

**BRITISH COUNCIL  
BULGARIA**

**SOFIA  
SCIENCE  
FESTIVAL  
2017**

**PROGRAMME  
OF EVENTS**

# MAIN PROGRAMME

Sofia Tech Park, John Atanasoff innovation forum



Thursday 11 May

## Technological Entrepreneurship – key to world peace and prosperity

### EVENT IN ENGLISH

11.05 | 19:00 | Mtel Arena Hall | general public | book free tickets

Over the past several decades we have witnessed a shift towards national policies that encourage innovation and technological entrepreneurship. The call for more investment in entrepreneurship echoes around the globe as it becomes clear that except for a few countries, natural resources like oil and minerals are not enough to sustain economies, while human ingenuity is indeed the most important, sustainable natural resource.

So, is there hope for everybody around the globe to improve their lives? Can technological entrepreneurship be encouraged and taught so that generations of determined entrepreneurs will build up thriving economies? The clear answer to both questions is yes and it all starts with education in general and scientific-technical education in particular. This is a long process, but there is a way to expedite it – start with the already educated engineers and scientists. They are the first candidates to open entrepreneurial endeavours. They can make a difference, but need motivation, instruction and encouraging economic environment that fosters creation of successful start-ups. These pioneering entrepreneurs can then serve as role models to others. The name of the game is motivation. If this nucleus of capable people are motivated for entrepreneurship, a process can start that will make a huge difference in the life of any country. Living examples of countries that underwent this process are China, Israel and Singapore whose societies shifted from agrarian to industrial within several decades thanks to the spirit of entrepreneurship and the motivation to create high-tech industries led and guided by individual engineers and scientists. In his talk Prof. Shechtman will explain the need for technological entrepreneurship and describe his involvement in turning Israel into a start-up nation.

Prof. Dan Shechtman won the Nobel Prize in Chemistry 2011 for his discovery of quasicrystals. After completing his doctorate studies at the Technion in Haifa, Israel, Danny Shechtman was an NRC fellow at the Aerospace Research Laboratories of Wright Patterson AFB, Ohio, where he performed research for three years. In 1975 he joined the Department of Materials Engineering at Technion where he is currently a Distinguished Professor. During 1981-2004 he was several times on Sabbatical at the Johns Hopkins University, (joint program with NBS-NIST). During this period he

discovered by TEM the Icosahedral Phase which opened the new science of quasi-periodic crystals and performed research on other subjects. As of 2004 he is also a Professor at MSE and Ames Lab, Iowa State University. His current research efforts centre on developing strong and ductile magnesium alloys for a variety of applications.

Shechtman is member of several Academies, including the US National Academy of Engineering and the Israel National Academy of Sciences. He is an Honorary Member of professional societies around the globe and was awarded many prizes including the Wolf Prize in Physics, the Gregori Aminoff Prize of the Royal Swedish Academy of Sciences, the EMRS award and the Nobel Prize in Chemistry 2011.

He has been teaching Technological Entrepreneurship at the Technion since 1986 to hundreds of students every year. By now the class was given to about 10,000 engineers and scientists and over that period of time Israel has become a "start-up Nation".

In parallel to his academic activity, Shechtman devotes time and effort to science outreach for kindergarten children and hosts the Israeli TV show for children "Science with Dan".

*This event is organised in partnership with the Embassy of Israel in Bulgaria.*

## The science in... a bottle of whiskey?

### EVENT IN ENGLISH

11.05 | 20:30 | Mtel Arena Hall | adult audience only | buy tickets

This will be a memorable encounter with Scotch brands produced in long-lost distilleries.

"The Lost Distillery" is a company in Scotland which has been working together with historians, researchers and technology experts from Glasgow University to study the archives, craft and science of blending. Between them they bring back to life legendary Scottish whisky distilleries from the 19<sup>th</sup> century.

