



15th European Union Science Olympiad Copenhagen, Denmark

Director: Hans Marker

[Task A - ICE](http://euso.eu/wp-content/uploads/Task_1_ICE.pdf)

http://euso.eu/wp-content/uploads/Task_1_ICE.pdf

[Task B - OCEAN](http://euso.eu/wp-content/uploads/Task_2_OCEAN.pdf)

http://euso.eu/wp-content/uploads/Task_2_OCEAN.pdf

Overview

The 15th European Union Science Olympiad (EUSO) was held in Copenhagen, Denmark on 7-14 May 2017. The Honorary Board included HRH Prince Joachim, Minister Merete Riisager, Dean John Renner Hansen, Dean Martin Vigild, Mayor Pia Allerslev, Mrs. Sophie Hæstorp Andersen and Dr. Michael Cotter. The staff of Sankt Annæ Gymnasium, Tradium Technical Gymnasium and Ribe Katedralskole took responsible for the organisation and management.

Twenty-four EU countries were each represented by two teams (144 Students): Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Portugal, Romania, Slovakia, Slovenia and Sweden.

Tasks 1, (ICE) and Task 2, (OCEAN) were designed and developed by teachers and scientists from Copenhagen University (CU), the Technical University of Denmark (DTU), Gefion Gymnasium, Egå Gymnasium and Sankt Annæ Gymnasium.

Mentors, students, observers and guests were accommodated in the Scandic Sydhavn hotel. As well as the taking part in the integrated, practical science experiments in the two university laboratories, visits to the Viking Ship Museum, Kronborg Castle in Helsingør, the Tivoli Gardens, the Zoological gardens and also Canal Tours were included in the activities schedule. In addition the participants followed social, sporting, cultural, musical and educational programmes.

Local Team for the 15th EUSO

Royal Protector: HRH Prince Joachim

Executive Committee Chairman: Hans Marker; **Secretary:** Tine Christiansen.

Members: Erland Andersen, Kirsten Wøldike, Lise Odgaard Gade, Ulrik Brasch, Hanne Skalborg Jensen, Søren Blanke, Brian Dupont Larsen, Peter Lysgaard Bentsen.

Task 1 (ICE) Chairman: Dean John Renner Hansen: Secretary, Dr. Erland Andersen. Members: Dr. Torben Roug Ingerslev, Prof. Nadja Møbjerg, Dr. Lykke Keldsted Bøgsted Clausen, Prof. Anders Døssing, Dr. Vasileios Gkinis, Prof. Jørgen P. Steffensen, Christine Hvidbjerg, Dr. Maria Kamilari, Thomas L. Hygum and Dr. Astrid M. Z. Schmidt.

Task 2 (OCEAN) Chairman: Prof. Christian Thune Jacobsen, Secretary, Prof. Marianne Mønsted Jørgensen. Members: Prof. Ole L. Trinhammer, Dr. Mirka Smrcinová, Prof. Peter Kjeldsen, Prof. Thomas Kiørboe.

Task 1 & 2: Birgit Eliasson, Dr. Rasmus Møller, Vibeke Axelsen and Carsten Ladegaard Pedersen.

Student Guides: Sofie Thomsen, Kristine Aarup, Charlotte Voigt Sonnichsen, Liv Truelsen, Jeppe Thaibert, Andreas Mosbæk Jensen, Nikolaj Simling, Søren Møller, Jacob Andersen, Hannah Bingley, Caja Lilhav Christoffersen, Sofie Leiszner, Niels Knudsen, Ida Kristine Sandford Meitil, Rose Garlt, Josefine Neerup-Lundh, Anna Olivia Zier Jeppesen, Lise Hagen, Stig Hammer Anne Grøn and Claudia Lassen

