

Capturing the impact of our networks

Annual Report 2018



Contents

Foreword	4
Highlights of the year	6
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Success stories	
'ENJECT'ing e-health into patient care	10
Building up EU standards on timber design	12
Europe pioneers in artificial intelligence hardware	14
Tinnitus researchers hit the right note	16
Recognising and responding to populism	18
Green-energy landscapes – solution to a dilemma	20



New frontiers in One Health	22
Generating energy for photon research	24
Solar power – less means more	26
A new front in the battle against parasitic diseases	28

Key figures of 2018	30
Financial overview	33
Our events in a nutshell	34
Media & engagement	42
About us	46

Foreword

Contemporary Europe is facing many challenges: some are scientific, while others are rather technological or societal. More than ever, researchers and professionals have to collaborate beyond the borders of countries, disciplines or professions in order to face up to these challenges. At COST, we are proud that for almost 50 years we have been building and nurturing pan-European networks which provide opportunities for these groundbreaking collaborations.

The ambition of COST to contribute to science and technology in Europe is reflected in our Strategic Plan which points the way towards the upcoming EU Framework Programme for Research and Innovation. It builds on three strategic priorities: promoting and spreading excellence, fostering interdisciplinary research for breakthrough science, and empowering and retaining young researchers and innovators. These priorities are vital in our continuous work to achieve seamless European cooperation to answer pressing societal challenges.

The strategic priorities are more than just words: they provide the basis for our day-to-day networking activities. COST Actions create open spaces where ideas and people can grow, without any barriers of affiliation, career stage or professional background. Notably, COST Actions are selected through an entirely bottom-up process, thereby ensuring that our activities focus on the challenges identified by the research community itself. Furthermore, COST provides the Actions and their participants with tools to help them maximise the impact of their activities, like the COST Academy, COST Connect and, in the near future, the COST Innovators Grant.

Indeed, at COST, impact is always on our mind. From the selection of proposals, where impact is one of the scoring criteria, to implementation of the networking activities, we strive to maximise the impact of our Actions. We are well aware that the impact of scientific networks can take very diverse forms, including the shared development of a new product or service, delivering crucial policy advice at just the right time, or setting up an association with a lasting effect on the European research agenda. Our impact model recognises and celebrates this diversity of results, whilst also helping the Actions to identify the unique way in which they can contribute to solving scientific or societal challenges.

The results of COST Actions are witness to the above-mentioned diversity. Our Actions have resulted in, among other successes, a sensor that detects an early-stage type of cancer from a blood test, standards for the construction of environmentally friendly buildings, and the first multimedia handbook for sign-language grammar. Moreover, if you want to find partners to build a consortium or a long-lasting research association, COST is the place to start. For example, over the last year, COST Actions have formed the basis of 104 successful Horizon 2020 proposals, achieving a success rate of over 33 %.

This could not have happened without all the people who contribute, in one way or another, to the COST framework. The COST National Coordinators, the COST staff, the Scientific Committee members and the proposal evaluators all play an essential role in making COST Actions work, while optimising their impact. A special word of recognition goes to more than 2 000 researchers who volunteer their time and effort to take part in leading COST Actions. And finally, let us not forget the 45 000 researchers and innovators who make COST Actions the leading networking tool in the European Research Area. 2018 was a great year for COST Actions, and we are looking forward to creating an even bigger impact in the years to come.



Professor Dr Sierd Cloetingh
President of the COST Association



Dr Ronald de Bruin
Director of the COST Association



Highlights of the year

New COST Members



Albania – on 25-26 April 2018, COST's Committee of Senior Officials (CSO) welcomed Albania as a new member at its 203rd meeting in Reykjavík, Iceland. Albanian institutions have participated in at least two consecutive EU Framework Programmes (FP7 and Horizon 2020) and the Albanian research community is currently taking part in around 10 % of the running COST Actions.



Moldova – on 8 November 2018, Moldova became the 38th COST member following the decision by the CSO during their 204th meeting, in Vienna, Austria. Moldovan institutions have participated in at least two consecutive EU Framework programmes, FP7 and Horizon 2020. Moldovan researchers are currently involved in 13 COST Actions, which represents 5.65 % of the total running Actions.

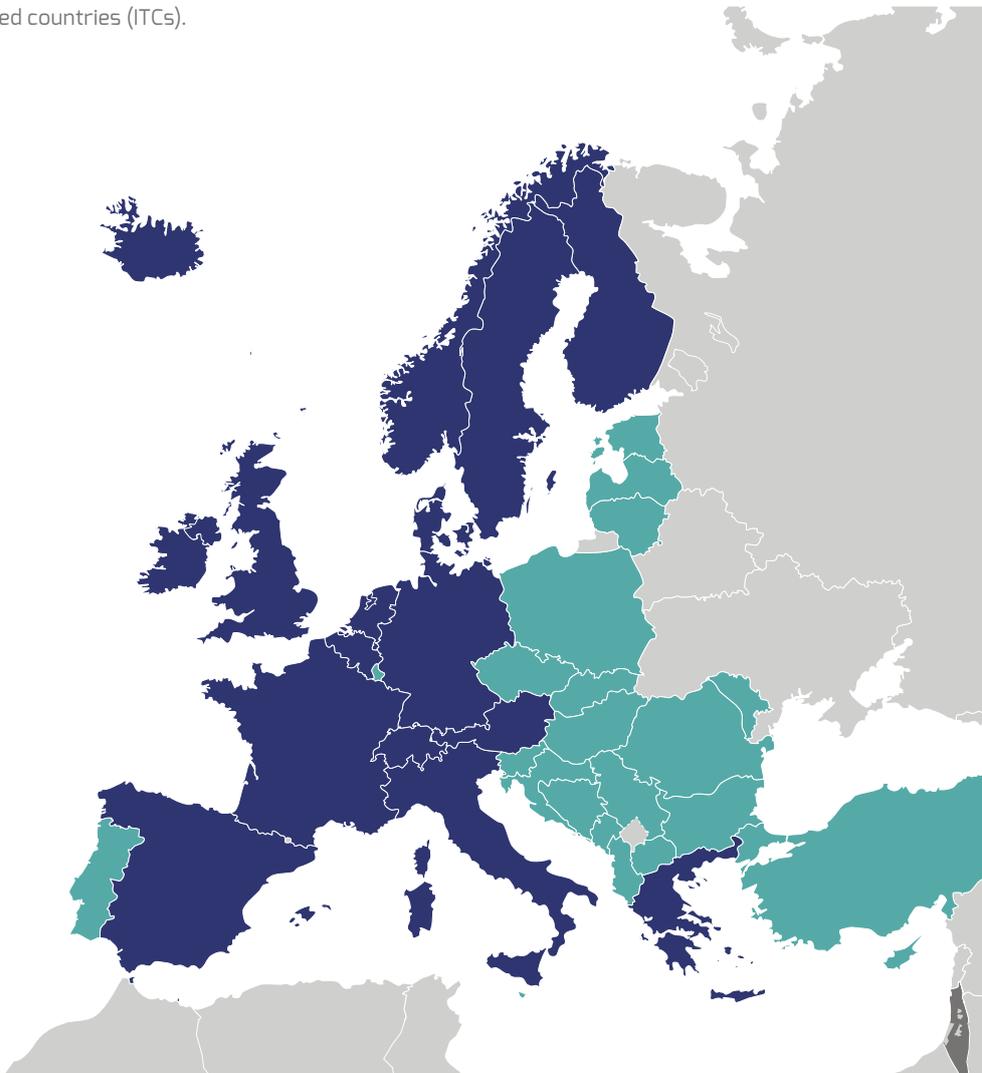
38 COST Members:

Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Montenegro, the Netherlands, the Republic of North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

The countries in green are the less-research-intensive COST Members, also known as inclusiveness targeted countries (ITCs).

1 Cooperating Member:

Israel.



New website

The new COST website was launched on 19 October 2018 alongside a new-look e-newsletter. The new website design was developed in response to COST employee and stakeholder feedback, which had been gathered since January 2017. During this process, interviews and internal workshops were held to understand the needs and wishes of external users and COST Association employees. An Advisory Group was then formed to steer the project through building the new website, including its design, content and functionality.

Why did we make the change?

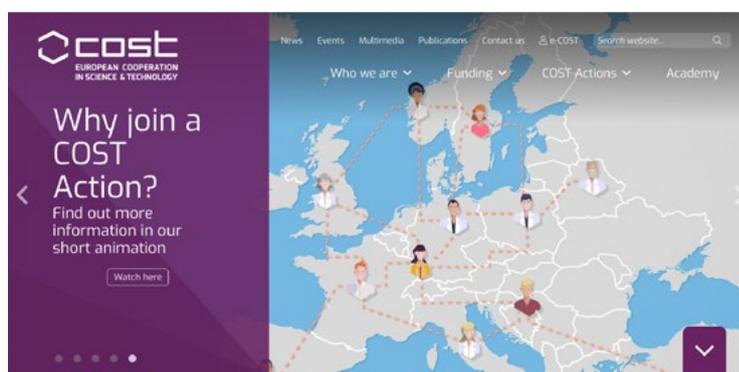
The old website could no longer meet the requirements of modern needs as it was not responsive to mobile browsing and was very limited in its functionality towards video and photo content.

New features:

- Improved data visualisation
- Multimedia content
- Enhanced security for users and data
- GDPR compliant



Screenshot of old website



Screenshot of new website

COST at the EuroScience Open Forum (ESOF)



From 9-14 July 2018, in Toulouse, France, COST supported researchers from over 20 COST Actions as they held seven sessions during the event's science programme. The sessions were:

'Challenges and benefits of digital technologies for ageing well'

The first COST-run session was a debate on issues such as privacy, anonymity and surveillance. Nuno Garcia, chair of COST Action 'AAPELE' suggested that we should choose those technologies that truly work. For instance, Jan Veneman

is leading an Action connecting international experts on **wearable robots** worn on the body, helping disabled patients walk again. All agreed that ethical questions could not be ignored: Blanca Deusdad of the Action 'ROSEnet' stressed that technology could not replace human relationships.

'Connected toys and social robots: what measures are in place to assist but equally protect your kids?'

Privacy and surveillance were part of the conversation about young children's use of connected toys. Jackie Marsh and Giovanna Mascheroni, both from COST Action **DigiLitEy**, showed how connected toys can boost children's creativity. Both researchers from the Commission's Joint Research Centre (JRC) recommended that experts helped parents to better understand digital toys and the way children use them.

'Big data: uncovering new mobility patterns and redefining planning'

How can data help urban planners develop fairer transport for all? Fairer transport in Europe could be achieved by tapping into valuable big data from social networks and mobile applications, according to Floridea Di Ciommo of **cambiaMO**, who is also leading the **TEA** COST Action.

'Why don't governments take citizen scientists seriously?'

Citizen science initiatives are crucial in finding and managing invasive alien species – plants or animals that have been introduced into an environment in which they do not actually belong. Ana Cristina Cardoso (JRC) and Helen Roy, both involved in the Action **European Information system for Alien Species**, said reliable, verified data was crucial if citizen science was to play a stronger role in the way governments make policy decisions.

'Quantum technologies: a chance for women to take their place in science?'

Women are leading only 9 % of all quantum technology projects in the UK. This is the picture Ruth Oulton, a participant in the COST network **Nanoscale Quantum Optics**, painted at a session focusing on quantum physics, a field that could give women a chance to stand out. Instead of imposing quotas on male-dominated boards, both men and women should discuss the issue of gender equality in the quantum field.