Ewan Henderson is Crucial's global brand ambassador of "The Lost Distillery" and has presented at a number of science festivals - UK Science Festival, Edinburgh International Science Festival, Glasgow Science Festival и Dundee Science Festival. He will share his passion for the science behind a whisky's feel, taste, flavour and balance, and will convince us how much geology, the soil, chemistry and even music are just as important to the taste of the spirit as are its ingredients.

Join us for this exciting story which reveals the art of one of Scotland's most treasured assets – whisky!

*This event is organised in partnership with Maxxium Bulgaria.*

**Strictly 18+, includes whisky tasting**

## Gravitational Waves: The Novel Messengers of the Universe

### EVENT IN ENGLISH

12.05 | 19:00 | Mtel Arena Hall | general audiences | buy tickets

The last century has witnessed a tremendous progress thanks to the observation of the electromagnetic radiation. Gravitational waves have opened a new window to space and revolutionized our understanding of the universe. They were for the first time detected by the LIGO detectors in September 2015. The waves came to Planet Earth as a result of a catastrophic event in the distant universe, which confirmed a prediction of Einstein's Theory of General Relativity. This talk will look at gravitational waves, the first discovery of the Advanced LIGO and the humans' role for the discovery.

Alicia Sintes Olives is the lead researcher of the scientific collaboration LIGO at the University of the Balearic Islands and has been a board member of LIGO-LSC since 2002 and the GEO executive committee. Sintes is a Full Professor of the University in the area of Theoretical Physics. She has been a Marie Curie fellow, a senior researcher at the Max Planck Institute for Gravitational Physics in Germany, as well as on research projects in Portugal, Canada, the United Kingdom, Germany, and Italy. Her research focuses on the field of gravitational wave astronomy. Sintes is an expert in the "commissioning" of detectors, and in the study and search for neutron stars and binary systems of black holes. She has led different research projects within the LIGO and GEO collaborations. Sintes has participated in the development of the software "LIGO Scientific Collaboration Algorithm Library Suite" and has contributed to the computing project Einstein @ home. Since March 2016 she is co-chair of the LIGO-Virgo Continuous waves working group and a member of LIGO's Data Analysis Council, as well as internal referee for LIGO's "continuous waves" and "compact binaries data analysis" working groups.

*This event is organised in partnership with Instituto Cervantes Sofia.*

## Big Data: does size matter?

### EVENT IN ENGLISH

12.05 | 20:30 | Mtel Arena Hall | general audiences | buy tickets

Big Data knows where you've been and who your friends are. It knows what you like and what makes you angry. It can predict what you'll buy, where you'll be the victim of crime and when you'll have a heart attack. Big Data knows you better than you know yourself, or so it claims.

But how well do you know big data? From science to smart cities, business to politics, self-quantification to the Internet of Things, people are talking about big data as a force for change. Privacy, democracy, even our ideas of who we are, could be transformed.

But you don't need to be a Silicon Valley tech prodigy to understand what's going on. Join Timandra Harkness to find out all about the world of "big data", artificial intelligence, robots and mobility.

Timandra has (approximately 86.11% of) an Open University degree in Mathematics & Statistics, but just as importantly she is an experienced writer, broadcaster and comedian. She has been performing on scientific, mathematical and statistical topics since the latter days of the 20th Century. She has written about travel for the Sunday Times, motoring for the Telegraph, science & technology for WIRED, BBC Focus Magazine and Men's Health Magazine, and on being 'Seduced by Stats' for Significance (the Journal of the Royal Statistical Society). She is a regular on BBC

Radio, resident reporter on social psychology series The Human Zoo as well as writing and presenting documentaries and BBC Radio 4's FutureProofing series.

In 2010 she co-wrote and performed Your Days Are Numbered: The Maths of Death, with stand-up mathematician Matt Parker, which was a sell-out hit at the Edinburgh Fringe before touring the rest of the UK and Australia. Science comedy since then includes solo show Brainsex, cabarets and gameshows. She is currently writing a new comedy show about Big Data. Meanwhile, she puts her MC skills to more serious uses, hosting and chairing events with Cheltenham Science Festival, the British Council, the Institute of Ideas, the Wellcome Collection and a Robotics conference in Moscow, among many others.

