

NEWSLETTER

EDUCO2CEAN #5



EduCO2cean is a European project that aims to communicate the importance of the research on climate change and the ocean to the society, with special emphasis on the Atlantic and the Baltic Sea.

EduCO2cean is focused on the involvement of students from the European Union (13-17 years old), during the school years 2016/17 and 2017/18, in artistic and creative initiatives aiming to communicate climate change impact and to promote environmental awareness, to achieve a more sustainable ocean environment.

EDUCO2CEAN NEWS

PARTNERS MEETING IN AVEIRO, PORTUGAL

The fourth EduCO2cean partners meeting was held in Aveiro, Portugal, on the 2nd and 3rd of May 2018. The meeting was focused on the conclusion of the e-book “Climate Change and Carbon Footprint Reduction in the Oceans”, the development of the collaborative educational portal and the production of the first issue of EduCO2cean digital magazine.

More information in the project’s [official site](#).

TEACHER’S TRAINING COURSE IN AVEIRO, PORTUGAL

Following the partners meeting, a teacher’s training course was also held in Aveiro. The course consisted of two workshops, the first led by the psychologist Agnieszka Skorupa (Institute of Psychology, University of Silesia, Poland) with the title “Using movies in awakening ecological awareness” and the second by the environmental activist Ryszard Kulik (Council of All Beings, Poland) with the title “Overconsumption as a key factor in climate change”.

FIRST UNIT OF EDUCO2CEAN E-BOOK IS ONLINE



The first unit of EduCO2cean e-book was published, with the title “Didactics of Anthropogenic Global Change in Marine Ecosystems”. Developed by University of Vigo and [IES Virxe do Mar-Climántica](#), this unit addresses four main topics related to climate change and the ocean: impacts of ocean warming on its productivity, eutrophication, invasive species and acidification. Download the unit [here](#).

SPANISH STUDENTS RAISE AWARENESS ABOUT GLOBAL CHANGE



Students from Climántica’s science group at [IES Virxe do Mar](#) (Spain) acted as awareness raising agents to engage citizens on subjects related to global change and the ocean. The students developed activities on ocean acidification, eutrophication and stratification, ice melting and genetic biodiversity. More information [here](#).

ASPEA PROMOTES “TALKS WITH SCIENTISTS” IN PORTUGUESE SCHOOLS



Over the past months **ASPEA** has promoted more than 20 “Talks with Scientists” in several Portuguese schools. Researchers from **CESAM** (University of Aveiro), **MARE - UC** (University of Coimbra), **MARE - ISPA** (Lisbon), **Instituto Politécnico de Viseu** and **CIIMAR** (University of Porto) were engaged in the initiative, where themes as coastal erosion, marine ecosystems, aquaculture, marine pollution, marine invasive species and carbon capture were discussed.

FIRST VOLUME OF EDUCO2CEAN MAGAZINE IS ONLINE



The **EduCO2cean Magazine**, coordinated by **IES Virxe do Mar**, was launched last March. The first issue is composed of 10 articles distributed by four sections: Editorial, Reviews, Scientific Dissemination Articles and Didactic Dissemination Articles. Read [here](#) the first issue of the magazine.

PORTUGUESE SCHOOLS CELEBRATE THE EUROPEAN MARITIME DAY



In an event developed by [ASPEA](#), several schools celebrated the European Maritime Day with different activities, from scientific field trips organized by [CESAM](#) researchers, to music played live by students from Aveiro Music School. Researcher Cátia Carreira took students from Oliveirinha schools in a field trip to the salt ponds of Aveiro Coastal Lagoon, where she alerted for the vulnerability of estuarine bacterial communities to climate change.

SCIENTIFIC RESEARCH CARRIED OUT BY SPANISH STUDENTS



Students from [IES Virxe do Mar](#) (Spain) were engaged in a scientific research, aiming at studying the effects of climate change on the recruitment of the common cockle (*Cerastoderma edule*). Students also learned to extract DNA from different bivalves, with the purpose of sending it to an International Conservation Bank of DNA. More information [here](#).