'Mathematics: a powerful tool for solving pressing business and societal challenges'

Joanna Jordan, leading COST Action **MI-NET**, showed her audience another side of mathematics as she explained how one of the oldest sciences in the world can help improve drug delivery, analyse human genome data, improve the design of planes and cars, or help companies make crucial business decisions.

'One health, for systems-based, integrative approach to sustainable public health'

A panel of food scientists, epidemiologists, veterinarians and economists opened a lively debate on a single approach to sustainable health, connecting humans, animals and the environment. Maurizio Aragrande, part of COST Action **NEOH**, stated that grass-roots initiatives and education were key to changing mindsets, thereby achieving a common approach to better health for all.





COST Academy - Developing the skill sets of our researchers

This capacity-building initiative kicked off in September 2017 to support COST Actions in the management of their networks. The main targets are young researchers and researchers from countries with a less-developed research infrastructure. In addition, the academy provides training for the Action leadership positions, including Action chairs, grant holders and science communication managers.

In 2018, around 600 researchers from COST networks took part in the activities. Throughout the year, the Academy developed and organised new trainings, workshops and mentoring for the different roles in the networks. These included seminars and mentoring for grant holders, a networking event on the sustainability of Actions, science communication trainings and management induction. Furthermore, the academy organised the first webinar on

international cooperation and an online learning library for Action participants. The online platform will offer participants additional training material on topics relevant to their role within the Action.

The science communication trainings were the most popular ones in 2018. These help science communication managers perfect their skills to promote the network's achievements to the relevant audience through different channels. In 2018, the COST Academy organised two rounds of five to six practical science communication training sessions, gathering around 200 participants. Training topics included: 'Using social media to communicate your Action', 'Shooting and editing a video for your Action', 'Storytelling: spotting and writing a good story', and 'Getting people to listen, and working with the media – mastering media interviews'.

“ The science communication trainings are the only opportunity that scientists have to learn about scientific communication. This is an area that has been neglected by our community for too long. I firmly believe that a good idea and its execution mean nothing without its proper communication. That is why I enjoy every second of these professionally prepared and thoroughly planned workshops. Moreover, I try to pass on the lessons learned to my peers and I have implemented many tips and tricks in my daily scientific communication routine, thanks to the COST Academy. ”

Ana Rotter - Scientific Associate, National Institute of Biology, Marine Biology Station, Slovenia

“ Science communication trainings have significantly contributed to the presentation and visibility of the COST Actions, not only to the researchers and scientists but also to the wider public. Media communication, social networking, and video presentations play a prominent role in the training process. ”

Marcel Leppée - MD Institute for Healthy Ageing, Croatia

“ Learning from excellent professionals, exchanging ideas and getting direct input on how to reach further with messages in every field is all really rewarding. The social setting also gives valuable insight to bringing back theory and practice, both for internal work in my COST Action as well as in my profession, too. ”

Hilde-Gunn Opsahl Sorteberg - Norwegian University of Life Sciences (NMBU)

Success stories

'ENJECT'ing e-health into patient care

Participants in a COST network have advanced knowledge on the state-of-the-art of 'e-health' in Europe. Two Marie-Curie training networks, an H2020 palliative care project and inspiration for new business models, products and services have resulted.



“The Action was a platform for us to come together on two successful Marie Skłodowska-Curie Innovative Training Networks.”

Professor Dr Brian Caulfield, Director, Connected Health Programme, University College Dublin, Ireland, PhD Physiotherapy, M.Sc. Medical Science

Connected health systems gather data from sources such as medical tests, reports or wearable sensors for doctors to analyse and share, improving care for people with complex needs, such as cancer patients, and saving costs.

In the COST Action ‘European Network for the Joint Evaluation of Connected Health Technologies’ (ENJECT), specialists in healthcare, ICT, engineering and sociology, along with businesses, economists and patients, shared knowledge and ideas, improving the ability of researchers and businesses to adapt to the e-health trend.

The collaboration has resulted in new EU funding for training. “The Action was a platform for two successful Marie Skłodowska-Curie Innovative Training Networks, CHES and CATCH,” says the Action Chair, Brian Caulfield of University College Dublin, Ireland.

CHES trains young health researchers to understand other domains in connected health, while CATCH improves research-industry links for cancer e-health innovation. Both networks were created by, among others, partners who met through ENJECT.

To extend networking opportunities, ENJECT opened up its training schools to CHES and CATCH trainees. “The overlap between ENJECT and Innovation Training Networks drives forward the next generation of research,” says Caulfield.

An entire-landscape approach

Cross-sector training in the Action’s research schools also provided young researchers with new perspectives. “At one event, we took early-stage researchers to a start-up incubator. In another, in 2018, Parkinson patients set challenges for a hackathon,” says Caulfield.

Pharmaceutical multinationals Merck Group and Abbott took part in the 2018 school. According to Caulfield, “It was a great example of putting together researchers, patients, and experts in digital health.”

Other Action outcomes strengthen Europe’s innovation base. “The H2020 project INADVANCE was set up through a study in ENJECT,” says Caulfield. This project supports industry-research collaboration on technology for palliative care.

Eight rounds of research exchanges – short-term scientific missions (STSMs) – between business and research partners further developed skills, knowledge and connections.

Luis Fernandez Luque, a partner in Spanish digital healthcare SME Salumedia Tecnologias SL, experienced this first hand. “One of our employees went to a clinical partner in Switzerland. We are now looking into a joint project.” He adds that the short duration of the STSMs makes them attractive. “There is not a huge time investment – just one week to a month.”

According to Luque, Salumedia Tecnologias evolved thanks to the COST Action. “We are moving away from consultancy towards digital products that, for example, empower people to stop smoking or engage cancer patients more in their care. ENJECT allowed us to learn more about healthcare needs across Europe.”

View the Action:

<https://www.cost.eu/actions/TD1405>

View the Network website:

<http://enject.eu/>

Building up EU standards on timber design

A COST network's findings on innovations in timber construction are being used to update European building standards for this climate-friendly material. Collaboration between researchers and industry participants is fostering wider use of wood-based building.



Picture by Philipp Dietsch

“Climate change means that interest in timber engineering is on the rise. We don’t have time to duplicate research.”

Dr Philipp Dietsch, Chair of Timber Structures and Building Construction, Technische Universitaet Muenchen, Germany, Dr.-Ing Civil Engineer

The COST Action ‘Basis of Structural Timber Design - from research to standards’ published comprehensive scientific evidence and harmonised construction methods for recent novelties in timber-based construction. It did so in four reports, on [design basics](#), [cross-laminated timber](#), [connections](#) and [timber concrete composite structures](#). A special edition of the scientific journal *Engineering Structures* summarised further evidence in 21 articles by network participants.

These publications are being used to update [Eurocode 5](#), the European standard for the design of timber structures, as part of a general revision. Action members came from 31 countries, 27 in the EU.

“We created a shared understanding of how to use these products. This is crucial for the acceptance of the revised standard,” says its Chair, Dr-Ing. Philipp Dietsch of the Technische Universitaet Muenchen in Germany.

The update could make new types of timber structures possible, such as high-rise buildings, Dietsch explains. The last revision of the standards was 20 years ago. Since then, the sector has seen a raft of innovations, including cross-laminated timber, novel screwed connections and timber concrete composites.

“They have to become part of standards so engineers and companies can use them. This was a ‘now or never’ chance for this Action,” says Dietsch.

Climate-friendly construction

Part of the urgency is that the EU has ambitious targets to reduce carbon emissions by 40 % of 1990 levels by 2030 and by 80-95 % by 2050. Construction produces [over a third of the EU’s CO₂ emissions](#). As a store of CO₂ and using less CO₂-intensive material than concrete and steel, timber buildings can help to reduce these emissions.

“Climate change means that interest in timber engineering is on the rise. We don’t have time to duplicate research,” says Dietsch.

With 30 % of participants from timber construction industries, this Action has created a community that can more efficiently promote and improve construction with wood.

Already, the network has led to seven new projects, including two funded by the European Commission’s H2020 programme. These include [INCEPTION](#) and [PRO-GET-ONE](#). Additionally, three early-stage researchers have found positions in universities through the network.

Leadership of the network has also sparked a new stage in Dietsch’s career. In 2019, he became Chair of a professional body [INTER](#), the International Network on Timber Engineering Research.

View the Action:

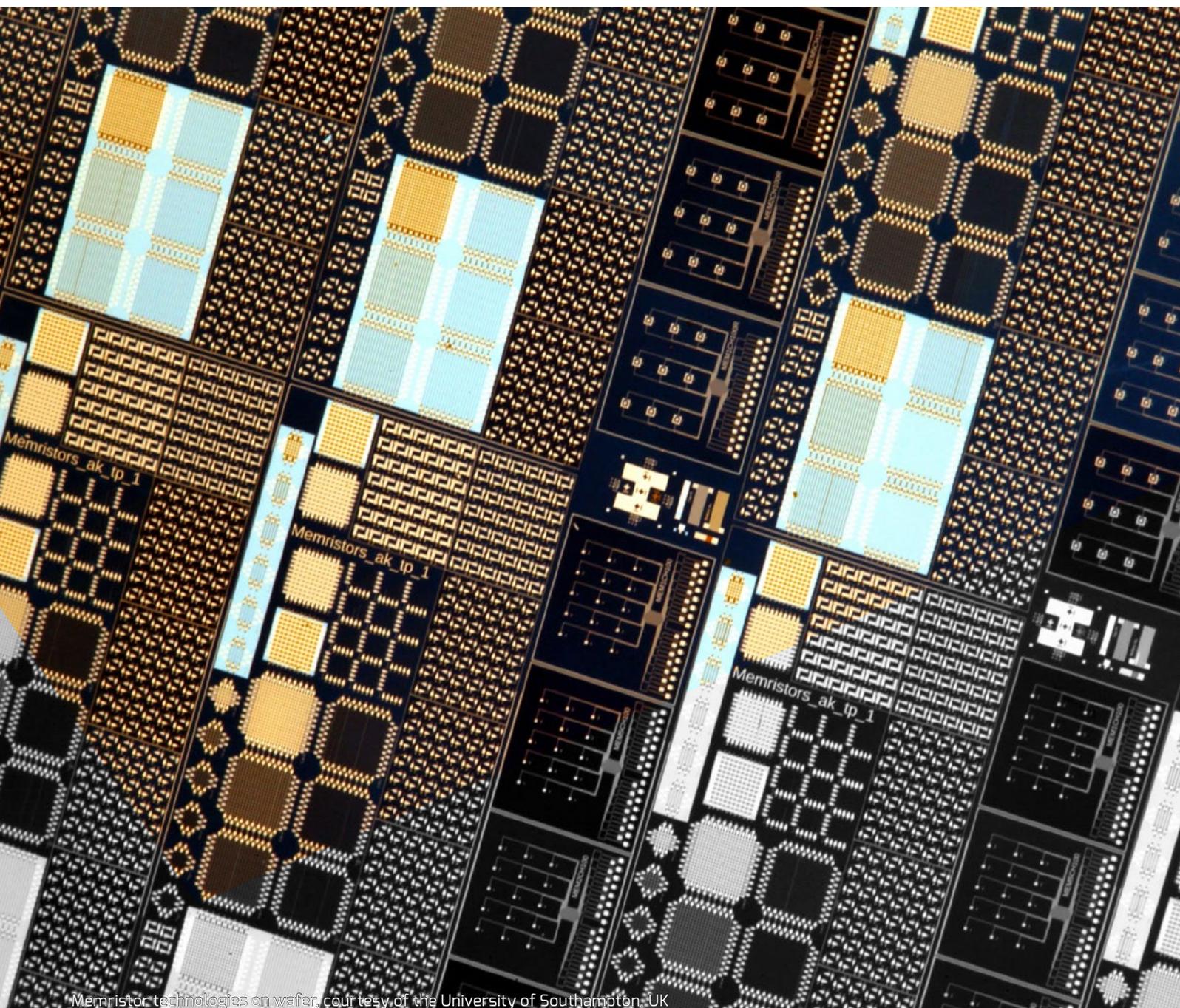
<https://www.cost.eu/actions/FP1402>

View the Network website:

www.costfp1402.tum.de

Europe pioneers in artificial intelligence hardware

A COST Action has created a major research community for a young technology that could underpin future artificial intelligence – memristors. The network has generated over 100 scientific breakthroughs as well as new projects, while fast-tracking opportunities for young researchers.