Timandra is a Visiting Fellow (Knowledge Exchange) in Big Data, Information Rights and Public Engagement with the Centre for Information Rights at the University of Winchester. She speaks with authority, intellectual rigour and humour to varied audiences, and claims to be neither a technophile nor a technophobe when looking into the future

## Saturday 13 May

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### Micro World

13.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | book your free seat

Look into the tiniest microorganisms with biologists Alexandrina Al-Djasseem and Victoria Milanova to find out just how exciting their mysterious micro world is.

### Tree and Bush Explorers

13.05 | Exploratorium zone | suitable for classes 1-4 | free

*Find out at what time the groups will leave and sign up at the Information Desk.*

The Sofia Tech Park is home to some trees besides the labs – join the exploration trail led by botanist Miroslava Dimitrova.

### On Your Marks, Get Set...!

#### **EVENT IN ENGLISH**

13.05 | 11:00 | Mtel Arena Hall | suitable for classes 1-4 | book your free seat

From the moment you leave the starting blocks, your sporting ability can be affected by science. How do people balance, and what makes them fall over? What happens when a ball bounces, and why do balls have different surfaces? How is friction useful in sport and how do we use science to protect us from injury? Watch plastic cups loop-the-loop, and try to spot the trick in the game of crazy cricket. Dare you sit on a seat of nails?

This exciting and interactive show uses lots of audience involvement to make you think about sport as you never have before. Be prepared to limber up and join in for this show with lots of audience interaction.

Before joining Science Made Simple Ruth Perkins developed over 6 years experience through

interactive science workshops and shows, working for the Museum of Science and Industry in Manchester and 'Chemistry with Cabbage'. She started her science communication career whilst still at university, studying physics. Her favourite aspect of science communication is getting out into community and festival events with science busking. She is LAMDA accredited to Gold standard.

Science Made Simple are one of the UK's leading science communication companies which brings the brilliance of science to life with amazing, high energy interactive shows for schools and festivals. From football to game shows to pop songs and everything in between, they take the world around us and show the science that makes it work.

*Sofia will be European Sports Capital 2018 – what better way to prepare than join this spectacular show on the science of sports?*

## Raspberry Electricity

13.05 | 10:00 | BASF Lab Hall | suitable for classes 5-7 | school bookings

Potatoe and lemon batteries are old news! Join Dr. Bo (chemist Bojidar Stefanov) on an exciting quest of producing electricity from berries.

## Protect Yourself from Online Fraud

13.05 | 10:00 | Hall Zone 42 | general audiences | book your free seat

Learn how you can stay safe of fraud while shopping online with the experts on cyber security from the Financial Literacy Initiative foundation. Watch live a demonstration of how hacking actually works.

## Dark Universe

13.05 | 13:00 | Hall Zone 42 | general audiences | buy tickets

The mysteries of our universe will overwhelm even the most passionate science fiction fans. Find out about the latest discoveries in space, the quest for dark galaxies and matter from Dr. Vladimir Bojilov, astrophysicist at Sofia University and BBC Knowledge Bulgaria editor-in-chief.

*This event is organised in partnership with BBC Knowledge Bulgaria.*

## Under the Spell of Colours (an event in 2 parts)

13.05 | 13:00 and 14:30 | BASF Lab Hall | general audiences | book your free seat

Are you nervous in a yellow room? Do you avoid red clothes and feel peaceful in green? Explore how colours affect us in this 2-part event with physicist Ivaylo Slavov.

## White Hacker, Black Hacker

13.05 | 13:30 | Mtel Arena Hall | general audiences | buy tickets

Hacking has become the topic of the day – the Democratic Party website in the US was hacked, the Panama Papers created an outcry, the Internet of things may you're your smart heater at home can be hacked from across the world. The ethical hackers from Safer cyber-security school will help you make sense of it all.

