

MEMO

Brussels, 21 September 2015

27 years of the European Union Contest for Young Scientists

What is the European Union Contest for Young Scientists (EUCYS)?

The Contest was initiated in 1989 when then European Commission President Jacques Delors took up a challenge from Royal Philips Electronics of the Netherlands to organise a Europe-wide student science fair. Philips had organised a similar event since 1968. The European Union Contest for Young Scientists (EUCYS) was launched with the aim of encouraging young people to get involved in science and eventually embark on a career in research. The contest is part of the Science with and for Society activities managed by the Directorate-General for Research and Innovation of the European Commission.

Who can take part?

The contest is open to all EU Member States, countries associated to the EU research framework programme and invited guest countries that should have a Science and Technology agreement with the EU. To be able to participate, the country has to have a national contest and a national organiser confirmed by their Ministry of Science/Education.

The participants in the EU Contest for Young Scientists are already winners! To enter the contest, participants must have previously won a competition for young scientists at the national level. This high standard sets the EU Contest for Young Scientists apart from similar competitions. Entries from both individuals and small teams of up to three people are allowed, and the students must be aged between 14 and 20. The projects cover a wide range of scientific disciplines.

The event is held in a different city every year. At the venue, each participating team is allocated a stand in an exhibition area to display its findings to the jury and other visitors. The jury is made up of leading scientists from both academia and industry. Before the event, the jury carries out a preliminary assessment of entries. At the event, each team is interviewed by at least three jury members. During these intense interviews, the jury is looking for the following:

- originality and creativity;
- skill and thoroughness in the way the project has been carried out;
- reasoning and clarity in the interpretation of the results;
- top class presentation of the project, both in the written work and during the interviews.

The judges also take into account how much support a team had from teachers and other mentors.

The Jury

The jury of the 2015 contest in Milan was composed of 19 members and 3 experts for the food projects.

President of the Jury : Dr. Lina Tomasella – Physics - ITALY

<u>Nationality</u>	<u>Title</u>	<u>First name</u>	<u>Name</u>	<u>Field</u>
SWEDEN	<i>Dr.</i>	Henrik	Aronsson	Environment
GERMANY	<i>Prof.</i>	Katrin	Auel	Social Sciences
UK	<i>Prof.</i>	Derek	Bell	Biology/Environment
HUNGARY	<i>Dr.</i>	Attila	Borics	Chemistry/Biochemistry
MALTA	<i>Prof.</i>	Maria	Cordina	Medicine
FRANCE	<i>Prof.</i>	Evelyne	Cottureau	Engineering
IRELAND	<i>Prof.</i>	Tony	Fagan	Engineering
SLOVENIA	<i>Dr.</i>	Milena	Horvat	Environment
DENMARK	<i>Dr.</i>	Morten	Lenholm	Engineering
BULGARIA	<i>Dr.</i>	Mariya	Lyubenova	Physics/Astrophysics

CZECH REPUBLIC	<i>Prof.</i>	Milan	Macek	Medicine
LITHUANIA	<i>Dr.</i>	Sergej	Makovejev	Engineering/Physics
SERBIA	<i>Prof.</i>	Lidija	Matija	Engineering/Materials
BELGIUM	<i>Dr.</i>	Estelle	Mossou	Physics
ESTONIA	<i>Dr.</i>	Margus	Niitsoo	Mathematics/Computing
FRANCE	<i>Dr.</i>	Yann	Ollivier	Mathematics/Computing
PORTUGAL	<i>Dr.</i>	Luisa	Pereira	Biology
ITALY Jury President	<i>Dr.</i>	Lina	Tomasella	Physics
POLAND	<i>Dr.</i>	Zuzanna	Szymańska	Mathematics/Computing

Experts for the projects related to EXPO 2015 (food-related projects)