SPANISH STUDENTS LEARN ABOUT THE CONSERVATION OF EUROPEAN POND TURTLE

Students from IES Ribeira do Louro attended a conference under the scope of the Action Plan for the Protection and Conservation of the European Pond Turtle (*Emys orbicularis*). This species is categorised as "in danger of extinction" in the Galician register of endangered species, with its main threats being the habitat destruction, the capture to be used as pet and the competition with exotic turtles.

SURVEY ON RECYCLING BEHAVIORS DEVELOPED BY SPANISH STUDENTS

Students from IES Ribeira do Louro developed a research project about recycling and the environment, by applying a questionnaire to 245 residents of Porriño Municipality (Galicia, Spain). With the survey, students concluded that more than 70% of the respondents were not aware of the 3R Rule (Reduce, Reuse, Recycle). Following this result, students are raising awareness to the importance of minimising the impacts of urban waste.

CLIMÁNTICA NETWORK CENTRES GATHERED IN PORTUGAL



Students from seven Galician high schools attended a meeting of the Climántica Network Centres in Portugal, last May. The purpose of the meeting was to present environmental research projects developed by students. During the meeting, that took place in Aveiro and Lisbon, students developed several activities with the aim of explaining the impact of climate change.

THE CLIMATE REALITY PROJECT PROMOTES TRAINING DAY ON COMMUNICATION



Caretakers of the Environment International – Poland participated in a one-day event organized by The Climate Reality Project, aimed at training peers to talk about climate change. The Climate Reality Project, founded by Al Gore, connects, trains and helps galvanize a new group of European advocates on the climate crisis.

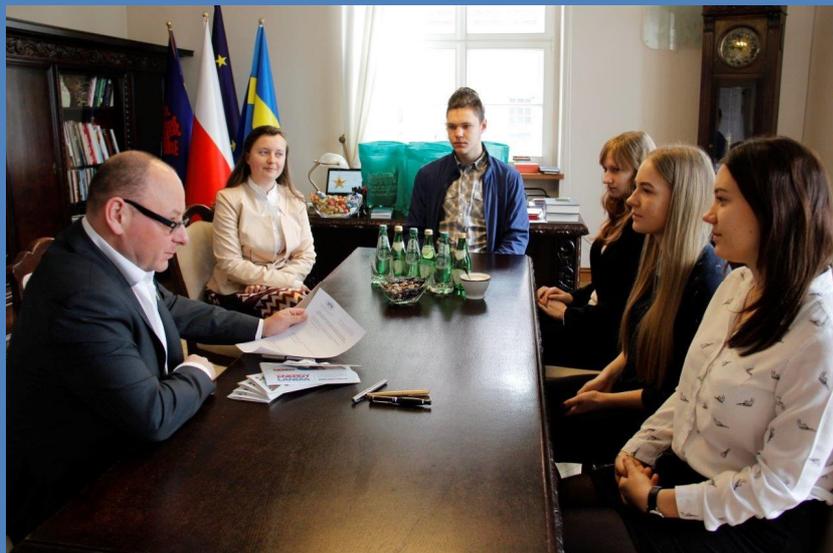
More information [here](#).

O ŚRODOWISKU W PRZEDSZKOLU



9 kwietnia 2018 r. uczniowie klasy 2 LO przygotowali przedstawienie dla dzieci z Niepublicznego Żłobka Troskliwe Misie w Pszczynie. Dzieci poznały sekrety segregacji śmieci, a także prawidłowego zachowania w swoim otoczeniu. Uczniowie opowiedzieli dzieciom jak szanować wodę. Zabawy animacyjne polegały na ruchu. Dzieci opowiadały o ekologicznych działaniach, jakie wykonują w domu. Uczennice przedstawiły również wizję świata w obrazkach, co się stanie gdy nie będziemy dbać o Ziemię.

ZIELONY PATROL



Dnia 28.03.2018 r. Burmistrz Miasta Pszczyna Dariusz Skrobol wręczył nagrody za zaangażowanie w „Zielony Patrol” na terenie miasta Pszczyna. Zadanie polegało na przygotowaniu krótkiego filmu, który ma zainteresować zjawiskiem niskiej emisji, negatywnych skutków jej oddziaływania na człowieka i środowisko naturalne oraz sposobów jej przeciwdziałania. Uczniowie stworzyli dwa filmiki:

„Pomyśl ciepło o przyszłości”
„Już od najmłodszych lat trzeba ratować świat”.