## Earth's Unearthly Landscapes

13.05 | 14:30 | Hall Zone 42 | general audiences | book your free seat

While humanity is getting ready to colonise Mars we realise that there are parts of our own Earth we know very little about. Find out where we can find the best terrains on this planet to prepare for the alien landscapes we will encounter. The best man to take you on this journey is Dr. Dimitar Zhelev from the Faculty of Geology and Geography at Sofia University, co-founder of Geograf BG.

## New Technologies in Medicine – a Future or our Present

13.05 | 15:00 | Mtel Arena Hall | general audiences | book your free seat

Medical doctor Prof. Slavcho Tomov is the Rector of the Pleven Medical University and is here to discuss how much of the technologies we see in the movies are already part of the daily routine of doctors in Bulgaria.

## Science Myth Busters

13.05 | 16:00 | BASF Lab Hall | general audiences | book your free seat

Can you think of a single scientific area which has been spared all sorts of urban myths? This is a quest against the scientifically ungrounded, often even harmful myths from our daily lives. Get it right with Myth Busters and FameLab alumni Ivayla Sopotenska, Zlatina Dimitrova, Toma Shtilianov, Kalin Kolev, Nasko Stamenov and Petar Evtimov.

## Trophy Hunting and Conservation in Africa – a Zoologist's Perspective

### EVENT IN ENGLISH

13.05 | 16:00 | Hall Zone 42 | general audiences | book your free seat

In July 2015 the story of Cecil, a lion shot by an American dentist in Zimbabwe, took the world by storm. I'm here to talk about how trophy hunting affects conservation of African wildlife. Is it a vile and dangerous procedure, or can it be used for protecting animals? Let's start a debate!

Dr Joanna Bagniewska is a zoologist; she obtained her MSc and doctorate from Oxford University's Zoology Department, and currently works as a teaching fellow at the School of Biological Sciences at the University of Reading. Joanna is passionate about science communication and is constantly engaged in a number of outreach activities. In 2014 she won FameLab Poland, a science

communication competition for researchers, and went on to receive the Alumni Award in the international finals of the event. She has co-organised the popular science conference “Science: Polish Perspectives”; more recently she has taken part in endeavours such as the theatrical Science Slam, science stand-up comedy for Bright Club Oxford and Museums Show Off, and TEDxWarsaw.

Find out more about Joanna from her [website](#) and enjoy her entertaining [videos](#) on youtube. *This event is organised in partnership with the Polish Institute in Sofia.*

## The Adventures of a Zoologist

13.05 | 16:30 | Mtel Arena Hall | general audiences | book your free seat

Meet one of Bulgaria’s most emblematic and charismatic researchers who has been the role model of many generations of biologists. Dr. Petar Beron has travelled over 90 countries on 5 continents to explore caves, mountain peaks, jungles and deserts, and collect specimens for the National Natural History Museum in Sofia. He is full of extraordinary tales which will convince you that science is indeed an exciting adventure.

*This event is in partnership with the National Natural Science Museum at the Bulgarian Academy of Sciences*

## Incognita Patagonia

### EVENT IN ENGLISH

13.05 | 17:30 | Hall Zone 42 | general audiences | book your free seat

The greatness of Patagonia, with a famous changeable and windy weather, as well as its legendary landscapes, attracts many people to this huge region of South America. However, Eñaut has had the opportunity to explore and do expeditions to less known glaciers and remote mountain ranges, experiencing a personal journey to the most unknown Patagonia. Some of the glaciers are melting 100 times faster today than anytime in the past 350 years, and indeed faster than any major glacier area in the world.

Eñaut Izagirre is from the Basque Country and a ski-mountaineering specialist with ski and climbing experience in the Pyrenees, Norway and the Alps, and recently in Patagonia. Now he lives in Punta Arenas (Chilean Patagonia), studying a MS in Glaciology and working at the University of Magallanes. He has participated in numerous sailing and kayaking expeditions into the Darwin Range and the Patagonian channels. In 2016 r. he headed the “Incognita Patagonia” project of the National Geographic Society.

Explore more about “Incognita Patagonia” on the project’s [website](#).