Mella Frewen
Claudia Sorlini
Jürgen Stolz

The Prizes

	Prizes 2015		Nb Persons
Core Prizes	The First Prize	7 000,00 EUR	3 projects
	The Second Prize	5 000,00 EUR	3 projects
	The Third Prize	3 500,00 EUR	3 projects
Honorary Prizes Associated with the First Prizes	London International Youth Science Forum	27 July to 10 August 2016	3
	Stockholm International Youth Science Seminar	4-11 December 2015	2
Special Donated Prizes	ESA (European Space Agency)	The opportunity to take part in one of the following major space science conferences in 2016: The European Geophysical Union General Assembly (Vienna, Austria, 17/04/2016 - 22/04/2016) or The European Week of Astronomy & Space Science of the European Astronomical Society (Athens, Greece, 04/07/2016 - 08/07/2016) or one week's visit to ESA's technical centre, ESTEC, in the Netherlands to meet and interact with ESA scientific and technical staff.	1
	CERN The European Laboratory for Particle Physics	one week stay in Geneva, Switzerland	1 project (maximum 3 people)
	EUROFusion	one week stay in Culham, United Kingdom	1

	ESRF The European Synchrotron Radiation Facility*	one week stay in Grenoble, France	1 or 2
	EMBL The European Molecular Biology Laboratory	one week stay in Heidelberg, Germany	1
	ESO European Southern Observatory	visit of ESO site in Chile	1
	ILL The Institute Laue- Langevin*	one week stay in Grenoble, France	1 or 2 (max 3 for ILL and ESRF together)
	European X-Ray Free- Electron Laser Facility GmbH	one week stay in Hamburg, Germany	1
	Joint Research Centre (JRC) - the European Commission's internal science service	a two-day stay at the JRC's Institute in Ispra, Italy.	3 projects with up to three people each
	Intel ISEF 2015 PRIZE	visit to INTEL ISEF 2016, Phoenix (AZ), USA, 08-13/5/2016	3 projects up to 3 people each
EuCheMS special donated prize	EuCheMS special donated prize	1 000,00 EUR for the best chemistry entry	1 person
Wolfram	Wolfram Research	free one-year Mathematica Student Edition license + free one- year subscription to WolframAlpha Pro	all students having submitted projects in the field of mathematics
	A2A, the multiutility of Milan and Brescia	2 000,00 EUR	1 project up to 3 persons
Host Special Donated Prizes	University of Milano- Bicocca	3 science internships of one month (November 3rd - December 3rd)	3 projects up to 9 persons

	AICA, the Italian Association for Information and Communication Technologies	1 500,00 EUR	1 project up to 3 persons
	FAST, the Italian Federation of Scientific and Technical Association and FOIST, the Foundation for the Development and the Promotion of the Education and the Scientific and Technical Culture	1 000,00 EUR	1 project up to 3 persons
	FBK, Bruno Kessler Foundation	internship of one week in their laboratories in Trento	1 project up to 3 persons
	IIT, the Italian Institute of Technology	internship of one week in their laboratories in Genoa	1 project up to 3 persons
	Salveti Foundation	1 000,00 EUR	1 project up to 3 persons
	SOL Group	2 000,00 EUR	1 project up to 3 persons
EC Special Prize	EXPO 2015 prize	laptop for each of the participants in the project and participation in EXPO 2015 closing event + 1 day visit in ISPRA	1 project up to 3 persons
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*** a maximum of 2 people may be considered such that the ESRF and ILL prizes combined shall accommodate a maximum of three people**

