

## November 2019

The Roentgenium Zone was a general science zone, supported by the Science and Technology Facilities Council. There were six scientists taking part in the zone:

- Varun Ramaswamy, the winner of this Zone, is a PhD student at the Institute of Cancer Research, finding the shapes of different proteins in the body and uses data from STFC facilities
- Samantha Firth is the Communications and Social Media Officer for STFC
- Rebecca Shaw is a Research Technician at the University of Aberdeen at the Institute of Medical Sciences
- Anna Kalorkoti is a materials scientist exploring how materials change when the world around them changes at a company that uses STFC facilities
- Alin Elena works at Daresbury Laboratory as a computational scientist
- Adam Washington works at the ISIS Pulsed Neutron and Muon source, building and maintaining instruments for visiting scientists to use

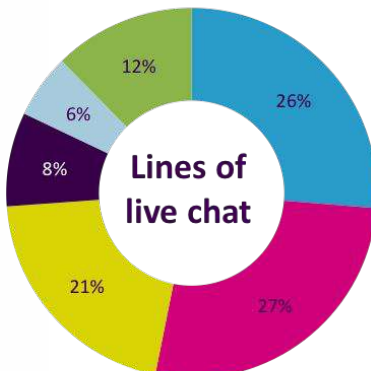
## Key figures

This general zone was varied in terms of questions asked, and had a higher than average percentage of questions about careers and education.

It was quieter than other zones in November's event, with a lower than average number of students logged in and questions asked.

	ROENTGENIUM ZONE	NOV '19 ZONES AVERAGE	2012-19 ZONES AVERAGE
Schools	12	10	10
Students logged in	307	368	389
% of students active in ASK, CHAT, VOTE, or comments	91%	91%	87%
Questions asked	243	571	659
Questions approved	133	262	291
Answers given	359	457	525
Comments	16	45	69
Votes	256	294	307
Live chats	17	18	17
Lines of live chat	5841	6334	5771
Average lines per chat	344	352	356

## Scientist activity



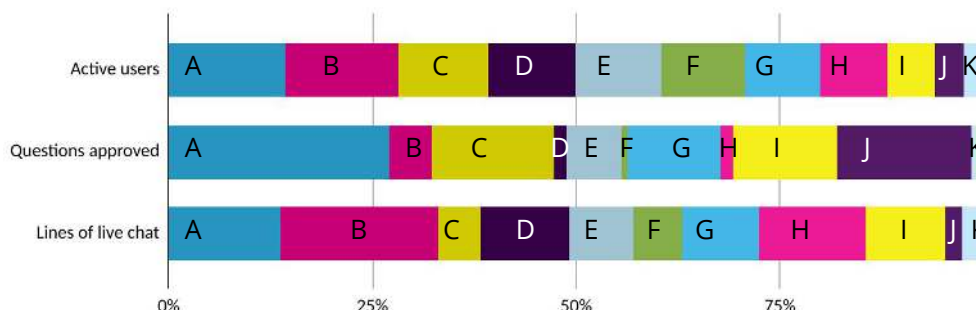
### SCIENTIST

### PLACE

Varun Ramaswamy  
Samantha Firth  
Rebecca Shaw  
Aline Lena  
Adam Washington  
Anna Kalorkoti

1st  
2nd  
3rd  
4th  
5th  
6th

## School activity



	YEAR GROUP(S)	CLASSES
<b>A</b>	The British School Yangon, Yangon, Myanmar	8 1
<b>B</b>	Furness Academy, Barrow-In-Furness (WP/U)	10, 11 2
<b>C</b>	Midkent College, Gillingham (U)	12, 13 2
<b>D</b>	John F Kennedy Catholic School, Hemel Hempstead (U)	8 1
<b>E</b>	Caerleon Comprehensive School, Newport (U)	9 1
<b>F</b>	All Saints Catholic College, Huddersfield (WP)	9 2
<b>G</b>	Redmoor Academy, Hinckley (U)	10 1
<b>H</b>	Harwich & Dovercourt High School, Harwich (U)	9 2
<b>I</b>	New Line Learning Academy, Maidstone (WP/U)	10 1
<b>J</b>	Darlington College, Darlington	12 1
<b>K</b>	The De Ferrers Academy, Burton-On-Trent (U)	10 2
<b>L</b>	Egglescliffe School, Stockton-On-Tees (U)	7 2

We have found that schools that are more than 30 minutes travel time from their closest Higher Education Institution are less likely to receive visits and benefit from engagement activities. We give priority to underserved (U) and widening participation (WP) schools when allocating places. Find out more about our research at <https://about.imascientist.org.uk/2017/school-engagement-in-stem-enrichment-effect-of-school-location/>

## Popular topics

Questions in the Roentgenium Zone were varied, reflecting the nature of the general zone and the scientists different work areas.

Students asked about the realities of being a scientist; whether laboratories are as they are depicted on TV, and which are the most scientifically correct TV shows or films. They asked what the scientists are currently working on, about recent experiments and discoveries, and whether they view their career as being beneficial to the world in general.

Students wanted to know about the scientists on a personal level too. For example, they asked whether they were religious, what they do in their free time and what they feel passionate about.

## Frequent words used in live chats by students and scientists



## Question analysis



What in particular  
would you volunteer for  
if you win the prize  
money?

Are there more  
elements to be  
discovered in the  
periodic table?