Medals and Results 2017

Rank	Team	Medal	Task A (110)	Task B (100)	Total (210)	% (100)
1	Hungary A	Gold	100.6	88.3	188.9	90.00
2	Estonia A	Gold	99.6	86.1	185.7	88.4
3	Croatia B	Gold	95.9	87.9	183.8	87.5
4	Germany A	Gold	98.0	85.4	183.4	87.3
5	Czech Republic A	Gold	103.2	74.0	177.2	84.4
6	Portugal A	Silver	96.2	77.6	173.8	82.8
7	Hungary B	Silver	93.3	78.8	172.1	82.0
8	Slovenia B	Silver	92.7	77.2	169.9	80.9
9	Italy A	Silver	92.3	77.2	169.5	80.7
10	Lithuania B	Silver	98.7	70.0	168.7	80.3
11	Netherlands A	Silver	83.0	85.5	168.5	80.2
12	Latvia A	Silver	91.4	74.9	166.3	79.2
13	Luxembourg B	Silver	91.1	72.7	163.8	78.0
14	Lithuania A	Silver	90.0	72.9	162.9	77.6
15	Germany B	Silver	83.7	78.2	161.9	77.1
16	Ireland A	Silver	92.3	69.5	161.8	77.0
17	Slovakia A	Silver	103.3	56.7	160.0	76.2
18	Estonia B	Silver	98.7	57.8	156.5	74.5
19	Ireland B	Silver	79.9	76.4	156.3	74.4
20	Netherlands B	Silver	89.8	62.6	152.4	72.6
21	Austria A	Silver	77.8	71.8	149.6	71.2
22	Croatia A	Silver	87.9	61.4	149.3	71.1
23	Italy B	Silver	79.7	69.5	149.2	71.0
23	Sweden B	Silver	86.6	62.6	149.2	71.0
25	Slovakia B	Silver	90.6	58.0	148.6	70.8
26	Denmark 1A	Silver	75.1	73.4	148.5	70.7

Range of Bronze Medals	89.5-49.8	68.4-35.2	142.3-86.1	67.9-41.0
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Bronze Medals (*Alphabetical Order*): Belgium A, Bulgaria A, Cyprus A, Denmark 2A, Finland A, France A, Greece A, Luxembourg A, Romania A, Slovenia A, Sweden A, Austria B, Belgium B, Bulgaria B, Cyprus B, Czech Republic B, Denmark 1B, Denmark 2B, Finland B, France B, Greece B, Latvia B, Portugal B, Romania B.

List of Participants at EUSO 2017

CC - Country Coordinator: B – Biology Mentor: C – Chemistry Mentor: P – Physics Mentor

Country	Team A	Team B	CCs & Mentors
Austria	Jakob Pretenthaler Markus Rupp Jesse Ziegler	Zarije Ademi Othmar Gritzky Christina Lassnig	Peter Holub (CC) Christine Ottowitz (B) Sabine Seidl (C) Dieter Winkler (P)
Belgium	Toon De Prins Brent Nissens Thijs Paelman	Adrien Arbalestier Thomas Rosseel Thomas Vray	Victor Rasquin (CC) Louis De Vos (B) Alexandre Marée (C) Bernadette Hendrickx (P)
Bulgaria	Yana Dimitrova Zdravko Ivanov Ivan-aleksandar Mavrov	Slaveya Kostadinova Silvi Koycheva Evgeni Statelov	Adriana Tafrova-Grigorova (CC & C) Snezhanka Tomova-Gogova (B) Maya Gaydarova (P)
Croatia	Mislav Barić Domagoj Perković Klara Tomašković	Luka Bulić bračulj Petar Škrobo Paula Vidas	Tajana Preočanin (CC & C) Andreja Lucic (B) Filip Toric (P)
Cyprus	Matthaios Chouzouris Despina Gerolemidou Xenios Papageorgiou	Angelos Assos Savvas Kamenos Ioannis Kestoras	Stella Ioannou-Loucaides (CC & C) Constantinos Phanis (B) Georgios Tsalakou (P)
Czech Republic	Jiří Janoušek Jindřich Jelínek Richard Veselý	Kateřina Bezányiová Adam Mendl Michal Straka	Jan Černý (CC & B) Petra Bajerová (C) Lukáš Ledvina (P)
Denmark 1	Søren Johannes Heiberg Astrid Kildelund Rosenkilde Esben Bjørn Salmonsens	Sif Bjerre Lindby Nanna Frost Falborg Anna Vingborg	Richard Cleyton (CC & P) Lisbet Marcussen (B) Søren Hansen (C)
Denmark 2	Rolf Bisgaard Poulsen Jakob Rossander Kristensen Rasmus Vester Munkner	Christian Adam Deding Vielsen Albert Sandahl Kjølby Katharina Walsted Lykou	Richard Cleyton (CC & P) Lisbet Marcussen (B) Søren Hansen (C)
Estonia	Kirke Joamets Kaarel Kivisalu Karl Paul Parmakson	Hanna-Riia Allas Konstantin Dukatš Andreas Must	Mark Gimbutas (CC & B) Siiri Velling (C) Mihkel Kree (P)
Finland	Anton Ruhr Oona Salonen Pietari Virkkunen	Oskar Heikkilä Reetta Kälvälä Otto Torkkeli	Nina Salminen (CC & C) Eeva Kalmanlehto (B) Tapani Korhola (P)
France	Iksi Ahmad Noé Perrin Tilia Pierson	Wagner Bastien Nicolas Brosseau-Habert Mathilde Gosse	Mesude Bablon (CC & C) Juliette Mathieu (B) Tanguy Saibi (P)