Konkurs miał na celu poszerzenie wiedzy uczniów na temat proekologicznych postaw i zachowań. Głównym zadaniem konkursu było zainteresowanie zjawiskiem niskiej emisji, negatywnymi skutkami jej oddziaływania na człowieka i środowisko naturalne oraz sposobami jej przeciwdziałania.

OCHRONA WÓD



Uczennice klasy 1 LOB zorganizowały zajęcia z podopiecznymi, zmagającymi się z autyzmem, w Zespole Szkół nr 3 im. Janusza Korczaka w Pszczynie. Grupka dzieci świetnie się bawiła podczas ćwiczeń, które rozwijają motorykę dużą i małą. Tematyka dotyczyła ochrony wód na ziemi, dzieci zamieniły się w czyste kropelki, walczące ze skażeniem środowiska. Dzieci uświadomiły sobie, że woda jest źródłem życia, dlatego należy o nią dbać. Na zakończenie zabaw kolorowały kropelki czystej wody.

WATER TREATMENT STATION



The Seventh graders and junior high students of Szramek Catholic School spent the Monday 23rd April 2018 in Goczałkowice Zdrój. Courtesy of Upper Silesian Water Serviceb (GPW) they visited Water Treatment in Goczałkowice where they traced the process of water treatment, starting with ozonization through coagulation, filtration having chlorination. Then they took part in a short site-cleaning action around the Goczałkowice lake as part of celebrating the Earth Day. At the end they took part in a workshop in Centrum Badawczo-Edukacyjne. Ekocentrum about water safety and safety in a time of storms.

EARTH DAY 2018



Between 20-21 April 2018, as part of the celebration of International Earth Day , 43 students participated in the Ecological Festival “ Szopienice – Borki” in which they cleaned the lakes banks and adjacent areas of Morawa, Borki and Hubertus- part of Katowice natural and landscape complex Szopienice - Borki. The Festival was carried out under patronage and co-financed by Department of Environmental Development of the Katowice City Hall. The Ecological Picnic started with a short ecological competition. Then we divided into 3 groups, each group was responsible for cleaning a fragment of the area around the lakes Morawa, Borki and Hubertus. After work there came a time to have fun: workshops, competitions, meeting with policemen and firemen, pea soup with a doorstep, Dr. Waldemar Szendera’s talk about willows and their role in water bodies.

At the end of the picnic the winners of the ecological competition Marysia Michalewska and Amelia Luboń received awards from Mrs. Ewa Kołodziej and Mr. Grzegorz Franki – chairman of the Upper Silesia Union.

ECOLOGICAL WORKSHOP



In December 2018 in Katowice, there will be held the most important global forum devoted to global climate policy.

Because of it in cooperation with the town hall of city of Katowice students Szramek High School and junior high school are preparing this event by participating in an ecological-psychological project: Sustainable consumption of caring about the natural heritage. On 24 and 25 April 2015 took place a workshop conducted by Barbara Wojtaszek, the chairwoman of "Szczęśliwi bez cukru" during which teenagers became acquainted with the subject of the functioning of socio-economic system and with the consumption patterns and their influence on natural environment.

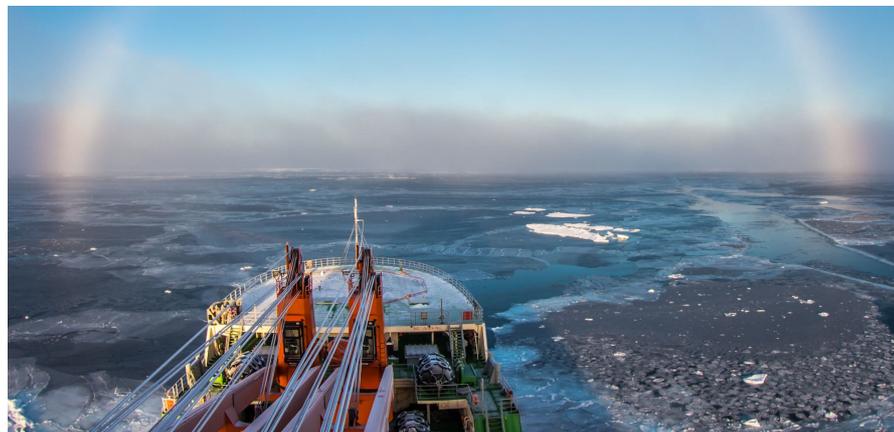
OTHER NEWS

20 YEARS OF OCEAN RESEARCH SHOWCASED IN PAVILION OF KNOWLEDGE, PORTUGAL



On the 20th anniversary of Lisbon world exhibition EXPO '98, **Pavilion of Knowledge** dedicated a full-day program to the ocean. More than 20 Portuguese institutions working on ocean research showed what has changed in the last 20 years. More about the event [here](#).

