEMNET, **"We are very proud that our programmes, partners and amazing volunteers are having a real impact. We are now working in 95% of UK secondary schools. It motivates us to build on our achievements and support more teachers and inspire more young people in STEM."**

... partnering with schools and employers ...

Professor John Womersley, particle physicist and STFC CEO said, **"For many young people the key to enthusing them about science, technology, engineering and maths and opening their eyes to the huge range of exciting and fulfilling career opportunities in STEM is very often an inspiring and passionate role model. STFC is proud to be a member of the STEMNET team and to recognise the substantial contribution each of these winners has made in helping to communicate this important message and to inspire the next generation of UK scientists."**

... every event this year oversubscribed by pupils ...



Guests meet the three finalist schools in the STEM Club Award category. The finalist schools were Plashet School in London, the Portslade Aldridge Community Academy from Brighton and Hove and the *Joseph Whitaker School* from Nottinghamshire.

THE STEMNET AWARDS CATEGORIES AND WINNERS ARE:

- **STEM Ambassador Award:** **Richard Taffs** regularly supports a wide range of activities including working with STEM Clubs, helping at large science events and also providing STEM mentoring for children with special needs. Richard promotes the STEM Ambassadors Programme
- **STEM Apprentice Award:** **Joanne Sharples** is passionate about encouraging more young women into STEM because she is concerned about the gender imbalance in many STEM sectors. Joanne's efforts have helped increase the number of female Engineering Apprenticeships at BAE by 30%. Joanne did this whilst also pursuing her

... an inspiring and passionate role model ...

encouraging numerous colleagues to become STEM Ambassadors. Teachers and pupils consistently give brilliant feedback about how valuable Richard's unswerving commitment is.

foundation degree and while facing many other challenges.

- **STEM Employer Award:** **Cullum Detuners Ltd** take a strategic approach to releasing their staff as STEM Ambassadors to deliver

inspiring activities in local schools. As well as realising benefits for their STEM recruitment they have grasped opportunities to offer development for existing staff through the STEM Ambassadors Programme whilst also recognising wider benefits for the STEM community. In addition to the STEMNET's programmes, for students they offer paid work experience, apprenticeships and lend a strong focus to inspiring females into STEM.

- **STEM Club Award:** **PACA STEM Club** took part in a huge range of STEM activities but through their STEM Ambassadors they took a particular interest in Astronomy and coding. The Club has also offered

activities for students with widely different interests, including developing a cosmetics business, Green power racing and Dr Who themed science writing.

... increase the number of female Engineering Apprenticeships ...

• **The Joan Sjøvoll STEM leadership Award:** Rachel Beddoes has enthused pupils, parents and colleagues. She has found funding for many school STEM initiatives and even for her own position. Her colleagues say she has transformed STEM provision in her school which takes up a large number of local STEM

opportunities – with every event this year oversubscribed by pupils. Rachel has engaged local business, found pupils work

experience and has developed STEM engagement beyond the school and for students in the wider community.

• **STEM Teacher Award:** Helen Higham is a Chemistry teacher who also volunteered to be Kirkcaldy High School's STEM co-



The winning school was Portslade Aldridge Community Academy from Brighton and Hove.



Left to right: BBC Journalist Steph McGovern, STEM Apprentice Award winner Joanne Sharples, host of the STEMNET Awards, Lord Sainsbury of Turville and STEMNET Chief Executive, Kirsten Bodley.



Journalist Steph McGovern and STEMNET Chief Executive, Kirsten Bodley, congratulate Richard Taffs, the winner of the STEM Ambassador Award.

About STEMNET

STEMNET creates opportunities to inspire young people in Science, Technology, Engineering and Mathematics (STEM) and is an independent educational charity. STEMNET runs three main programmes:

- The **STEM Ambassadors** programme, bringing 30,000 role model volunteers working in STEM sectors into schools to offer real life application and inspiration around STEM subjects
- The **STEM Clubs** programme supports teachers in taking pupils beyond the curriculum is funded.
- The **Schools STEM Advisory Network**, providing schools with the help they need to deliver exciting STEM lessons and enrichment.

STEMNET's work is supported by BIS, DfE, the Gatsby Charitable Foundation and the Scottish Government.

ordinator and runs the school's STEM Club. Helen leads the annual employability event with more than 25 STEM Ambassadors and makes a priority of helping to break down stereotypes and promote positive role models for girls in STEM. Helen's efforts have also supported the school to achieve the highest number of pupils gaining Engineering Scholarships out of all Scottish state schools.