EUCYS in numbers

27 years of EUCYS

24 cities have hosted the contest

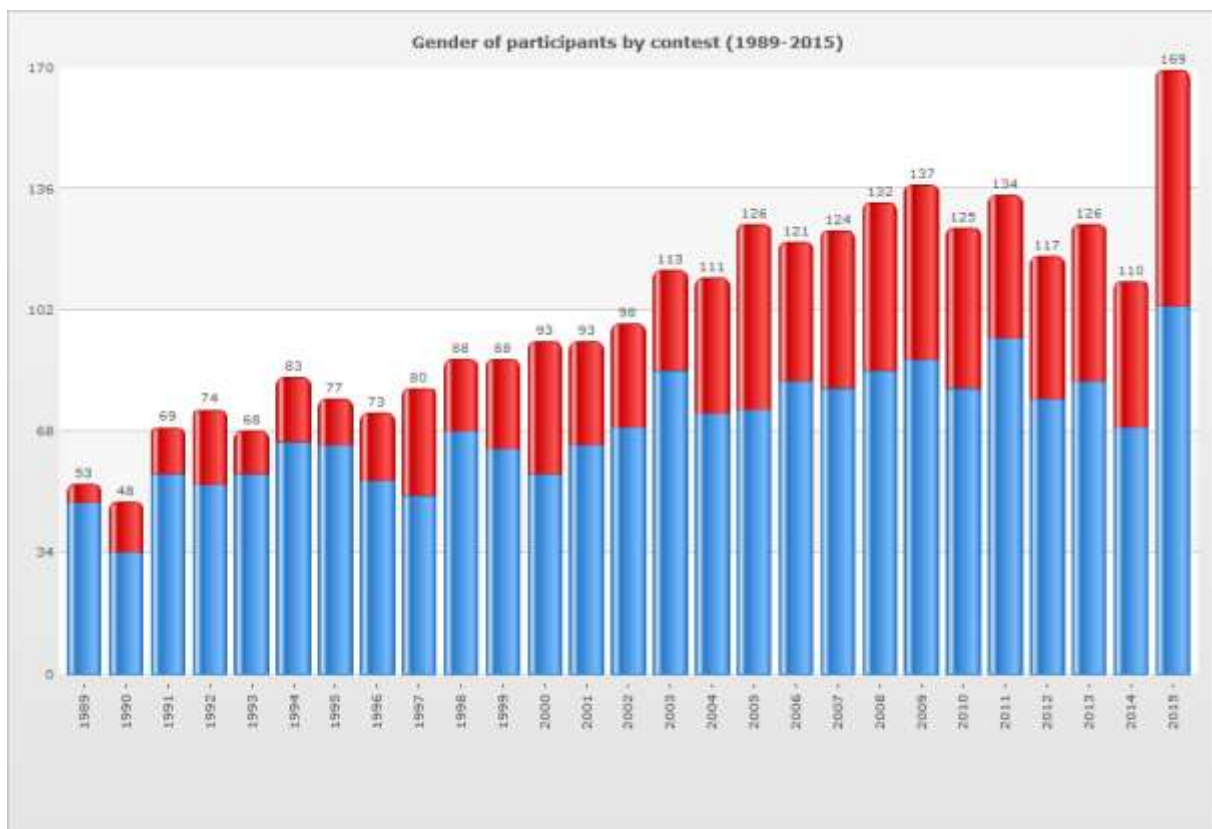
2730 contestants participated since 1989

676 prizes since 1989 + 41 prizes for this year

The number of participants has increased every year since 1989 from 59 to 169 this year.

Table of participation

Participants per year from 1989 to 2015



A total of 45 different countries have taken part in EUCYS since 1989. Currently, 42 countries have national organisers:

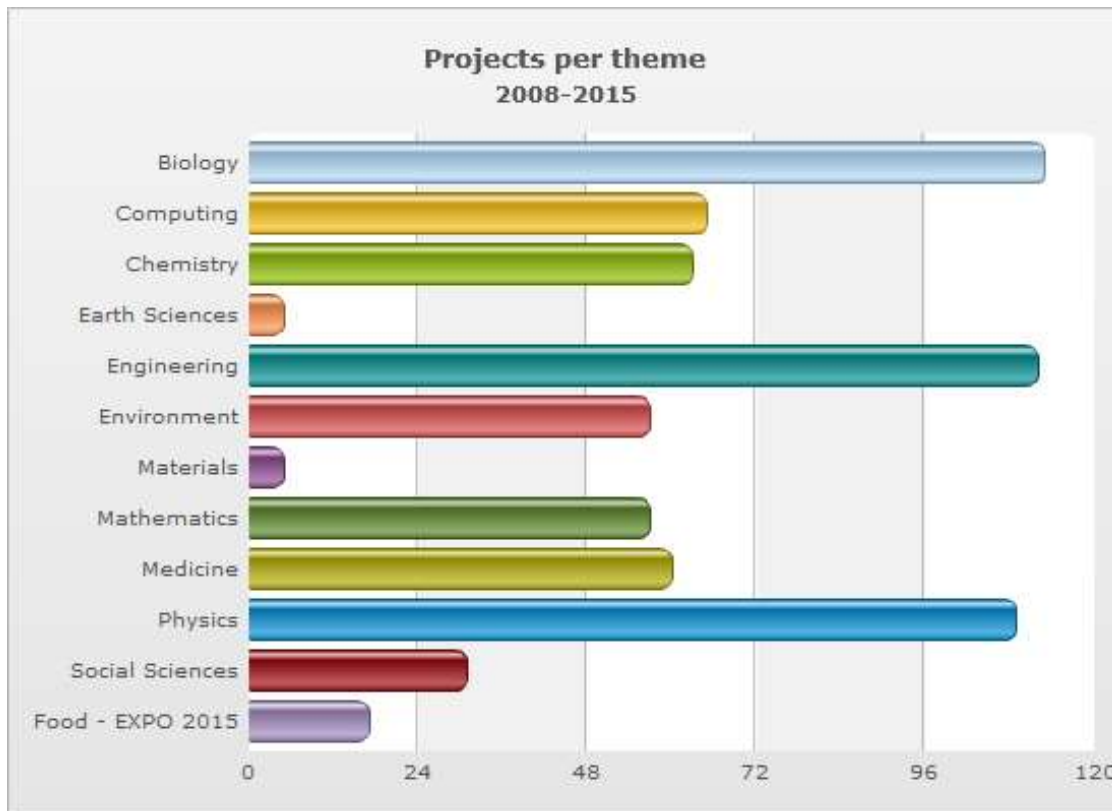
- EU Member States (factsheet per country)

[Austria](#) - [Belgium](#) - [Bulgaria](#) - [Czech Republic](#) - [Cyprus](#) - [Denmark](#) - [Estonia](#) - [Finland](#) - [France](#) - [Germany](#) - [Greece](#) - [Hungary](#) - [Ireland](#) - [Italy](#) - [Latvia](#) - [Lithuania](#) - [Luxembourg](#) - [Malta](#) - [Poland](#) - [Portugal](#) - [Slovakia](#) - [Slovenia](#) - [Spain](#) - [Sweden](#) - [United Kingdom](#)

- Other countries (factsheet per country) and association

[Belarus](#) - [Canada](#) - [China](#) - [Egypt](#) - [Georgia](#) - [Iceland](#) - [Israel](#) - [Japan](#) - [New Zealand](#) - [Norway](#) - [Russia](#) - [Serbia](#) - [South Korea](#) - [Switzerland](#) - [Turkey](#) - [Ukraine](#) - [United States of America](#) - [European Schools](#)