*This event is organised in partnership with the Instituto Cervantes Sofia.*

## Bread

13.05 | 17:30 | BASF Lab Hall | general audiences | book your free seat

Bread is not just a delight to our palate! Engineer technologist Ivayla Sopotenska is quite passionate about every single bit of bread – find out what she finds so inspiring about the technology of fermentation, the rituals of kneading and more.



# Religion and Science – Mapping the Conflict Zone

## EVENT IN ENGLISH

13.05 | 19:00 | Mtel Arena Hall | general audiences | buy tickets

The relationship of religion and science has often been portrayed as warfare. The rise of the 'New Atheists' (Richard Dawkins et al) on the one hand and the religiously motivated proponents of 'anti-science' on the other, might encourage this view. But what is the true history of science's encounter with religion and vice versa? And what is the current state of play? In this talk Malcolm surveys the alleged 'battleground' between science and religion. He tries to filter the signal from the argumentative noise, all the while drawing on a personal journey that began in the heart of evangelical Christian belief.

Malcolm Love has had careers as a minister of religion (Baptist), a BBC producer and as specialist trainer, coach and university lecturer in Science Communication. On religious belief he describes himself as a 'devout sceptic'.

Although a specialist in science communication and public engagement, Malcolm has a wide range of other clients. They include: CEOs, MPs, local politicians, academics and campaigners. He provides support for numerous organisations including charities, government organisations, the church and international festivals.

Before joining the BBC staff in 1988 Malcolm had been a freelance journalist in Central America (Nicaragua and El Salvador). He worked for the BBC as a producer (and occasional presenter) in London, Cardiff and Bristol where he became senior producer for features and documentaries. Since going freelance in 1997 Malcolm has made many more programmes for the BBC and other outlets. This experience has enabled him to work with many well-known contributors including (among many others): John Cleese, Midge Ure, Anita Roddick, Alexei Sayle, Claire Rayner, Brian Redhead, Ian Hislop, Amy Tan, Armistead Maupin and Isabel Allende.

As a specialist in the public engagement of science Malcolm runs workshops in the UK and internationally, helping scientists and engineers to better engage with the media and the public. Malcolm conducts media interviews and chairs events.

He was a coach and (along with Prof Robert Winston) a permanent panel member for the selection of the Engineering and Physical Sciences Research Council's (EPSRC) Senior Media Fellows programme. He is an associate lecturer in 'Broadcast Science' part of a Masters degree course in Science Communication (University of West of England, Bristol). Malcolm also taught science communication for 13 years at Birkbeck College, London. He regularly speaks on this and other subjects in the UK and abroad.

He is chief trainer for 'Famelab' and 'Famelab International' running master classes in public communications. Famelab is a competition that encourages and trains scientists to be better communicators. The competition originated at the Cheltenham Science Festival and has now extended (via the activities of the British Council) to 26 countries and organisations around the world.

Find out more about Malcolm from his [website](#).

## Phantoms of the Past

13.05 | 20:30 | Mtel Arena Hall | general audiences | book your free seat

We had even forgotten their names but today they're crawling back from the holes we'd pushed them into. Learn scientists are so anxious about the return of some of the most dangerous infectious diseases we had thought we'd eradicated. Discuss your own fears with medical doctor Assoc. Prof. Lyubomira Nikolaeva-Glomb, Head of Virusology at the National Centre of Infectious and Parasitic Diseases.

Sunday 14 May

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## Kids' Academy

14.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | book your free seat

Radostina Arasheva and Marieta Terzieva from the Uzana Nature Academy will explore what it's like to see if you are an insect or feel the sunray if you are a flower.

## Tree and Bush Explorers

14.05 | Exploratorium zone | suitable for classes 1-4 | free

*Find out at what time the groups will leave and sign up at the Information Desk.*

The Sofia Tech Park is home to some trees besides the labs – join the exploration trail led by botanist Miroslava Dimitrova.