Memristor technologies on wafer, courtesy of the University of Southampton, UK

“The Action is an excellent opportunity for Europe to become the world leader in hardware for artificial intelligence.”

Dr Julius Georgiou, Professor, Department of Electrical and Computer Engineering, University of Cyprus
PhD Micropower Electronics for Neural Prosthetics, MEng Electrical and Electronics Engineering

Collaboration in the COST Action ‘Memristors - Devices, Models, Circuits, Systems and Applications’ (MemoCiS) has led to **innovations** such as new algorithms, testing models and applications. Notable applications include a camera that processes images similarly to human vision, a sensor that detects early-stage prostate cancer from a blood test and a testing platform for a spin-off, **ARC Instruments**, that helps multinationals to develop memristor-based devices.

Over 160 participants from 24 countries in or near Europe joined forces to progress the technology in MemoCiS. “We have created the largest memristor research community in the world,” says the Action Chair, Professor Julius Georgiou of the University of Cyprus.

“Memristors are a means to create low-cost, extremely compact information processors in hardware,” Georgiou adds. Memristors store much more information than transistors – the established data-processing technology – and can self-organise like neurons in the brain. They could underpin innovations ranging from intelligent healthcare solutions to advanced electronic platforms that can be deployed in remote environments.

Participants in the Action have also strengthened the future of memristor research. They have secured Horizon 2020 funding for new projects – **RAMP**, **SYNCH** and **NEURAM** – founded the world’s **first international conference on memristive technology**, and fostered dozens of emerging young scientists.

“The Action is an excellent opportunity for Europe to become the world leader in hardware for artificial intelligence,” Georgiou acknowledges.

High-level showcase

One young researcher, Ioulia Tzouvadaki, achieved a string of successes through the network, which she joined while doing her PhD.

During a MemoCiS research placement, she developed the prostate cancer sensor. “This is less painful than current tests and detects the cancer biomarkers at the most treatable stages,” she says.

Collaboration with other MemoCiS participants encouraged Tzouvadaki both to go to Stanford University, USA as a postdoctorate fellow in 2018 and to successfully apply for a Marie Skłodowska-Curie postdoctoral fellowship at Southampton University in the United Kingdom, working with Professor Themis Prodromakis from February 2019.

“The Action inspired me to think big,” she says. “I went to Stanford to replicate the high-level experience. Its good dynamic and the opportunity to meet Themis and a team with common interests also led to my Marie Skłodowska-Curie application.”

At Southampton, Tzouvadaki will translate research into commercial applications with Professor Prodromakis, who is leading research on metal-oxide memristors and applications. His group is a partner in RAMP and SYNCH and has secured major national grants, while ARC Instruments is his initiative.

“MemoCiS was about sharing know-how and experience,” he says. “The community has grown massively and showcased European expertise.”

View the Action:

<https://www.cost.eu/actions/IC1401>

View the Network website:

www.memocis.eu

Tinnitus researchers hit the right note

Tinnitus researchers in a COST Action improved the genetic work and research on this common condition and helped to raise awareness of it by establishing a Tinnitus Awareness Week. Other results include two Marie Curie training networks – the first-ever graduate funding programmes on tinnitus – and a finalist position for a Frontiers Spotlight Award.



Picture by Winfried Schlee

“We now have much better collaboration between tinnitus researchers, as well as better research standards and more tinnitus-related activities. I am confident that someday this collaboration will lead to better treatment.”

Dr Winfried Schlee, Habilitation, Experimental Psychiatry, University of Regensburg, Germany, PhD Neuropsychology

Winfried Schlee, doctor of neuropsychology at the University of Regensburg, Germany, was coordinator of ‘Better Understanding the Heterogeneity of Tinnitus to Improve and Develop New Treatments’ (TINNET). He says that before TINNET, the research landscape for tinnitus was fragmented. “There was not much collaboration and it was hard to compare different studies.”

Tinnitus is a common but complex condition that afflicts 1 in 10 people, including 70 million Europeans. Sufferers hear sounds despite no external noise. One problem is what researchers call the disorder’s ‘heterogeneity’: symptoms can vary from a high-pitched whistle to a roar inside the head.

Its causes are also hard to pinpoint. “An important thing for us was to help the general public understand what Tinnitus is,” says Schlee. “There are many different types. If I’m a tinnitus patient and my friend has found a successful treatment, his treatment might not work for me.”

Researchers from 30 countries came together to establish TINNET. After the network’s creation, Schlee saw improved communication between researchers, and between researchers and their patients.

“We had travel funding within TINNET that allowed patient organisations to come to researcher meetings,” he says. “That allowed very good collaboration between researchers and patients, which matters a lot.”

One result of that collaboration was the creation of an annual Tinnitus Awareness Week that promotes a better understanding of tinnitus and its causes. “This year, it was even bigger than in 2018,” Schlee says.

During the Tinnitus Awareness Week, and as part of the dissemination of its final results, TINNET released a [series](#)

of [animated videos on YouTube](#) for the general public, explaining the condition, its causes and possible treatments.

Strength in numbers

Another outcome of TINNET was the establishment of two Marie Skłodowska-Curie Actions training networks, which Schlee says are the “world’s first graduate training programmes” on tinnitus. In total, EUR 7.7 million was used by these networks to fund 30 PhD students.

“There was no structured education for tinnitus researchers before,” Schlee says. “Currently, there are roughly 300 tinnitus researchers worldwide. When these students graduate, that number will grow by 10 %.”

The network was a finalist in the 2018 [Frontiers Spotlight Award](#), an annual prize given to outstanding article collections focused on specific research topics. TINNET also led to 80 published articles by 332 authors on the condition and its symptoms.

Furthermore, it helped to reveal that the condition might have a strong genetic component. “Before this Action, there was not much genetic research on tinnitus,” says Schlee. “Just by bringing researchers into one group, we now have several publications on a genetic link.”

He cautions that such research is in its initial stages. “We cannot say we have developed a treatment, but we have come up with standardised methods and procedures that will help us in the future.”

Schlee is grateful for the Action and the enthusiasm that the TINNET network has inspired. He also says that although the project has ended, researchers continue to collaborate.

View the Action:

📌 [https://www.cost.eu/actions/BM1306/#tab\\$Name:overview](https://www.cost.eu/actions/BM1306/#tab$Name:overview)

📄 View the Network website:

<https://tinnet.tinnitusresearch.net>

▶ View YouTube videos:

https://www.youtube.com/playlist?list=PLwoMMAgO-XGUFtSUV3J-_0-pH3nLh2J9x

Recognising and responding to populism

Populism is on the rise in Europe. A COST Action has built a network of researchers who are studying how populism is being communicated. Results include two anthologies and a European Commission video award that will be part of an education package for high school students.



“Without the COST Actions funds, establishing such a large network to research populist communication would have been impossible.”

Dr Toril Aalberg, Head of Department, Department of Sociology and Political Science, Norwegian University of Science and Technology in Trondheim, Norway, PhD Political Science

The COST Action ‘Populist Political Communication in Europe’ involved some 100 researchers from 31 countries in or around the European Union. In addition to the two anthologies, researchers published 61 articles about populist communication in peer-reviewed journals.

The Action held conferences on populist communication in several capitals across Europe as a means of bringing politicians, journalists and researchers together. For example, participants at the 2017 Paris Action Conference included the then vice president of the French Senate, Françoise Catron, who [opened](#) a lively debate about the history of French populism, among other topics.

“We wrote the proposal in 2012, before recent developments, when populism was an increasing phenomenon,” says Toril Aalberg, head of the sociology and political science department at the Norwegian University of Science and Technology in Trondheim, who was the network’s chair.

She believes that the COST Action filled an important gap in communication research. “Before, most researchers focused on a single candidate, party or country. It was a learning experience to see what we could achieve together,” she explains.

To help young people recognise populist information, Action researchers developed an ‘education package’ for use in high school curricula which includes short [videos](#) on populist communication. “We wanted to explain the phenomenon to young citizens so that they could identify similar actors and patterns in their own societies,” Aalberg says.

The European Commission’s Joint Research Centre recognised [one of the videos](#) with its [EU4FACTS video award](#) in September 2017.

In addition, [the second](#) of two Action Anthologies, part of a Routledge series on communication and media studies, will become available in April 2019 and will offer advice to politicians and journalists about how best to respond to populism. The [first book](#) was published in 2016.

No one size fits all

The network adopted three approaches: analysing the political strategies of populist communicators, media coverage of populists and their messages, and citizen engagement with populist communication. Among other things, researchers learned that even if there are similarities across countries, there are important national variations.

“The reactions to populism also depend on the context of the country,” Aalberg says. “For example, whether the populist party is part of the governing elite, or if they are in fact the government, or if the populist actors are new and only starting to rebel against established parties.”

Media coverage is also vital in determining whether populist messages will reach a broad audience, the researchers found. “It matters whether populists have direct access to media or own their own media,” she says.

One key take-away: populist movement must be analysed and understood on its own merits. “For the effects of populist messages, no one size fits all,” Aalberg concludes.

View the Action:

<https://www.cost.eu/actions/IS1308/#tabsName:overview>

View the Network website:

<https://www.ntnu.edu/populistcommunication/>

Green-energy landscapes – solution to a dilemma

Which is more important: renewable energy or landscape heritage? Two researchers in a COST Action examined how the public and policymakers might not have to choose, and strengthened their careers at the same time.



Picture by Michael Roth

“RELY generated new knowledge for melding extreme positions.”

Prof. Michael Roth, School of Landscape Architecture, Environmental and Urban Planning, Nürtingen-Geislingen University, Germany, Dr.-Ing. Spatial Planning, Diplomingenieur für Landespflege (FH)

Over 200 engineers, landscape conservationists and social scientists from 37 countries joined the 'Renewable energy and landscape quality' (RELY) COST Action to address a dilemma. "Renewable energies are one of the best ways to mitigate climate change, but you can't hide infrastructure such as wind farms. That creates conflict," says Professor Michael Roth, chair of RELY.

"RELY generated new knowledge for melding extreme positions," he adds. The result was '[Renewable Energy and Landscape Quality](#)' – a book of 33 country overviews of renewable energy and landscape policies, along with guidelines and case studies on siting infrastructure. For example, RELY showed that people are more willing to accept renewables production when it is on waste land, benefits communities financially or includes local people in the planning process.

"The book was a huge success," says Roth. "It synthesised research in the field and our working groups to reach a wider audience." In addition, RELY held exhibitions and public meetings around Europe to share its work.

Enhanced perspectives

Contributing to the case studies research was Tadej Bevk, a Slovenian post-graduate researcher from a so-called Inclusiveness Target Country – a country with a less-developed research infrastructure.

In RELY, he found a PhD focus and instant network. "I had 50 mentors. I could write to people for information and got a focal point for framing research on landscape perceptions," he says. "I have a better international perspective and got right into the state of the art."

He reciprocated with a chapter in the book. "COST gives me more credibility within my own country. It is tremendously helpful for people at my stage of career," Bevk confirms.