EUCYS and Science



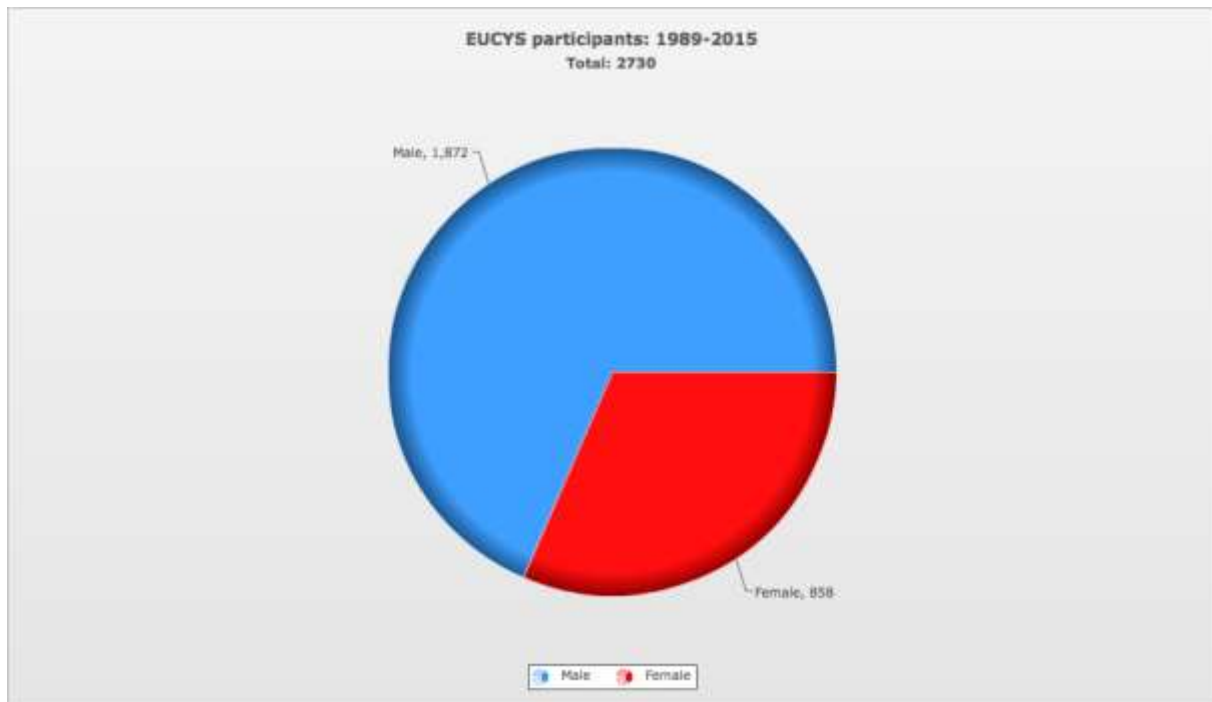
Since 2008, 694 projects have competed and the scientific fields that have the most projects are Biology (113), Engineering (109) and Physics (112). The winning projects also come mainly from these three fields (2008 – 2013).

EUCYS and Gender

Of the 2730 EUCYS participants since 1989, 858 were female. In 2015, 66 young women and 103 young men were present. 183 female participants, some in the same teams, have won prizes over the 27 years. Since 1989, 717 prizes were given out. The participation of young women was low at the start, but since 1997 has generally exceeded 30% with a peak of around 41% in 2005. This year we reached 39%.

In order to encourage young women to choose science studies, in June 2012 the European Commission launched a communication campaign on Women in Research and Innovation. Under the slogan *Science it's a girl thing!* the campaign targets girls aged 13-18. At this year's contest, there will be eight Marie Skłodowska-Curie fellows presenting their projects at the stand (7 female scientists and 1 male scientist) *Science: it's a girl thing!*. They will answer contestants' questions and explain why they have chosen science as a carrier. A photo

exhibition is also organised during EUCYS to highlight some of the best photos from the *Science: it's a girl thing!* photo contest: "What does science means to you?".



Where are they now?

Some past contestants, not only the winners, have gone on to set up cutting-edge companies or work at world-class research facilities or universities. All see EUCYS as having been a great opportunity and a real springboard for their career in science.

Here are a few **examples**:

Martin Hairer from Austria In 1991 he won a COMETT Award for an electronics project –is now a Professor based at the University of Warwick, in the UK and works in a field of random systems called stochastic analysis. He has developed a theory to accurately characterise random systems that change as time passes, for example the breakdown of a magnetic field as a magnet is heated up. He has won a Consolidator Grant from the European Research Council to refine his theory and work out how it can be applied to different physical systems. He is winner of the 2014 Fields Medal, the world's foremost maths prize, for his work on random systems

Lina Tomasella from Italy won First Prize in 1989 at the first EUCYS contest in Brussels. She did not know that her project 'Toxicity of colour dyes used as tracers' would lead her to become a researcher at the National Institute for Astrophysics in Padua. She is also one of the Jury members of EUCYS since 2012 and since this year the President of the Jury.

In 1993 at the 5th edition of the contest in Berlin, **Antoni Camprubi** from Spain won a first prize with a geology project. He describes the contest as a landmark in his career. He is now a Professor at the Institute of Geology at the National Autonomous University of Mexico.

Lithuanian **Laurynas Pliusky** won third prize at Dublin (2004) for his project 'An analysis of the water in the lakes of Trakai and a new biosensor for the determination of heavy metals'. He is currently doing a PhD in biomedicine at Oxford University.

More examples can be found on the contest [website](#) and [media platform](#).