UNITED NATIONS ANNOUNCE THE DECADE OF OCEAN SCIENCE



With the urgent aim of finding scientific solutions to understand the changes taking place in the ocean, and to reverse its declining health, the UN Decade of Ocean Science seeks to transform how the scientific community, the governments and the civil society coordinate their actions to “conserve and sustainably use the oceans, seas and marine resources for sustainable development” – as stated in Objective 14 of the Sustainable Development Goals. More information [here](#).

ART FROM THE SEA IN THE PAVILION OF KNOWLEDGE, PORTUGAL



Following the 20th anniversary of Lisbon world exhibition EXPO '98, the Pavilion of Knowledge hosted the exhibition "Art from the Sea". Authored by artists and surfers Xandi Kreuzeder and João Parrinha, the exhibition showcased skeleton-like objects made from beach trash as buoys, metal parts, plastic pieces and ropes. These creations aim to raise awareness to the trash found in beaches all over the world.

More about the exhibition [here](#).

NEXT EDUCO2CEAN EVENTS

Until 30th June 2018

EDUCO2CEAN INFOGRAPHICS COMPETITION

The deadline for the submission of works to EduCO2cean's infographics competition was extended until the 30th of June. This competition is aimed at students from secondary education and professional schools, as well as university students, that should create an infographic on the theme "Oceans and Climate Change".

More information [here](#).

OTHER EVENTS

Until July 2018

**CULTURAL PROGRAM DEDICATED TO THE OCEAN,
LISBON**



This is an invitation to the public of all ages to be engaged on artistic, scientific and environmental proposals around an exhibition about the continental shelf extension project. The program results from a partnership between the [Portuguese Task Group for the Extension of the Continental Shelf](#) and [CCB/Fábrica das Artes](#). More information about the program [here](#).

10th and 11th September 2018

HIGH LEVEL SCIENTIFIC CONFERENCE ORGANIZED BY UNESCO



In view of the launching of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030), the conference will bring together scientists from multiple disciplines, civil society, businesses, decision-makers and UN entities, to share their expertise on ocean and climate related issues. Read more about the conference [here](#).

4th and 5th December 2018

3RD INTERNATIONAL MARINE SCIENCE COMMUNICATION CONFERENCE, UK



Conference aimed at marine scientists and professional communicators working in marine institutes, governmental bodies or NGOs, who want to be trained in science communication skills for disseminating ocean research and technology.

Read more about the conference [here](#).

RESOURCES - ACTIVITIES

OCEAN LITERACY FOR ALL – ACTIVITIES



This toolkit on ocean literacy, released by the Intergovernmental Oceanographic Commission of UNESCO, provides a set of 16 activities that help learners of all ages to deal with sustainable development issues linked to the ocean. The format gives the background information needed for teachers to conduct the activity, as well as the steps to be followed.

Find the activities [here](#), starting from page 93.

RESOURCES - GOOD READS

EXPLAINING OCEAN WARMING: CAUSES, SCALE, EFFECTS AND CONSEQUENCES

This report, published by [IUCN](#) (International Union for Conservation of Nature), is a review on the changes driven by ocean warming, with the contribute of scientists from around the world that addressed the impacts of ocean warming, from species to ecosystems to services.

Read the full document [here](#).

RESOURCES - VIDEOS

ISLE DE JEAN CHARLES



Directed by Emmanuel Vaughan-Lee and produced by Go Project Films, this short film is an intimate portrait of an island in Louisiana, USA, in risk of disappearing due to the effect of hurricanes and rising waters. The island's inhabitants are the first American climate refugees, and witnessed the disappearance of 98% of land since 1955.

Watch the video [here](#).

NEWSLETTER EDUCO2CEAN
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