Meeting challenges

There was also an academic need behind the Action, Professor Roth explains. "Research on the interrelation between landscape quality and renewable energy is fragmented throughout Europe. No one had done a high-level screening on this."

The size of RELY made it possible to document and analyse a wide range of research, Roth adds. Research on factors for reconciling renewables with landscape quality continues in two EU-funded projects, [PEARLS](#) and [ADAPTAS](#).

In addition, RELY was personally rewarding for Roth. "This was the first EU project of this size that I ran. It confirmed that I could manage a similar project again." After the Action started, Roth jumped straight into leadership of a German [nationally-funded project](#) on conservation and renewables, assessing landscape quality for grid expansion.

Following RELY, he thinks that people can accept infrastructure for the switch to low-carbon energy. "It is possible to build renewable energy projects if they are built in the right way in the right places," he says.

View the Action:

<https://www.cost.eu/actions/TU1401>

View the Network website:

cost-rely.eu/

New frontiers in One Health

Guidelines from a COST Action offer help in designing and evaluating solutions to pressing health issues, such as antibiotic resistance. The approach reaches across research horizons and is crossing national boundaries, with opportunities for a young Serbian researcher and a new European Chapter of Ecohealth International.



“Before NEOH I could not easily dive into a new challenge. Now I just jump.”

Dr Sara Savić, Senior Research Associate, Scientific Veterinary Institute «Novi Sad», PhD Veterinary Medicine
MSc Veterinary Medicine

The ‘Network for Evaluation of One Health’ (NEOH) COST Action has encouraged awareness, understanding and use of ‘One Health’ to promote systems thinking and avoid unintended consequences.

The concept views human, animal and environmental health as interdependent. It promotes cross-sectoral and transdisciplinary collaboration on research and strategies for a healthier world, explains the Action chair, Dr Barbara Häslér, a senior lecturer at the Royal Veterinary College, the United Kingdom. “One Health is good for all,” she says.

For example, integrated approaches are needed to tackle antibiotic resistance for the benefit of human, animal and plant health.

Around 250 experts in health, ecology, geography, economics, microbiology, epidemiology, anthropology, statistics and nutrition, among others, from 29 countries, took part in the highly interdisciplinary Action. “It created an innovative and dynamic learning network,” says Häslér.

Leap into the Balkans

NEOH raised awareness of One Health across the Balkans, with three training workshops for the region. Sara Savić, a researcher at the Scientific Veterinary Institute «Novi Sad» in Serbia, was involved in training, research and networking in NEOH. She also headed the working group that tested the NEOH evaluation protocols on ten case studies.

“Before NEOH I could not easily dive into a new challenge. Now I just jump,” she says. She is now head of her laboratory, while a joint project with Slovenian medical researchers has been approved nationally after earlier rejections. “This time we added One Health to the proposal.”

In 2018, she organised a 10-speaker conference for doctors, veterinarians and biologists in her region for [International One Health Day](#). She and colleagues now plan to create a Serbian One Health Association.

“NEOH made Serbia visible in the discipline and on the COST map,” says Savić.

Expanding reach

NEOH’s international reach can grow as One Health is increasingly used around the world, Dr Häslér says. The Action’s evaluation framework is available in an open-access book, [Integrated approaches to health - A handbook for the evaluation of One Health](#) “We hope it will encourage people to think more about One Health, use the protocols and raise understanding of where One Health can add value,” she adds.

Since NEOH ended, participants have begun an [internationally-funded project](#) evaluating antimicrobial resistance surveillance. Members are also continuing the COST network as the new European Chapter of [Ecohealth International](#) to create a joint integrated-health community. “The next step is to take One Health to the general population,” Häslér concludes.

View the Action:

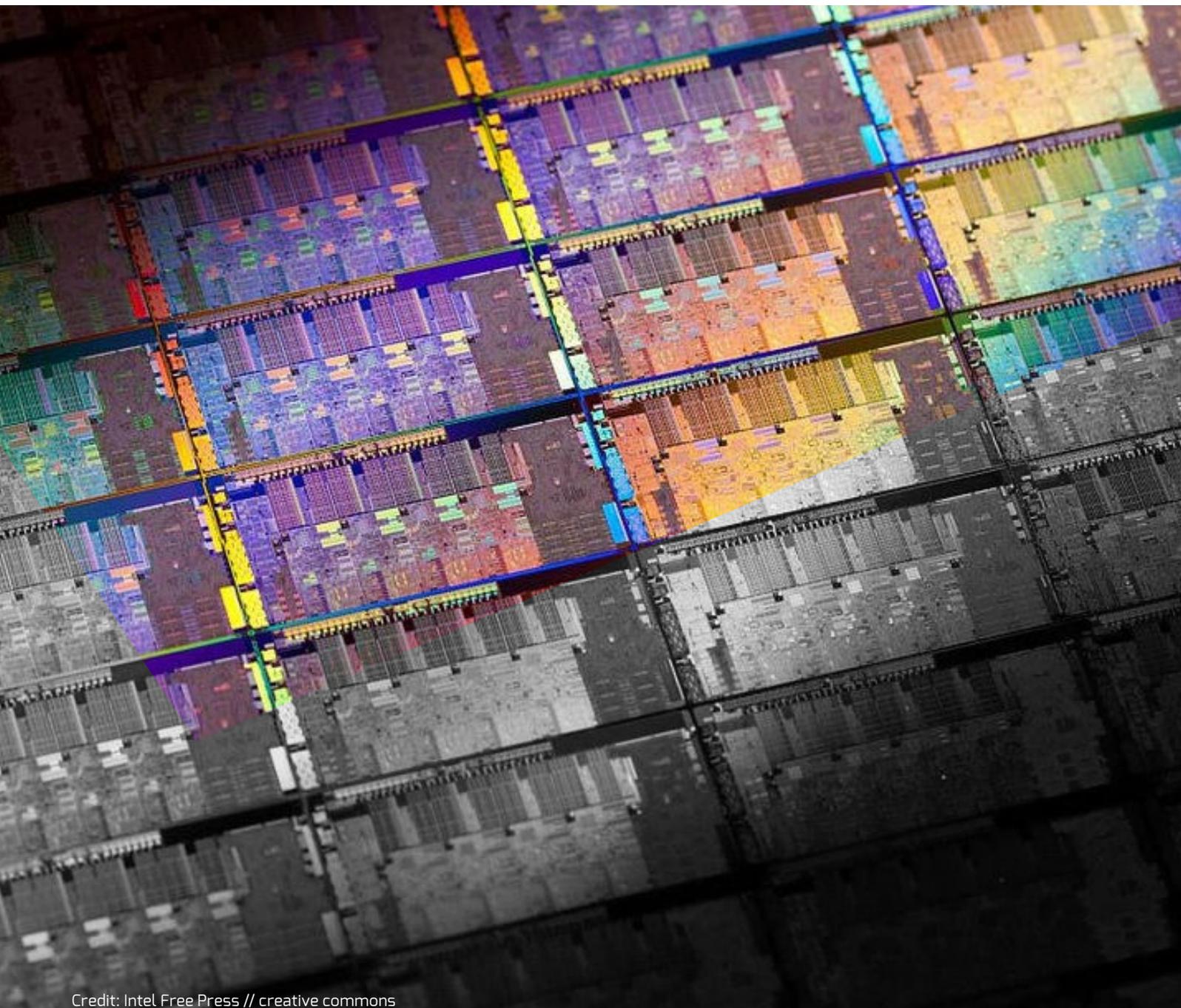
<https://www.cost.eu/actions/TD1404>

View the Network website:

neoh.onehealthglobal.net/

Generating energy for photon research

Young physicist Humeyra Caglayan received a European Research Council (ERC) grant after taking part in a COST Action on how to harness light energy. Nanoscale Quantum Optics has kick-started both her international career and a drive to greater gender equality in this field, she says.



Credit: Intel Free Press // creative commons

“We welcomed all who were interested, both from the EU and outside the EU. This creates opportunities for young researchers and makes the EU stronger.”

Dr Humeyra Caglayan, Associate professor, Tampere University, Finland, PhD Physics, M.Sc. Physics

Nanoscale Quantum Optics investigated how to control the interaction between light particles – known as photons – and matter, with far-reaching possibilities for information processing, sensing and measurement, light sources and sustainable energy.

Specialists in nanophotonics, quantum optics and materials science from 40 countries participated in the COST Action. For Caglayan, the network was a chance to discover research opportunities beyond her native Turkey, where she had been awarded her PhD.

“I learned about European Research Council grants through the Action,” she says. “In a workshop, I got feedback about how to improve my idea and mature it for the application. The Action helped me to integrate my research within the broader topic.”

Caglayan was successful in receiving the grant, which funds [aQUARIUM](#), the project she now leads at Tampere University in Finland. Her research aims to increase the range of conditions under which single photons can be exploited, so that photon-driven devices could one day be on the market.

Empowering young researchers and women

There was another welcome impact for her long-term career. “It was the start of my international professional network,” Caglayan says. “There are not many people in my field in Turkey. Through meetings and short-term scientific missions, COST Actions provide a unique opportunity for early-stage researchers to assert their independence and develop contacts.”

Caglayan added to these opportunities for other young scientists by acting as the COST network’s early-stage research advisor, a role created by the Action Chair, Professor Mario Agio.

She explains that young researchers often find it challenging to direct their careers to either academic research, industry or as an entrepreneur. “We held workshops to discuss the options and to share our experience,” Caglayan says.

Professor Agio also created the role of gender balance advisor to address the low participation of women in the field. “The Action started an inclusive conversation. We explored the issues with every member and between generations,” Caglayan explains.

In terms of research, the network identified what is missing and challenging in the field and where research could be directed to solve the problems. For example, single-photon detectors and single-photon emitters could enable secure quantum communications systems, for faster, more responsive computers, according to Caglayan.

Cooperation between research and industry which began in Nanoscale Quantum Optics continues to investigate potential applications of this promising technology in start-ups [QNAMI](#) and [nanoPHAB](#).

Indeed, open collaboration defined NanoScale Quantum Optics and its success. “The Action welcomed everyone who wanted to be involved,” Caglayan says.