## In the Zone

14.05 | Exploratorium zone | suitable for classes 5-7 | free

*Find out at what time the event will start and sign up at the Information Desk.*

Learn how GPS/GNSS, satellites, geographical information systems (GIS), drones laser scanners (LiDAR) work from the students and professors at the University of Mining and Geology.

## Scooping up in Pairs

14.05 | 11:30 | BASF Lab Hall | general audiences | book your free seat

Engineer technologist Ivayla Sopotenska and chemist Zlatina Dimitrova are looking for couples who claim to be in perfect harmony. They will put their relationships to the test by getting them to cook together!

## The Energy of the Future

14.05 | 11:30 | Mtel Arena Hall | general audiences | book your free seat

Does hydrogen have a chance in the future and will we be fuelling our cars with ammonia any time soon? How about solar energy and algae? Chemist and nanotechnologist Dr. Bojidar Stefanov (Dr. Bo) has the answers.

## Exclusive Screening of an episode from the National Geographic "Origins: The Journey of Humankind"

14.05 | 12:00 | Hall Zone 42 | general audiences | book your free seat

Hosted by Jason Silva, Origins: The Journey of Humankind rewinds all the way back to the beginning and traces the innovations that made us modern.

*This event is organised in partnership with National Geographic*

## Fake News

14.05 | 13:00 | Mtel Arena Hall | general audiences | buy tickets

Everybody's talking about it. Join in the debate with an outstanding panel, including Samuil Petkanov - the journalist who makes a living by publishing fake news (NEnovinite), Nikolay Vitanov - the professor of mathematics and physics who makes mathematical models of societal phenomena, and Vera Gotseva, or Lomovera who has a keen eye for reality through her lens. After all, after much discussion, debate, and research, the Oxford Dictionaries Word of the Year 2016 was *post-truth* – an adjective defined as 'relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief'.

## Elementary Particles and the Universe

14.05 | 13:30 | Hall Zone 42 | general audiences | book your free seat

Learn more about the Standard Model, the Higgs boson and the exploration into dark matter to take a glimpse of what the universe might have looked like at its birth. Dr. Venelin Kozhuharov is a professor of Particle Physics at the Sofia University and is one of the first winners of FameLab in Bulgaria.

## Treat the Patient, Not the Illness

14.05 | 13:30 | BASF Lab Hall | general audiences | book your free seat

Personalised medicine is no longer just a topic of science fiction. It is here to stay and make our lives better. Find out what is available even now in Bulgaria from biologist and geneticist Dessislava Hlebarska.

## A Tale of Chemical Elements

14.05 | 14:30 | Mtel Arena Hall | general audiences | [buy tickets](#)

The periodical table of chemical elements is perhaps one of the most recognisable symbols of science. It is now sold as a souvenir in all shapes and forms but it wasn't always so accessible. Find out from chemist and nanotechnologist Dr. Bozhidar Stefanov (Dr. Bo) about the elements and how some of them caused civilizational clashes while others left a powerful trail in art.

## Jungles

14.05 | 15:00 | Hall Zone 42 | general audiences | [book your free seat](#)

Besides a place of romantic adventures, the jungles are workplace for many scientists. Find out how their research in the rain forests introduced biologists and explorers Antonia Houbancheva and Velzara Stoilova to some fascinating and almost extinct jungle species.

## Wearable Gadgets

14.05 | 15:00 | BASF Lab Hall | general audiences | [book your free seat](#)

WEAR Sustain invites art, design, technology and engineering professionals / entities in the wearables and e-textiles domains to participate. By supporting our work you can have a positive impact on your practice, your organisation, the sector as a whole and society by generating new knowledge and insights for technology ethics and sustainability. Dr. Stavri Nikolov, founding director of the Digital Spaces Living Lab will present the [WEAR Sustain](#) project and tell you how you can take part.

## Eureka! A Day in the life of a scientist

14.05 | 16:00 | Mtel Arena Hall | general audiences | [book your free seat](#)

We have all seen headlines announcing "Scientists have found...". But how much do we know about the long days and nights, years at times, when the results of experiments returned errors? And about Viagra, the telephone and radioactivity which were all discovered by mistake? Chemist Zlatina Dimitrova and physicist Stefan Nikolov have more stories for you.

