

FOR IMMEDIATE RELEASE

PRESS RELEASE HEADLINE

Refrigeration made Cool! Cool Science wows 1000's of young people with #CoolKnowHow at the Big Bang Fair

PRESS RELEASE SUMMARY

*Cool Science is a Youth Engagement project for the RACHP Industry.
(Refrigeration, Air Conditioning & Heat Pumps)*

Cool Science was launched at the 2015 Big Bang Fair, the largest UK youth event
(full name: Big Bang Young Scientists and Engineers Fair)

The 2015 Big Bang Fair took place at the NEC in Birmingham 11th – 14th March

Cool Science was founded by Chris Vallis of AB Group, an active member of the Institute of Refrigeration and also a member of the IoR executive council. Cool Science was supported by a cooperative of 12 key industry bodies & companies (listed below*).

To help in addressing an Engineering skills gap, Cool Science is engaging and inspiring a younger and wider audience by sharing & explaining the Cool Science behind our industry.

PRESS RELEASE BODY

Cool Science proved to be a big hit at the 2015 Big Bang Fair, the largest UK youth event which attracted over 75,000 young scientists & engineers, teachers, parents & STEM professionals.

Everything The Big Bang Fair does is aimed at showing young people (primarily aged 7-19) just how many exciting and rewarding opportunities there are out there for them with the right experience and qualifications. Big Bang work with partner organisations across business and industry, government and academia to try and give a flavour of the **real scale of engineering** and science in the UK. At its heart Big Bang is about careers and futures and highlighting the exciting possibilities that exist for young people with **science, technology, engineering and maths** backgrounds. It's about the contribution they, with the right motivation, can make to the UK economy and to society in general. The Big Bang Fair seemed the perfect place to showcase Refrigeration, Air Conditioning and Heat Pumps as one of these exciting possibilities; and **this is exactly what Cool Science did!**

The 25sqm Cool Science stand had a prime location to showcase the RACHP industry amongst the 170 stands, it gained an incredible amount of attention from visitors and interacted with over **12,000** young people over 4 incredibly busy days.

Cool Science also received significant press attention, media coverage and VIP visitors. This included the Big Bang Fair official launch press shoot on the Cool Science stand, Associated Press, CBBC Newsround, TV's Marty Jopson, and a visit from the **Science Minister Greg Clarke MP.**

The Cool Science stand proved a huge draw, with its eye-catching design and a fantastic range of fun interactive areas. This attracted a constant swarm of visitors and led to a remarkable level of engagement with young people, interested to learn more about the science behind Refrigeration.

A common theme was learning that refrigeration is something most people don't realize how much they rely on, let alone that it can provide an interesting career.

The Cool Science team worked hard to make the exhibits relevant and educational as well as importantly being interactive and hands-on. **Engaging young people in a practical way is the best way to open their minds to careers which they may not have considered before, such as the Cooling industry.**

The areas of the stand included 4 members of the Mad Science team with dry ice experiments, adding some theatre to draw the passing visitors to the stand.

The stand also featured 2 fantastic bespoke hand-built bicycle-powered refrigeration machines (aka. ‘The Refrigeration Cycle’ #BicyCool), designed and hand built by Dr. Ed Hammond of ECH Engineering. The harder you pedal, the colder it goes, and the large LED temperature displays above the rider encouraged some friendly competition! This was a great demonstration of a vapour compression refrigeration system; its components, the energy input required, and the cooling (& heating) effect.

Also proving very popular was the hand-made ‘Cool Science’ sign, spelt out by frosty pipework: this was a very tactile exhibit for young people to see and feel cooling in action. Also on the stand to explain more about it was the engineer who built it: Stuart Blackman of AB Group.

Another big draw was the 2m video-wall linked to a hi-res Thermal Imaging camera. Showing off the Cool parts of the stand, the camera was also mobile, being able to reveal what’s hot and what’s not. This vivid thermographic colour proved a very engaging way for visitors to very clearly visualize the cooling and heating happening, from parts of the BicyCool to stand visitors and their hands fresh from gripping the frozen Cool Science sign.

In addition there was an iPad wall running an interactive Cool Science quiz (also available on the Cool Science website).

Other parts of the stand had slideshows about Fantastic Fridges, a new website for young people from the IoR. Slides also explained the new Apprenticeship Standard for RACHP engineers, which was launched by the government during the same week as the Big Bang Fair.

Also on show was the World Skills UK RAC team to demonstrate the aspirational avenues available to be recognized worldwide for skills in this industry.

The Cool Science stand was staffed by over 20 keen young engineering volunteers from RACHP companies who engaged with the visitors, encouraging them to ask questions and informing them about how to find out more about the Cool Science behind our industry and the career routes available. President of the Institute of Refrigeration, Graeme Maidment, spent the day on the Cool Science stand and was impressed with what was achieved (quote below).