View the Action:

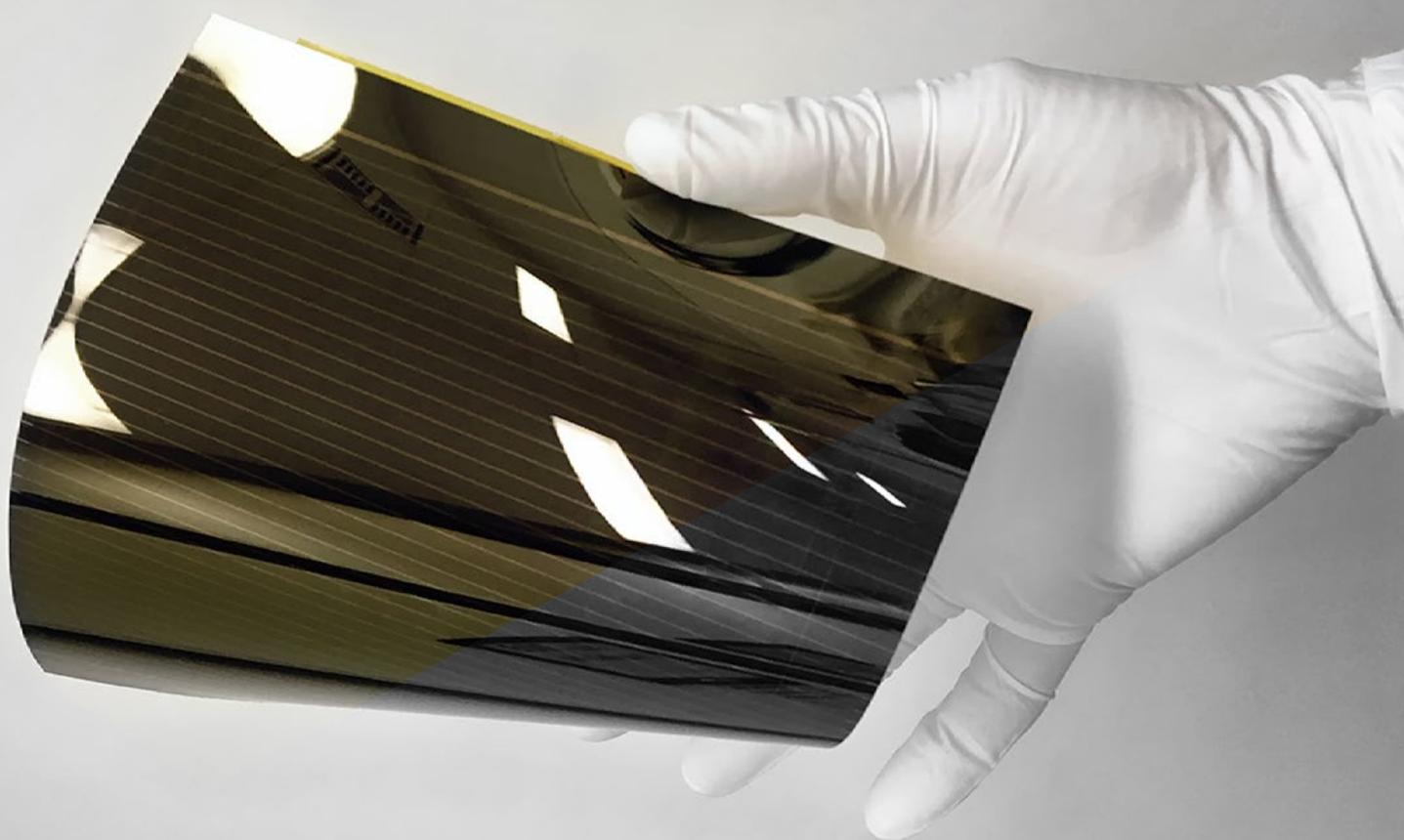
<https://www.cost.eu/actions/MP1403>

View the Network website:

<http://www.cost-nqo.eu/>

Solar power – less means more

Solar cell technology is evolving to become cheaper, easier to manufacture and lighter. These innovative cells could last longer and produce more energy thanks to a COST network that has also shone a light on women researchers in this field.



Picture by Yulia Galagan (Solliance).

“COST Actions allow experimental, innovative research. This is very useful for early-stage technology.”

Prof. Monica Lira-Cantu, Fundació Institut Català de Nanociència i Nanotecnologia (ICN2), CSIC and the Barcelona Institut of Science and Technology (BIST), PhD Materials Science, BASc Chemistry

Organic and halide perovskite (HP) solar cells are some of the latest innovations in photovoltaic (PV) technology. Unlike classic silicon PV cells, HP cells use materials that are readily available, could be manufactured for less cost, and can be lightweight, transparent, and flexible.

To make these new cell types more productive and stable, 480 participants from 35 countries and 22 industries joined the COST Action ‘Unravelling degradation mechanisms of organic and perovskite solar cells by complimentary characterization techniques’ (StableNextSol).

Participating researchers have brought HP cells’ efficiency closer to commercial viability and increased knowledge on improving cell lifespans, says Action Chair, Monica Lira-Cantu of the Institut Català de Nanociència i Nanotecnologia (ICN2) in Spain. Almost 40 % of the network’s participants were women, fostering talent for this important but male-dominated field, she adds.

StableNextSol increased the percentage of sunlight that HP cells can convert into power to 23.7 %. “This is the efficiency of silicon cells, 22-23 %,” says Lira-Cantu.

A bigger challenge is the stability of HP cells, which can perform at full efficiency for just months but will have to perform well for 20 years to match silicon cells. “We now understand more about their degradation mechanisms to help future cells become more stable,” she adds.

Expanding the field

“The halide perovskite cell industry could become important in Europe,” Lira-Cantu says. She explains that the technology increases manufacturing and application options. Unlike silicon solar cells, organic and HP cells can be made at low temperatures with relatively simple techniques such as ink-jet printing on flexible substrates like plastic.

Innovative uses could include lightweight solar panels for portable applications or power for wearable health monitoring devices, among many others.

Much of the StableNextSol innovation took place in short-term research exchanges. “COST Actions allow experimental, innovative research. This is very useful for early-stage technology,” she says. More than four H2020 projects and Marie-Curie fellowships, several ERC grants and ITN networks have emerged to continue the work.

To share research, the Action held about six industry days and a training school, and posted extracts from the [first](#) and [last](#) network conferences online. “All contributions were welcome and equal,” says Lira-Cantu.

In particular, StableNextSol promoted the visibility of female researchers. “Before COST, we heard a lot that only a few women were working in photovoltaics. We showed that we are here,” Lira-Cantu says.

“People saw the level and quality of women’s work,” she adds. “Usually 70 % of people at conferences are men and there are few women speakers. Since this COST Action we have seen more women.”

View the Action:

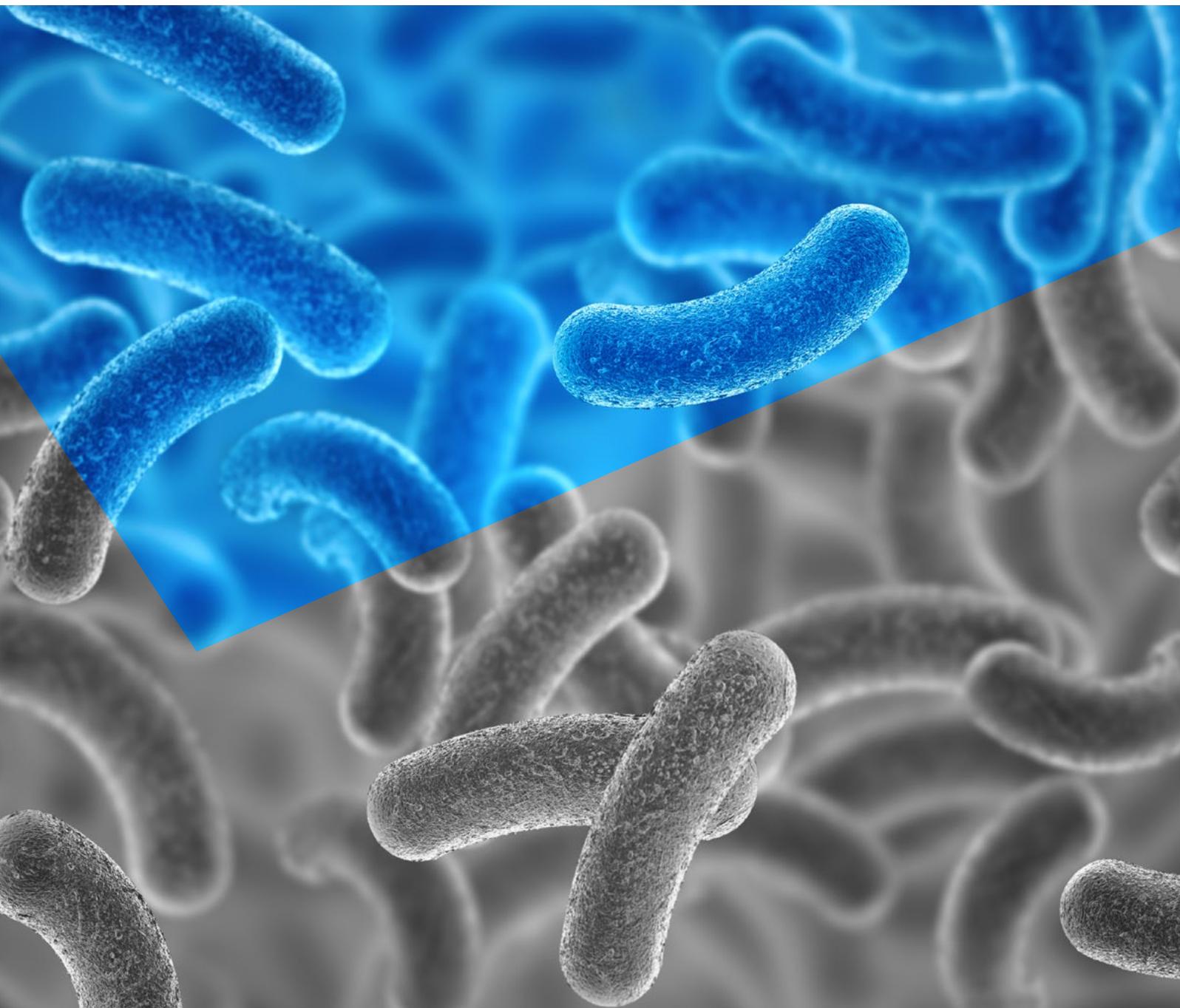
<https://www.cost.eu/actions/MP1307>

View the Network website:

[stablenextsol.eu](https://www.stablenextsol.eu)

A new front in the battle against parasitic diseases

The fight against deadly parasitic diseases affecting millions has been advanced by a COST Action, which has identified new drug candidates for malaria, Chagas and schistosomiasis. The network also provided researchers with industry-related training to boost their career prospects.



“In the future, these discoveries could have considerable societal significance by potentially leading to novel treatments that could save the lives of many.”

Prof. Philippe Loiseau, Antiparasite Chemotherapy, Université Paris-Saclay, France

Parasitic diseases plague both people and animals in many parts of the world. While effective treatments have been found for some of them, scientists have struggled to develop drugs to battle others.

The COST Action ‘Targeted chemotherapy towards diseases caused by endoparasites’ – completed in March 2018 after four years – has paved the way to discovering new treatments for such infections.

“The main impact of this COST Action is the selection of three drug candidates – one against malaria, another against South American trypanosomiasis, or Chagas disease, and another against schistosomiasis,” says Philippe Loiseau of the Université Paris-Saclay in France, who was the network’s chair.

“In the future, these discoveries could have considerable societal significance by potentially leading to novel treatments that could save the lives of many,” he adds.

Proposals for clinical trials of the three drug candidates could be submitted in one to two years, he says. Researchers are currently applying for funding to carry out evaluations on whether these candidates are toxic to living organisms, another key step in drug development.

Focus on future scientists

Two training schools launched by the Action brought together 31 PhD students, postdoctoral fellows and others to focus on practical aspects of their work on parasitic diseases – such as learning how to use new research technologies.

Some of their training supervisors were from start-ups and small companies, giving students exposure to industry research approaches. “The topics of the training schools were highly adapted to the activities of industry in drug research,” says Loiseau, adding this included applied and fundamental research.

The Action also enabled 28 students to go on short-term scientific missions of up to three months at participating labs. “This was very interesting because it stimulated collaboration between labs and social scientific production since some papers emerged,” Loiseau notes.

Both the lab exchanges and the training schools familiarised the young researchers with new industry techniques – opening up new opportunities for them in the private sector.

“When you produce PhD students, they should be able to find a job – and not only in the academic system because that is relatively limited,” Loiseau says.

The Action also resulted in ties between academia and the pharmaceutical industry, including companies such as GSK and Sanofi. The academic-industrial relationships fostered by the Action were developed through joint round tables held at four annual Action conferences.

Representatives from academia and industry participating in the round tables produced recommendations on topics such as anti-parasitic drug discovery and drug resistance. These have been submitted to national health ministries in Europe, the European Commission, the World Health Organization, NGOs and others.