Editors: Hans Marker & Michael A. Cotter

Germany	Bruno Ederer Jakob Schramm Roman David Ventzke	Sophia Maria Louisa Häußler Franziska Salome Schwark Lea Paula Wagner	Burkhard Schroeter (CC & B) Anne Omlor (B) Dave Hartig (C) Stefan Petersen (P)
Greece	Velissarios Christodoulou Aikaterini Gkrintzia Panagiotis Makris	Kerasoula Christakaki Nikolaos Kalligas Panagiotis Karakostidis	Vasileios Garganourakis (CC) Ioannis Paschalidis (B) Kyriaki Eliadou (C) Christos Papanikolaou (P)
Hungary	Bulcsú Fajszí Ákos Harangozó Balázs Németh	István Csépanyi Csaba Kozma Ivett Mihálicz	Péter Vankó (CC & P) Sándor Bán (B) István Pálinkó (C)
Ireland	Theo Bolger Antonia Huang Andrew Nash	Brian Durkan Kevin Jansson Stephen Trenier	Paul Van Kampen (CC & P) Niamh Hunt (B) Pat O Malley (C)
Italy	Alberto Cadorin Gaia De Paciani Luca Lazzari	Felix Chippendale Francesco De Bortoli Jakob Nogler	Paolo Laveder (CC & B) Andrea Ursic (C) Alberto Meroni (P)
Latvia	Laura Bukevica Kristers Kokars Anna Marija Sumrova	Vilhelms Cinis Anastasija Šļapina Anitra Zīle	Agnese Kokina (CC & B) Mihails Halitovs (C) Valdis Zuters (P)
Lithuania	Gediminas Lelešius Milda Navickaitė Ričardas Navickas	Mindaugas Dženkaitis Ignas Šakuro Justas Terentjevas	Paulius Tamošiūnas (CC & B) Ramunas Skaudzius (C) Tomas Kivaras (P)
Luxembourg	Jean-Marc Furlano Raffaël Marth Helena Westermann	Michel Mertens Chris Petit Daniel Stors	Jeff Kohnen (CC & B) Liss Weber (C) Gérard Wagener (C) Frank Thillen (P)
Netherlands	Stan Koenis Lotte Kremer Marouscha Puister	Sean Camps Daan Hoogers Tido Houtepen	Emiel De Kleijn (CC) Agnes Legierse (B) Tom Bloemberg (C) André Eppink (P)
Portugal	Marco António Ribeiro Diogo Rodrigues João Miguel Sousa	Filipe Miguel Favita Monteiro Ana Rita Magalhães Gerales Alexandra Ribeiro Verdasca	Isaura De Jesus Vieira (CC) Joana D'Orey Capucho (B) Maria Das Dores Ribeiro Da Silva (C) Célia Maria Reis Henriques (P)
Romania	Monica Balanescu Miruna Ioana Belciu Daria Ioana Radu	Andrei Bordeianu Razvan Petru Efrim Miruna Teodora Patru	Daniela Elisabeta Bogdan (CC & C) Georgiana Duta-Cornescu (B) Constantin Gavrilă (P)
Slovakia	Michal Chovanec Dominik Kopcak Emil Lelak	Jakub Barat Michal Lelak Peter Rukovansky	Andrea Sevcovicova (CC & B) Erik Szabo (C) Lubomir Mucha (P)
Slovenia	Ana Meta Dolinar Jon Judež Tijan Prijon	Klemen Bogataj Aleš Globočnik Maša Predin	Katja Stopar (CC & B) Matej Huš (C) Anita Nose (P)
Sweden	Mustafa Al-assadi Lucas Johnson Henrik Vester	Björn Diemer Andy Fang Linus Persson	Anne-Sofie Mårtensson (CC) Jonas Forshamn (CC) Ulrika Wedding (B) Suheyła Demir (C) Lars Gråsjö (P)

Observers

Austria	Sigrid Holub, Christina Morgenstern
Greece	Dimitra Alexaki, Vasileios Karamaounas, Sophia Kyriazopoulou, Dimitrios Mantatzis
Italy	Antonella Bonaldo
Portugal	SílviaTavares De Castro, Cristina Palma, Diana Cláudia Gouveia Pinto, Margarida Braga, João Carlos Lima, José António Paixão
Estonia	Karin Hellat, Ülle Kikas
Slovenia	Helena Lesar, Tadeja Smolej, Anja Horvat, Simon Čopar, Darko Dolenc