The huge success of the inaugural Cool Science event at The 2015 Big Bang Fair has provided a fantastic springboard for Cool Science to continue. During and since the Fair, Cool Science has been approached to be involved in national science fairs and festivals, Engineering Schools’ programs, national events for STEM education trusts, education charities and even to be part of the education platform for SSC Bloodhound Education Program.

With further support from the sector, Cool Science hopes to be back at the Big Bang Fair in 2016 and also participate in more events to continue to engage and inspire a younger and wider audience to join our important industry.

***Cool Science was made possible through support from:**

AB Group, Institute of Refrigeration, British Refrigeration Association, ECH Engineering, EBM Papst, Dean & Wood, Mitsubishi Electric, Danfoss, Harp, GEA Searle, Space Engineering, Carel UK.

(banner of logos for these companies is available along with photos from the event)

PRESS RELEASE QUOTES

Science Minister Greg Clarke MP: 'Fantastic!'

@rhiannonlowe1 via Twitter: @CoolScienceUK Thankyou so much for the time you spent with Yr5's, made fridges come alive!

Tamzin Caffrey - Head of Communications at The Big Bang Fair

'What's great about the Cool Science stand is it gives kids the opportunity to see the things they use in their everyday lives that they're not really thinking about and get hands on to see how they work, and that's it's something they might be interested in doing later in life. Also there is a strong and serious message about getting more skills into this industry'

Graeme Maidment – President of the Institute of Refrigeration

Coming along to help out with Cool Science at the Big Bang Fair, I was really impressed with what was achieved. Cool Science was a fantastic success and it gave us as an industry the opportunity to show large numbers of young people that we are a brilliant career choice.

This initiative was only possible because of the support that it received from members of our industry. I would like to thank everyone who volunteered and supported the show, especially Chris Vallis and his team at AB Group who came up with the whole concept of Cool Science and made it happen. **For me, Cool Science is so important: it highlights to young people the opportunity and challenges of a career in Refrigeration Air Conditioning & Heat Pumps - it's fantastic!**

Russell Beattie - Chief Executive of FETA

I had the pleasure of seeing first hand the contribution going on there to encourage the next generation with the very impressive Cool Science stand and the volunteers doing sterling work. The Big Bang organisers told me that, especially considering it was a first year appearance, it was a very impressive set up: gaining particular accolades for the amount of interaction and participation it provided for the youngsters.

Paul Alway – Marks and Spencer

I was very happy to attend the Big Bang Fair to support Cool Science; obviously as a business M&S do millions of pounds worth of trade selling refrigerated food, and as an industry we need to make sure that there are enough new engineers coming into it. Refrigeration is a fantastic industry to get into and a fascinating trade to be in. Cool Science is doing a brilliant job of helping maintain this talent pipeline for our industry's future.

Mark Forsyth WorldSkillsUK

There are so many young people at this event interested who want to know more about the science of Refrigeration. They're learning that it is all about the transfer of heat and we've got some really practical activities for them to get engaged with.

This is all about awareness - it is a really innovative stand which showcases the industry well. We've got real excitement from all the industry volunteers who are really enthusing the young people. This is a great, great spectacle and I really hope it continues in the future.

Chris Vallis – AB Group & Founder of Cool Science

The estimate is there are approximately 70,000 people working in the UK cooling industry - it's a huge sector. We suffer from the same symptoms as the whole of the engineering sector, in that we have a skills gap, and I believe young people are who we need to be talking to, to plug that gap. We should be encouraging them to continue studying STEM subjects and making them aware that they can train in this field. For example, they can now take up an apprenticeship under the new apprenticeship standard from 2017 in Refrigeration and Air Conditioning, which is government approved. We hope to maintain the momentum with Cool Science to continue this work. **Hopefully**

after seeing what we have managed to achieve in 2015, industry support will grow to help Cool Science continue to move forwards.

Coming soon... A series of short videos filmed for Cool Science at The Big Bang Fair.

Please visit our website www.coolscience.org.uk for further updates.

Also, follow us on Twitter @CoolScienceUK

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NOTES TO EDITOR

Photos to accompany this press release of **Cool Science at The Big Bang Fair** can be found here:

<https://flic.kr/s/aHsk6svo5W>

Further detail & context about Cool Science, its Mission and Aims:

Cool Science mission...

Britain is Great at Engineering, but It's projected that we need double the number of engineering related apprentices and graduates coming out of colleges and universities. Skills shortage and future skills gap are real challenges for us to address now. Critical to Future development and talent pipeline is an ability to inspire younger members and attract young people from different backgrounds.

Cool Science is engaging and inspiring a younger and wider audience by sharing & explaining the Cool Science behind refrigeration, air conditioning and heat pumps.

Broadening the appeal and awareness of the Cooling industry, its importance in modern life & the long and interesting STEM careers available.

Cool Science aims...

- Improve awareness and understanding through education in a fun and engaging way.
- Demonstrate a practical and important use for STEM skills and qualifications.
- Sparking interest to attract young people to explore a career in cooling.
- Inspiring innovation from different backgrounds through widening participation and outreach.

PRESS RELEASE CONTACT

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