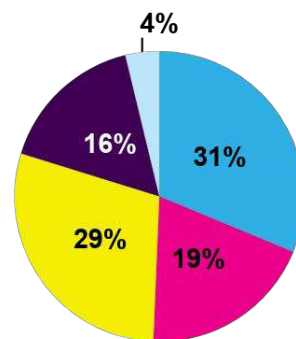
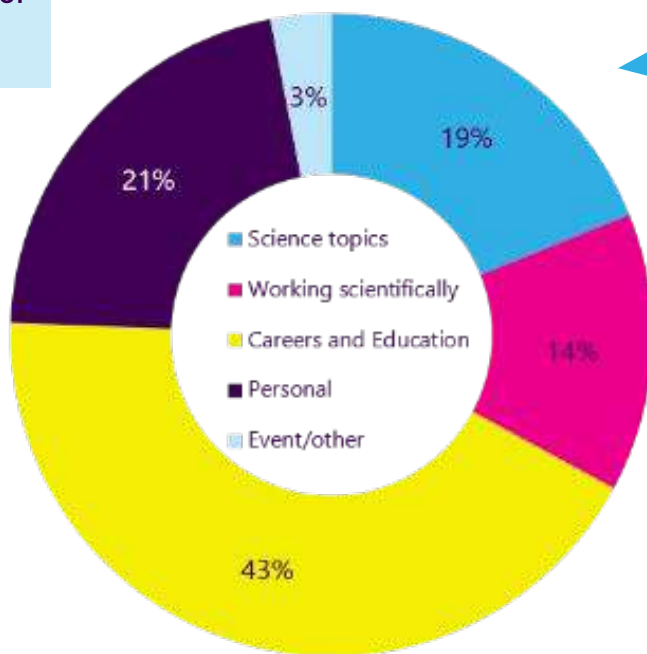
With such a  
busy job  
when do you  
have time to  
play games?

What is your  
biggest pet  
peeve within  
the scientific  
community?

What do you  
build in  
Minecraft?

What scientific  
problems to you  
intend to solve in  
the future?

I'm hoping to become something like a  
microbiologist, would you have any tips on  
how to get there?



Historic Per-Zone  
Average (Themed Zone)

## Examples of good engagement

Within the chats, scientists and students built a great rapport, with conversations about hobbies and interests. Students wanted to talk about their own interests and find things in common with scientists, helping to contribute to their Science Capital:

*"What do you like to do for fun when you have free time?" – **Student***

*"I play Dungeons & Dragons! We have a group that meets at my house every week, and it's always loads of fun. My fiancée and I also play a lot of board games: we own about 100 different games between us, although I've not played all of them yet! I also enjoy reading, climbing, cross stitch & computer games." – **Anna, Scientist***

*"My spouse and I play quite a bit of Minecraft, almost exclusively on the creative mode side. I've probably only spent a couple of hours playing in survival mode." **Adam, Scientist***

*"I like to read MANGA (Japanese comics) or watch shows before I go to bed. Over the weekends, I usually play the piano or write a song. Sometimes, I go out for a game of squash with my labmates after work." – **Varun, Scientist***

*"I like to go for hikes! I live in Scotland and there are so many beautiful spots to go walking here! I also do some photography and take pictures of the places I travel too. In summer months I go scuba diving – mostly in the North sea. Even in Summer it can be quite cold, but there is loads of wildlife that we can see in the water which is amazing!" – **Rebecca, Scientist***

*"Same here i also like to play Minecraft also i love to watch films mostly action related. i also love photography and diving, I went diving at Cyprus with my Granddad as my Nan and him lives out there we go every year. I play rugby and go to mui tui boxing and also football." – **Student***

*"I love Cyprus! My Dad was born there, so we went back there a lot for family holidays when I was growing up. I never got to dive there, but it sounds amazing" – **Anna, Scientist***

*"Wow, good stuff mate! That's an exciting set of activities! I don't really play video games, growing up, I enjoyed physical sports more" **Varun, Scientist***

*"Super jealous you got to dive in Cyprus! Bet the water was amaaazing." – **Rebecca, Scientist***





## Scientist winner: **Varun Ramaswamy**

Varun's plans for the prize money: *"If I win the prize money of £500, I would use it to open my own tutorials for high school and undergraduate students on physics, chemistry and maths to help them understand science and enjoy learning it. I will invest in the technology to start my own online and offline tutorials where I can have interesting discussions, demos, chats and videos with animations for curious young students"*

Read Varun's **thank you message**

## Student winner: **Mason**

As the student winner, Mason will receive a certificate and a gift voucher.

## Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made about [month]'s *I'm a Scientist*...

*Both classes absolutely loved taking part and my class actually clap at the end of the live chat...This project encourages a greater understanding and interest in science. Pupils see scientists as real people with interests like their own. It breaks down the stereotypes around the career. Taking part also encourages the pupils to think about the world of work and future careers.*

— Teacher

*We had our first live chat today and the students loved it!! It was so lovely to see them so engaged with the live chat and some of their questions were fab!*

— Teacher

*I'm a Scientist has changed my perspective on science*  
— Student

*I particularly enjoyed the live chats with classes because the engagement was totally led by them and it was a lot of fun to chat about such a variety of things, from being a researcher, to their questions about dementia, to our favourite snacks, to Netflix - I'll miss doing them a lot! And, in chats, there were some questions that came up frequently, which has given me a better idea of some of the concerns/questions of younger people.*

— Scientist



Becky Shaw  
@bexterr\_

First @imascientist chat of the day completed ✅! It really got me motivated to be productive today 🙌 But today is also the first #eviction day 😬!! I wanna stay in so 🙌 I've inspired some future scientists!! 🧑🔬🧬  
#WomenInSTEM #IASUK #sciencetwitter #scientists

8:36 AM · Nov 19, 2019 from Aberdeen, Scotland · Twitter for iPhone