## DNA Philology

14.05 | 16:30 | BASF Lab Hall | general audiences | [book your free seat](#)

DNA governs all cellular activity through its four nucleotides combined in codons. With 30 letters in its alphabet Bulgarians coins words that define the cultural features of the language. Join mother and daughter, philologist Assoc. Prof. Vesselka Zhelyazkova, and geneticist Violeta Zhelyazkova, to find out why genetic mutations and cheating at exams are alike.

## **Mission: Black Sea**

14.05 | 16:30 | Hall Zone 42 | general audiences | book your free seat

To the team of the Institute of Oceanology at the Bulgarian Academy of Sciences the Black Sea is indeed a mission. Join the institute's director, Prof. Dr. Snejana Moncheva, to learn about how science is helping the sea stay clean.

## **National Final of the FameLab Competition**

14.05 | 18:00 | Mtel Arena Hall | general audiences | book your free seat

Nine finalists take to the stage this year to enchant the public and the jury with their science. Hear nine fascinating 3-minute science talks and see who will be the next FameLab winner of Bulgaria!

# PROGRAMME FOR SCHOOLS

Thursday 11 May

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## Game of Life

11.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | school bookings

Workshop on vertebrates by geneticist Violeta Zhelyazkova

## Can we save the world?

11.05 | 10:00 | Hall Zone 42 | suitable for classes 1-4 | school bookings

Experts from the Financial Literacy Initiative foundation will show young participants how they can help save the planet by being mindful of its resources.

## Plus/Minus

11.05 | 10:00 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Children will explore how to manage their pocket money and make their own simple budgets with experts from the Financial Literacy Initiative foundation.

## The Animal Kingdom

11.05 | 10:00 | Mtel Arena Hall | suitable for classes 5-7 | school bookings

Researchers and explorers Antonia Hubancheva and Violeta Zhelyazkova from the National Natural History Museum will take you on a quest for the world's most fascinating species.

## Hug the Bug

11.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | school bookings

Biologists Dr. Nikolay Simov and Nadejda Karastoyanova from the National Natural History Museum will make you fall in love with all the stinky, stinging little mites, and reveal how you can make your own "bug hotel".

## A Friend in Need is a Friend Indeed

11.05 | 13:00 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Join Nia Toshkova from the National Natural History Museum to find out if humans are the only mammals capable of love and friendships.

## Hot!

11.05 | 13:00 | BASF Lab Hall | suitable for classes 5-7 | school bookings

Why is the Earth getting warmer and what is in fact the hothouse effect – it's time for chemists Zlatina Dimitrova and Nasko Stamenov to tell you all about it. And show!

## Ice Age

11.05 | 13:30 | Mtel Arena Hall | suitable for classes 5-7 | school bookings

Do you know how many Ice Ages we have had on Earth? Geographer Dr. Dimitar Zhelev from the Faculty of Geology and Geography at Sofia University, co-founder of Geograf BG, does and he's here to share this and many other stories.

## I Am an Oceanologists

11.05 | 14:30 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Meet Ilian Kotzev from the Institute of Oceanology to find out why he loves his job researching the Black Sea.

## Paper Magic

11.05 | 14:30 | BASF Lab Hall | suitable for classes 1-4 | school bookings

Fall under the spell of paper with the Muzeiko Children's Science Centre team.

## BASF Chemgeneration Lab

11.05 | 16:00 | BASF Lab Hall | suitable for classes 5-7 | school bookings

"Chemgeneration Lab" will show you the beauty of chemistry in an exciting workshop with the chemists of Sofia University and their friends from BASF Bulgaria.

## Mushroom Mysteries

11.05 | 16:00 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Find out the answer to the question if mushrooms animals or plants from biologist Miroslava Dimitrova.