Multi-disciplinary effort

Loiseau credits the Action’s success to its link-up of about 200 researchers from 27 European countries and many different backgrounds.

The Action participants are elaborating future collaborations around the One Health concept which recognises that human health is linked to animal health and the environment.

View the Action:

<https://www.cost.eu/actions/CM1307>

Key figures of 2018

78%

of researchers say participation in COST Actions opened new opportunities in their professional activities

84%

of researchers say COST plays an important role in the enhancement of the careers of young researchers

291

running Actions

88%

of researchers say COST Action participation fulfilled their expectations

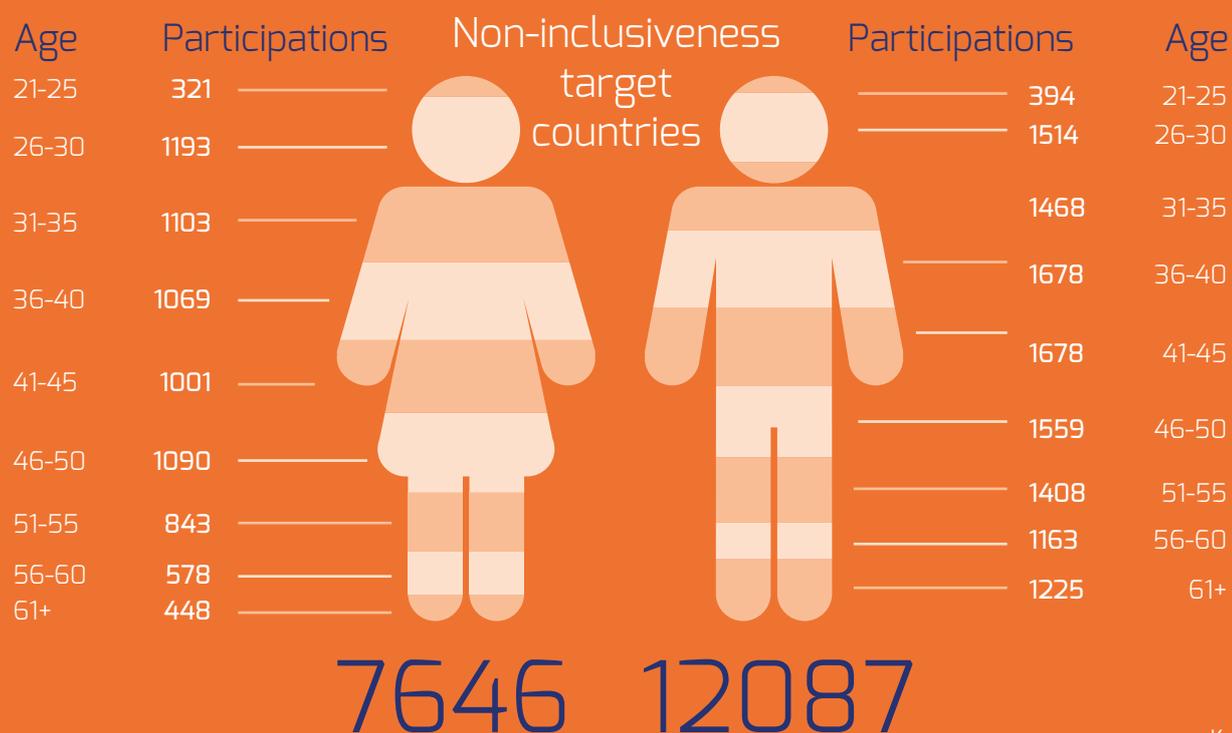
33%

of H2020 project proposals were approved from ended Actions

1611

co-authored scientific articles were published when Actions ended

Profile of COST Action participants



Country participation in running Actions

		Chairs	Vice-Chairs
Germany	291	32	20
Spain	291	33	24
United Kingdom	290	39	47
Italy	289	33	26
France	285	21	26
Greece	285	3	15
Portugal	285	11	14
Poland	273	7	7
Belgium	267	15	11
Netherlands	264	22	15
Serbia	261	0	3
Switzerland	261	11	13
Croatia	260	3	6
Denmark	257	4	3
Norway	257	12	7
Israel	255	2	2
Ireland	252	11	5
Austria	247	8	7
Sweden	245	5	4
Romania	237	0	2
Slovenia	236	1	4
Turkey	233	0	1
Czech Republic	230	3	6
Hungary	223	1	4
Finland	216	3	3
Bosnia and Herzegovina	207	1	1
Bulgaria	197	0	0
North Macedonia	188	0	3
Estonia	187	1	3
Lithuania	177	0	0
Slovakia	174	0	1
Malta	173	1	2
Cyprus	160	5	4
Latvia	134	1	0
Iceland	112	0	1
Luxembourg	92	2	0
Montenegro	92	0	0
Albania	27	0	0
Moldova	13	0	0

Please note that the current number of running COST Actions is 291.

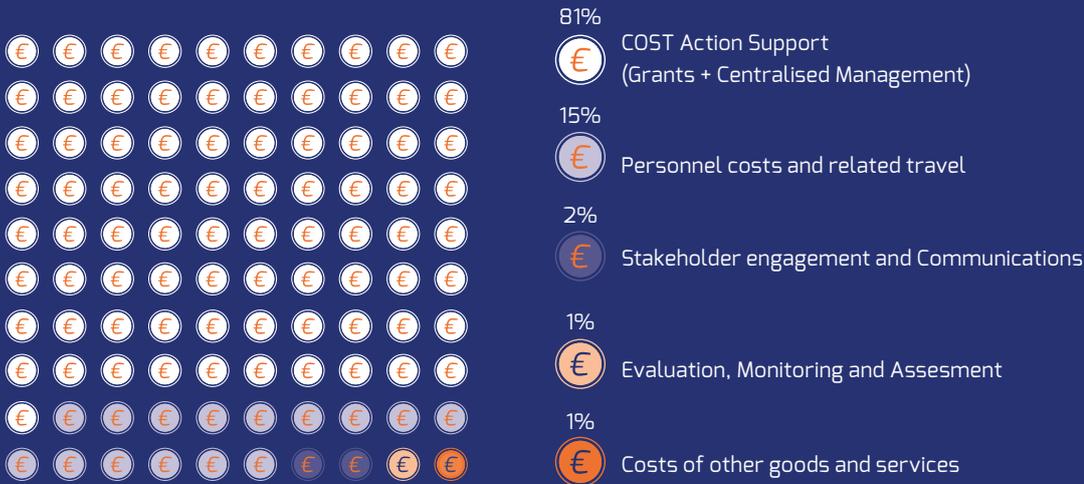
Financial overview

Budget spent per networking tool

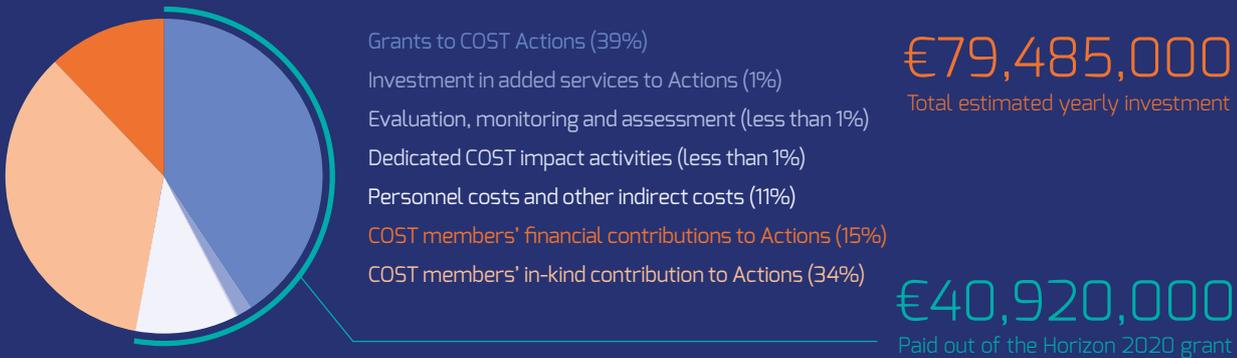


Over the period 1 May 2017 to 30 April 2018, the COST Association implemented 295 COST Action Grant Agreement which in turn enabled around 34 000 networking activities (meetings, training schools, conferences, etc.)

Direct costs - Budget share per category



Total investment in COST activities



COST Actions only become a success through the combination of the COST Horizon 2020 grant, the COST Members' financial contributions and the in-kind contributions of thousands of participants volunteering their time for the greater good of the Actions. Every year, many researchers and professionals within COST countries and beyond, contribute by managing the Actions, by hosting events or by giving training sessions. This graphic represents the share of all of these different components to the total estimated yearly investment in COST Actions and their activities, broken down by main beneficiary of the investment.

Our events in a nutshell

We participated in ...

 14-15 May 2018

5th European Conference on Sustainable Urban Mobility Plans (SUMP)

Nicosia, Cyprus

The European Commission's SUMP initiative is a forum for policymakers and academics across Europe to debate and exchange ideas on sustainable urban mobility planning. The theme of this edition was multimodality, with a focus on the integration of transport modes and combined mobility solutions for passengers and freight in cities and regions.

COST had a booth at the event and COST Action participants contributed to a dedicated session by presenting reflections on how their pan-European networking supports sustainable urban mobility planning. The presenters were Nikolas Thomopoulos, chair of WISE-ACT Action, Prina Plaut, chair

of the Action Social networks and travel behaviour, and Vasos Vassiliou from IRACON Action.

In addition, Siegfried Rupprecht, management committee member of COST Action Wider Impacts and Scenario Evaluation of Autonomous and Connected Transport, is the main author of the SUMP guidelines and a valuable contact point for COST Actions on this initiative.

 18-21 June 2018

European Conference on Networks and Communications 2018 (EuCNC)

Ljubljana, Slovenia

Supported by the European Commission, this is the 27th edition of a series of technical and scientific conferences on telecommunications open to the research community. More than 500 researchers, policy- and decision-makers and industry representatives attended the event.

Besides having a booth, COST also organised a special session about networks and communications. Action participants, mainly from the so-called inclusiveness target countries, presented their work in the following COST Actions: European Network for High Performance Integrated Microwave Photonics, Indoor living space improvement: Smart Habitat for the Elderly, IRACON, RECODIS, ACROSS and AAPELE.



📅 9-14 July 2018

ESOF - EuroScience Open Forum 2018

Toulouse, France

ESOF is the largest interdisciplinary science meeting in Europe dedicated to scientific research and innovation. It provides a unique framework for interaction and debate among scientists, innovators, policymakers, business people and the general public. This year's event counted more than 4 000 delegates from over 80 countries, at least 400 journalists and science communicators, more than 150 conferences and workshops, around 200 events open to the general public and attended by over 3 500 participants.

COST took this opportunity to support researchers from over 20 COST Actions, both with a booth and by helping them to organise seven sessions.

To learn more about these sessions, see the [COST leaflet at ESOF](#). You can also visit our YouTube channel to see the [playlist](#) of interviews with some of the participants.

The event was also the opportunity for European Commissioner Carlos Moedas to present the ideas behind Horizon Europe, the EU's next funding programme for research and innovation. Putting forward a case for a funding programme that goes beyond science, he claimed Horizon Europe must represent a new social contract between citizens, governments and innovators.

The ESOF 2018 Champion was COST Action participant Dr Anne Cambon-Thomsen, Emeritus Research Director at CNRS, Université Fédérale Toulouse Midi-Pyrénées. Dr Cambon-Thomsen was management committee member of the Action CHIP ME (Citizen's health through public-private Initiatives: public health, market and ethical perspectives).



📅 29 October-3 November 2018

7th EUROMED (International Euro-Mediterranean) 2018 conference - on digital heritage and focusing on documentation, preservation and protection

Nicosia, Cyprus

EUROMED is a biannual international conference on research into digital heritage. The 2018 event explored how digital technologies can contribute to the preservation and restoration of Europe's most important and endangered cultural heritage sites. It offered a unique framework for interaction and debate for scientists, innovators, policymakers, local administrations, industry and civil society. The event was a cornerstone of the European Year of Cultural Heritage.

COST Director, Ronald de Bruin, gave a keynote speech and representatives from five Actions held a session to discuss 'How to overcome the fragmentation of funding for cultural heritage research activity in the context of Horizon Europe?'. The Actions participating were: The Soil Science & Archaeo-Geophysics Alliance: going beyond prospection, archaeological practices and knowledge work in the digital environment; Innovation in Intelligent Management of Heritage Buildings; Reassembling the Republic of Letters, 1500-1800: A digital framework for multilateral collaboration on Europe's intellectual history and colour and space in cultural Heritage.



📅 14-16 November 2018

Decentralized 2018

Athens, Greece

The Decentralised 2018 event, which was organised by the University of Nicosia, featured more than 70 speakers and 1 000 attendees from over 50 countries. This successful summit focused on the innovative business and political implications of blockchain technologies. Representatives from the COST Association and COST Actions presented 'How COST can help you to network your blockchain community'.

The presenters were: Ioanna Stavridou (COST Association), Andrea Bracciali (Action: High-Performance Modelling and Simulation for Big Data Applications), Federico Constantini (Action: Wider Impacts and Scenario Evaluation of Autonomous and Connected Transport) and Julio-Hernandez Castro (Action: Cryptanalysis of ubiquitous computing systems).



📅 26-29 November 2018

10th European Innovation Summit – Knowledge4Innovation

Brussels, Belgium

On 27 November, COST and K4I organised a joint session entitled 'Data-driven innovation in a connected world'. The session, which was attended by Members of the European Parliament, EU policymakers, EU research and development stakeholders and industry representatives, looked into the use, openness and interoperability of data.

MEP Brando Benifei opened the event by outlining the main challenges and hurdles regarding the use of research data in cross-border and interdisciplinary research and innovation networks. Ronald de Bruin, Director of the COST Association, then gave a presentation on COST's work.

Representatives from four COST Actions; Pnina Plaut, Dimitrios Koureas, Susanne Hollmann and Göran Kauermann presented their personal experiences of using data in innovative ways and participating in an Action.

On 28 November, Ronald de Bruin was invited to speak at a plenary session in the European Parliament, entitled 'Horizon Europe: The future EU Research and Innovation Programme'. The session focused on new approaches that will shape the direction of future R&I policies to ensure that the EU remains innovative and competitive during the remainder of Horizon 2020 and in the run-up to Horizon Europe.



📅 4-6 December 2018

ICT 2018: Imagine Digital – Connect Europe

Vienna, Austria

This research and innovation event, which attracted 4 800 attendees, focused on the European Union's priorities in the digital transformation of society and industry. It provided an opportunity for those participants involved in this transformation to share their experience and vision of Europe in the digital age.

In an open and participatory event, organised by the European Commission and the Austrian Presidency of the Council of the European Union, citizens joined science community members, policymakers and fellow ICT-enthusiasts to discuss the future digital Europe.

The networking session 'COST: Create your network to boost European research and technology in ICT' took place on 4 December. Speakers presented the COST programme and explained how to join it. Present at the booth were COST science officers and 10 young researchers from ITCs who had been awarded a COST grant to participate in this event.



We organised ...

COST Connect

These are a series of thematic multi-stakeholder workshops providing an open space for researchers and innovators from COST Actions, policymakers and the broader research and innovation (R&I) community to network on scientific or science-policy-related topics. The aim is to provide new funding and networking opportunities for COST Actions by creating new partnerships between Actions and the broader European R&I community.

In 2018, five Connect events were organised. Representatives of more than 86 COST Actions participated and more than 40 different institutions were mobilised to connect with our networks. Topics are defined along the lines of the current EU policy agenda, societal challenges and a relevant critical mass of COST Actions.

📅 14-16 November 2018

Quantum: Where will the next jump go?

Warsaw, Poland

The event came at an important time for quantum research in Europe: building and operating the first quantum computer in Europe is acknowledged as a key European initiative. A strategic research agenda of the Quantum FET Flagship is available and first calls for funding have been launched.

📅 25-26 April 2018

How to Shape a Sustainable Urban Mobility for all

Bucharest, Romania

This event highlighted and shared scientific success stories, enhanced the mutual understanding between researchers, policymakers and funders. It created new synergies to understand what is needed for a sustainable urban mobility and how to achieve, through collaborations, breakthrough innovations that lead to greener, more inclusive, safer and smarter urban mobility solutions. It was organised with the JPI Urban Europe Agora meeting which took place in Bucharest on 24-25 April 2018.



📅 5 June 2018

Climate Change and Forest Systems

Sofia, Bulgaria

This event was co-organised together with SCAR FOREST as an interactive workshop involving related COST Actions and scientific communities, stakeholders and policymakers to facilitate dialogue and discussion on future research agendas in the field. It gathered various actors working on climate change and the forest-based sector, to further develop synergies and collaboration, linked to the discussions in frame of the Sustainable Development Goals.



📅 10 October 2018

Sustainable Energy in the Danube region

Belgrade, Serbia

This Connect aimed at questions about the identification of future research cooperation and funding opportunities in the field of sustainable energy, and the identification of priorities for Horizon Europe. Discussions covered topics such as renewable energy, energy infrastructure, bio-energy, energy efficiency and renewable energy sources in buildings.



📅 19-20 November 2018

The future of European Brain Research

Brussels, Belgium

A key objective of this event was to enhance collaboration between researchers, innovators and policy makers from the fields of neuroscience, psychiatric genetics, psychosocial research, psychiatry, psychology, medical genetics, molecular sciences, chemistry, computing and robotics.



COST InfoDays

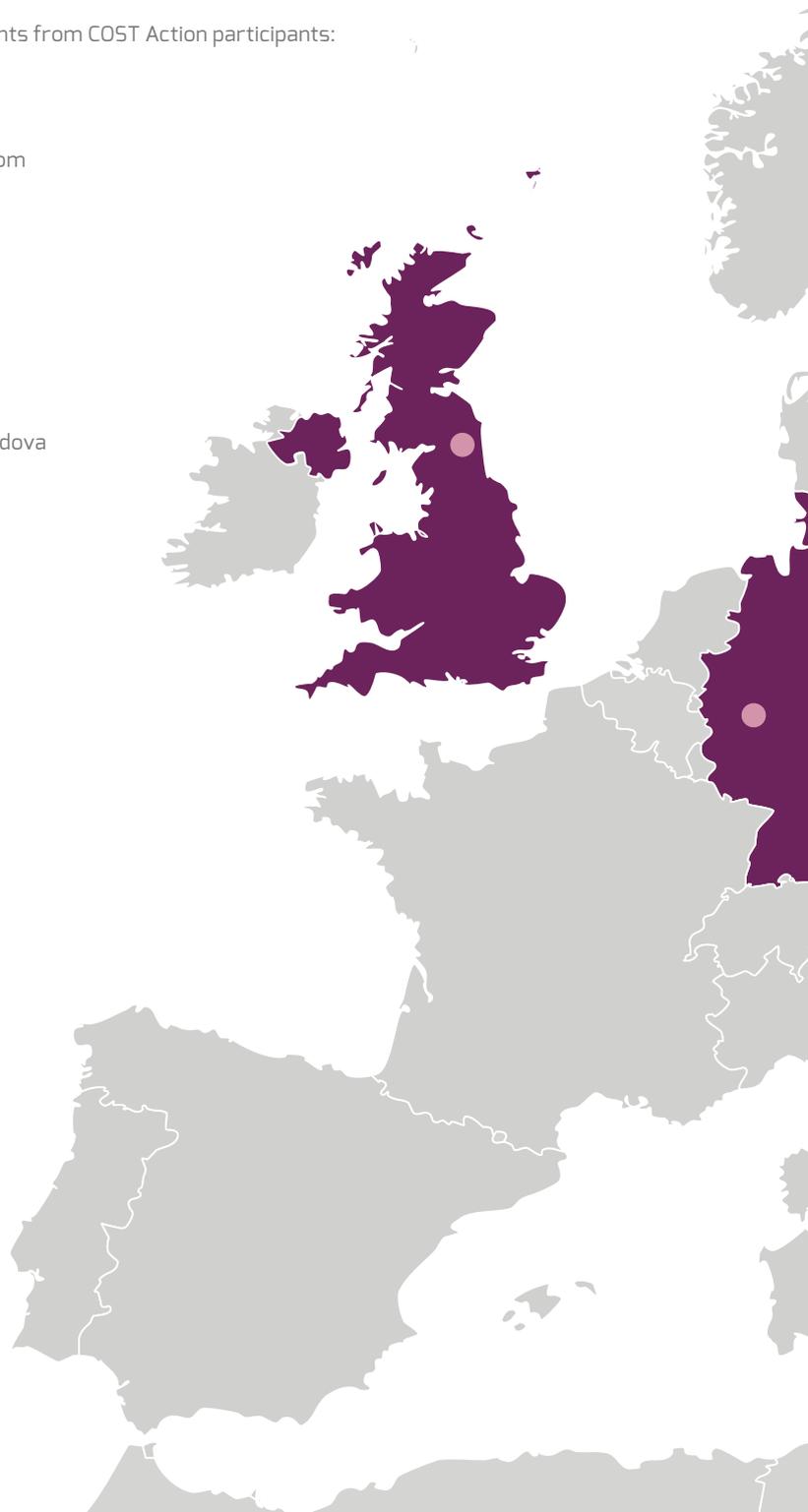
COST Information Days offer an introduction to the COST Programme and COST Actions. The main topics include:

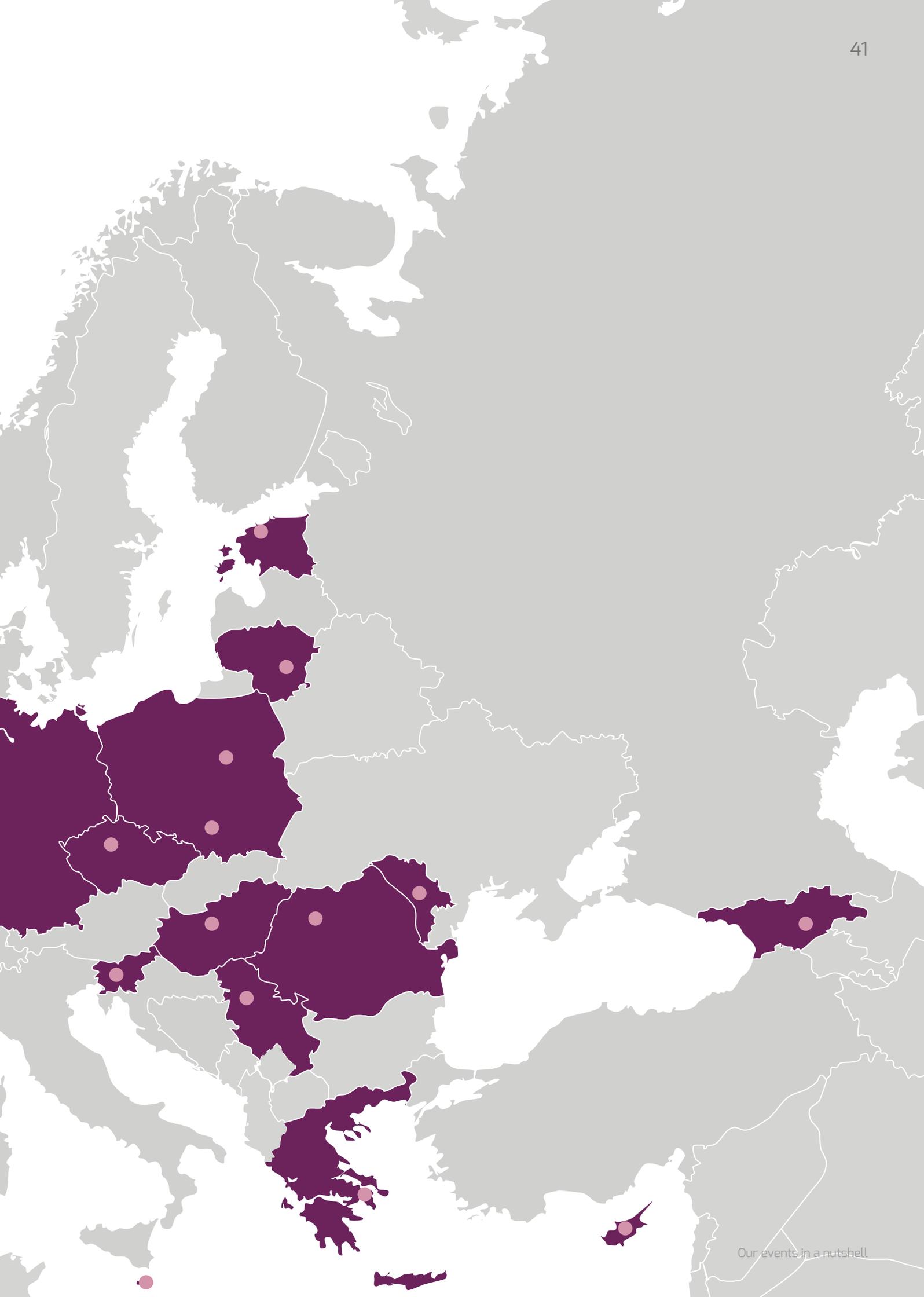
- What is COST?
- What is the COST strategy?
- How does the COST Programme work?
- What is a COST Action and how can you participate?
- What is the added value of participating in a COST Action? (Testimonies of Action participants).



In some countries, attendees hear first-hand accounts from COST Action participants:

Date	Location
23 January 2018	Bonn, Germany
8 February 2018	Newcastle, United Kingdom
16 February 2018	Prague, Czech republic
27 February 2018	Warsaw, Poland
12 March 2018	Ljubljana, Slovenia
16 March 2018	Cluj, Romania
23 March 2018	Belgrade, Serbia
27 March 2018	Athens, Greece
20 April 2018	Budapest, Hungary
4 May 2018	Tbilisi, Georgia
4 May 2018	Chişinău, Republic of Moldova
18 May 2018	Kalkara, Malta
7 September 2018	Tallinn, Estonia
25 September 2018	Kraków, Poland
5 October 2018	Vilnius, Lithuania
31 October 2018	Nicosia, Cyprus





Making the headlines

Some key examples:

The 'European Network for Problematic Usage of the Internet' hit the international headlines with its manifesto for research into the problematic use of the internet (PIU). Only the story in the Guardian reached 47M.

The Guardian

🌐 View the full story here:
<https://bit.ly/2uoWKUn>



The story on *Hürriyet* focuses on the fact that it is good to belong to a COST network and the need to strengthen the infrastructure for development in Turkey. Reach: 13.6M.

Hürriyet

🌐 View the full story here:
<https://bit.ly/2CzYgYz>

* Monitoring throughout 2018 - Source: Meltwater.

ONLINE FOCUS Local

Politik Finanzen Regional Perspektiven Wissen Gesundheit Kultur Panorama Sport Digital Reisen Auto Immobilien Video

Regional Wuppertal

Nachrichten > Regional > Wuppertal > Universität Wuppertal: Neues Forschungsfeld für Atmosphärenchemiker: Projekt zur Luftverschmutzung in Innenräumen gestartet

Dieser Inhalt wurde erstellt von Universität Wuppertal

Universität Wuppertal

Neues Forschungsfeld für Atmosphärenchemiker: Projekt zur Luftverschmutzung in Innenräumen gestartet

Teilen

Freitag, 03.08.2018, 11:52

„80 bis 90 Prozent unseres Lebens verbringen wir in Innenräumen. Trotzdem haben wir Atmosphärenchemiker den Prozessen in Innenraumluft bislang wenig Beachtung geschenkt.“ Für Prof. Dr. Peter Wiesen lag deshalb nahe, dass sich das Institut für Atmosphären- und Umweltforschung der Bergischen Universität am „Indoor Air Pollution Network“ – kurz: INDAIRPOLLNET – beteiligt. Dahinter verbirgt sich eine neue Aktion der Cooperation in Science and Technology (COST), ein von der EU finanziertes Programm, in dem Forscherinnen und Forscher aus Europa und Partnerländern interdisziplinäre Forschungsnetzwerke entwickeln.

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Aktualisiert um 12:00 Uhr

Mein Fußball-Moment - März-Gewinner

11:52 Uhr

Euskirchen: Ersthelfer befreit Frau nach Unfall aus Auto

07:30 Uhr

Mein Fußball-Moment - Inhabehar Effort

German Focus Online newspaper reports on the kick off of COST Action INDAIRPOLLNET, about indoor air quality. Reach: 9.51M
[Focus Online](#)

🌐 [View the full story here:](https://bit.ly/2FRkmb6)
<https://bit.ly/2FRkmb6>

Spanish newspaper *La Vanguardia* reported on Dr García-Castellanos' visit to the Dead Sea area in the framework of a meeting organised by the Action 'Uncovering the Mediterranean salt giant (MEDSALT)'. Reach: 7.61M
[La Vanguardia](#)

🌐 [View the full story here:](https://bit.ly/2HE61AC)
<https://bit.ly/2HE61AC>

LAVANGUARDIA

natural

TU HUELLA CAMBIO CLIMÁTICO ACTUALIDAD HÉROES Y VILLANOS ANIMALADAS SI EXISTE ECOGALLEGO

ECOSISTEMA UNICOS

Las razones profundas de los socavones del mar Muerto

• La mala gestión de los recursos hídricos está provocando que el mar Muerto retroceda a un ritmo de un metro por año

• La retirada de las aguas deja a su paso un rastro de devastación, en forma de socavones

VER IMÁGENES

LORENA FARRAS PÉREZ

25/02/2018 10:08

Actualizado a 25/02/2018 10:25

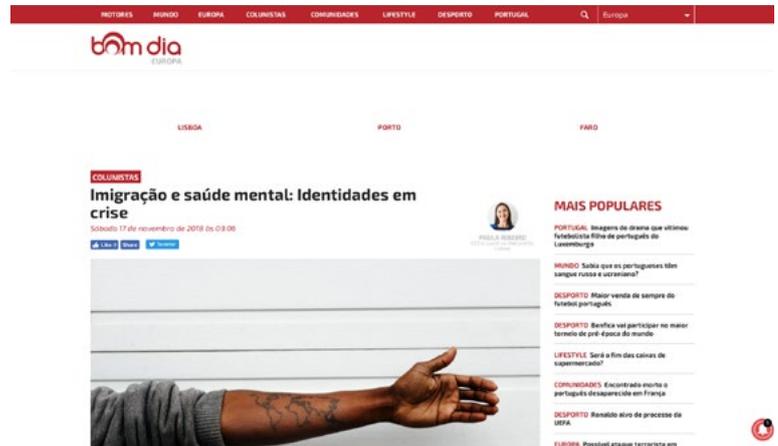
El descenso del nivel en el mar Muerto y la formación de grandes socavones deja al descubierto las capas de sedimentos.

Further coverage:

COST Action 'Health and Social Care for Migrants and Ethnic Minorities in Europe' was mentioned in a news article on immigration and mental health by the Portuguese newspaper Bom dia.

Bom dia

View the full story here:
<https://bit.ly/2Wk22fY>



The Italian news portal *askanews* reported on COST Action 'Aedes Invasive Mosquito'.

View the full story here:
<https://bit.ly/2Wr48ef>

Nicosiapress reported about COST's participation at the conference on digitalisation of cultural heritage. [Nicosiapress](#)

View the full story here: <https://bit.ly/2Yiy98J>



Determinan un método sencillo y económico para medir la erosión en los cultivos vitivinícolas

EUROPA PRESS 05.12.2018



• El Instituto de Geomorfología y Suelos, del departamento de Geografía de la Universidad de Málaga (UMA), y el grupo Seder del departamento de Geografía física de la Universidad de Valencia han diseñado un nuevo método sencillo y económico para la estimación de la erosión en los cultivos vitivinícolas. Un proyecto en el que también han participado investigadores de las universidades de Palermo, Queensland, Politécnica de Valencia, Dickinson y de Wageningen.



Medición de la erosión FUNDACIÓN DESCUBRE

El estudio se apoya en el "método de los tocones" o SUM (Stock Unearthing Method), un sistema de medición de la erosión en el campo que observa el tocón de la planta en cultivos injertados. El tocón es la parte del tronco de una parra que se queda unida a la raíz y sobre la que se realiza el injerto para que crezca la cepa.

BLOGS DE 20MINUTOS

-  BRAVO, FERNANDO - FÓRMULA 1
La cámara 'onboard' deja a Verstappen al descubierto: golpeó a Sainz
-  VEINTE SEGUNDOS
Relectura de "El Jaramá" en la muerte de Rafael Sánchez Ferlosio
-  MÁS DE LA MIFAD
Victimas, nada más

This news presents a study on the erosion of vineyards cultivated on steep slopes as part of COST Action Connecteur. [20 minutos](#)

View the full story here: <https://bit.ly/2Vab53N>

About us

COST provides networking opportunities for researchers and innovators in order to strengthen Europe's capacity to address scientific, technological and societal challenges.

There are three strategic priorities: Promoting and spreading excellence, fostering interdisciplinary research for breakthrough science and empowering and retaining young researchers and innovators. COST implements its mission by funding bottom-up, excellence-driven, open and inclusive networks for peaceful purposes in all areas of science and technology.

Who can participate?

Researchers and innovators from universities, public and private institutions, NGOs, industry and SMEs. Particular emphasis is placed on activities involving researchers from less-research-intensive COST Countries (ITCs) with a view to increasing their participation.

Researchers from Near Neighbour Countries and International Partner Countries can also take part in a COST Action on the basis of mutual benefit.

How?

COST does not fund research, but provides support for networking activities carried out within COST Actions. In this way, it coordinates nationally funded research. COST invites researchers across Europe to submit proposals for Actions through a continuous open call, no matter what their field of interest.

Networking tools



Meetings, workshops and conferences – These are organised by the COST Action management committees in any COST country participating in the network and are open to the entire scientific community.



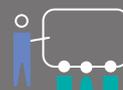
Short-term scientific missions (STSMs) – These are exchange visits between researchers in the network which enable scientists to visit an institution or laboratory in another COST country.



Training schools – They offer training in a relevant or new subject at one of the Action's laboratories which provides unique equipment and/or know-how.



Dissemination activities – COST encourages and supports Action participants to disseminate the outcome of their research to other COST science and technology networks, the wider scientific community, policymakers, the media, and society at large, through publications, electronic media, news releases, events, success story releases, etc.



Conference grants – These grants help PhD students and early-career investigators from Inclusiveness Target Countries attend international science and technology related conferences that are not organised by a COST Action.

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