# PROGRAMME FOR SCHOOLS

Friday 12 May

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## Hug the bug

12.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | school bookings

Biologists Dr. Nikolay Simov and Nadejda Karastoyanova from the National Natural History Museum will make you fall in love with all the stinky, stinging little mites, and reveal how you can make your own “bug hotel”.

## It's Only Water!... Or is it?

12.05 | 10:30 and 15:00 | Mtel Arena Hall | suitable for classes 5-7 | school bookings

This exciting *science made simple* show explores all the amazing properties of water. From absorbing water effectively, to dissolving chemicals in it, you can squash, freeze and heat water to do all sorts of things.

Be prepared to get wet, in this interactive show which may see students (and teachers) get a little wetter than they bargained for!

*It's Only Water* is suitable for schools with children aged 7-13, families and mixed aged audiences, and festival audiences. This show contains demonstrations where water will be spilled on the floor.

Before joining Science Made Simple Ruth Perkins developed over 6 years of experience through interactive science workshops and shows, working for the Museum of Science and Industry in Manchester and 'Chemistry with Cabbage'. She started her science communication career whilst still at university, studying physics. Her favourite aspect of science communication is getting out into community and festival events with science busking. She is LAMDA accredited to Gold standard.

Science Made Simple are one of the UK's leading science communication companies which brings the brilliance of science to life with amazing, high energy interactive shows for schools and festivals. From football to game shows to pop songs and everything in between, they take the world around us and show the science that makes it work.



## Symmetry

12.05 | 11:00 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Explore the fascinating world of symmetries with Assoc. Prof. Tony Chehlarova from the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences.

## Secret Spy Codes

12.05 | 10:00 | BASF Lab Hall | suitable for classes 1-4 | school bookings

Learn how you can write a message so secret that even your parents can't read it with the Muzeiko Children's Science Centre team.

## Small Worlds

12.05 | 13:00 | Mtel Arena Hall | suitable for classes 8-12 | school bookings

There are so many exoplanets and moons near us – can any of them be inhabitable? Ask Raycho Raychev and Victor Danchev from Space Challenges.

## Nuggets for Peanuts

12.05 | 13:00 | BASF Lab Hall | suitable for classes 5-7 | school bookings

Learn all about garbage separation and recycling at home with chemists Zlatina Dimitrova and Nasko Stamenov.

## Colours of My Body

12.05 | 13:30 | Hall Zone 42 | suitable for classes 5-7 | school bookings

Do you know why blood is red and eyes are blue or green? Find out what gives our skin different colours and so much more from doctor-to-be Vanyo Vezirov.

## Draw me a Frog... on the Inside!

12.05 | 14:30 | BASF Lab Hall | suitable for classes 5-7 | school bookings

Explore how important drawings in biology and medicine are, and why photographs are not enough with science illustrator Denitza Petrova from the National Natural History Museum.

## How Round is the Earth?

12.05 | 15:00 | Hall Zone 42 | suitable for classes 5-7 | school bookings

From a flat disc on a turtle's back to a round ball – our planet's been described in so many ways,

and most of them wrong. Find out from physicist Tzvetan Simeonov how technology is helping us learn about the (changing) shape of Earth.

## Raspberry Electricity

12.05 | 16:00 | BASF Lab Hall | suitable for classes 5-7 | school bookings

Potato and lemon batteries are old news! Join Dr. Bo (chemist Bojidar Stefanov) on an exciting quest of producing electricity from berries

## Literary Diagnoses

12.05 | 17:30 | BASF Lab Hall | general audiences | book your free seat

Have you ever wondered what was the unnamed ailment of your favourite literary character? Let doctor Victoria Ilieva take you through the medical status of some literary classics like “Love in Times of Cholera”, “Dead Zone” and “Inferno”.

## TO BOOK YOUR FREE SEATS:

<http://bit.ly/2nIcmBq>

## TO BUY TICKETS:

<http://bit.ly/2p9X1cW>

## FOR THE FULL FESTIVAL PROGRAMME:

[www.sofiasciencefestival.bg](http://www.sofiasciencefestival.bg)

## DOWNLOAD THE FESTIVAL PROGRAMME:

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