HSCI2021 – Program – live online

July 19 to July 23, 2021

Lisbon time (GMT, Daylight Saving Time: summer time) https://www.timeanddate.com/worldclock/

Monday, 19th July 2021

13.40 - **Opening**

- 13.45 Invited presentation Introducing the International Council of Associations for Science Education (ICASE), *Dr Declan Kennedy, President-Elect ICASE, Senior Lecturer in Science Education, University College Cork, Ireland*
- 14.00 Plenary lecture The progression of children learning about 'nature' in our living world, *Sue Dale Tunnicliffe*
- 14.40 Perception of Recycling and Environmental Pollution in Preschool Children, Emine Akkaş Baysal
- 15.00 Augmented Reality Applications in Preschool Science Education, Kerem İçel
- 15.20 Online STEM Practice Example Pythagoras Cup, Berrak Kocaman
- 15.40 The Effect of STEM Activities on Preschool Children's Basic Process Skills, Kerem İçel
- 16.00 Determining the Opinions of Preschool Children About Science and Scientist Through Short Stories, *Emine Akkaş Baysal*
- 16.20 The View of Secondary School Students on Using Digital Stories in Social Sciences, *Burak Olur, Gürbüz Ocak*
- 16.40 The effect of the consequence wheel and the priority pyramid on the English-speaking skills in online lessons, *Ayşegül Kutlu Çakın, Gürbüz Ocak*
- 17.00 Humanities, Science and Teaching: The case of vowels of the Portuguese language, Helena Rebelo

Tuesday, 20th July 2021

- 13.20 Plenary lecture The Experimental and Historical Foundations of Electricity, Andre Koch Torres Assis
- 14.20 Plenary workshop Online and Remote Outreach Lectures on Physics Concepts, *José Benito Vázquez Dorrío, Miguel Ángel Queiruga-Dios*
- 15.00 Plenary lecture Best World Practices for Hearing Impaired Learners: the Project Overview, *Iryna Berezovska*, *Mariya Golovchak*, *Kseniia Minakova*
- 15.40 Lab in a box, Future with Science, Joana Loureiro, Rodrigo Abreu, Joana Gonçalves-Sá, Inês Bravo

Wednesday 21th July 2021

- 13.20 Plenary lecture Down to Earth literally. Teaching soil, Denise Balmer
- 13.50 Plenary lecture Young Science Students as Asimov's Followers, *Josep Maria Fernández Novell, Carme Zaragoza Domenech*
- 14.20 Invited lecture COVID-19 Engineering Design Challenge, Teresa Kennedy
- 14.40 Physics from teaching to coaching Tesla Hands-On Science Academy, Emad Hassan El-Shafey
- 15.00 Home Making Videos Help Students to be More Communicative, Hassan Hazarkhani
- 15.20 Introducing Programming to Basic Schools Students Using Robotics, Victor Martins, Manuel Costa
- 15.40 Plenary lecture Demystifying the basics of Image Processing with OpenCV and Python, *Fernando Ribeiro*

Thursday 22th July 2021

- 13.20 Plenary lecture Covid-19 Pandemic II Wave in India: Role of Scientoons and Scientoonics, *Pradeep Kumar Srivastava*
- 14.20 COVID-19 and the Plastic Crisis: two proposals for Environment Education Approaches, *Ana Catarina Santos, Tiago Assis, Tiago Pinho, Carlos M. Pereira, Sofia Oliveira, Joana Lourenço, Ruth Pereira* 14.40 Koffeeco a residue treating the environment, *Leonor Oliveira, João Freitas, Luísa Couto e Tomás Barros*
- 15.00 The role of synchronous tools in online learning practices after the pandemics, *Sónia Seixas, Victor Rocio*
- 15.20 Live streaming outreach: Twitch as an alternative in pandemic times, Carlos Damián Rodríguez Fernández, B Carnero, M Canabal, D Ínsua-Costa, A Doval, A Muñoz-Ramos, R Sánchez-Cruz, R Liñares, X González-Iglesias, MT Flores-Arias
- 15.40 Tangible Objects in ESL Classroom: impact in learning at Primary school level, *Cláudia Meirinhos, Liliana Fernandes*
- 16.00 Photovoltaic Solar Energy. A Pedagogic Approach, João Castro, Manuel Costa

Friday 23th July 2021

- 13.20 Plenary lecture Animated Scientoons: an opportunity in distant and online teaching and learning science, *Vishal Muliya*
- 14.20 Scientoon creation and teacher education: a case study, Rupal Mankad
- 15.00 Planning STEM lessons with pre-service classroom teachers: Edible Car (Rolling vegetables). *Şule Bayraktar*
- 15.20 Candasat II: a satellite in a soft drink can, Francisco Javier Redondas Maseda
- 15.40 SAYANSI! Seeds of Science for a Sustainable Future, Manuel Ballatore, M. Ragio

16.00 - Closing remarks

FULL LIST OF CONTRIBUTIONS (alphabetical order)

- A year of the COVID-19 Lockdown: comparative analysis of Distance Learning approaches in TNMU
- Animated Scientoons: an opportunity in Distant and online teaching and learning science
- Application of the Interrupted Case Method in Undergraduate Chemistry Teaching
- APPS 4 SCHOOL A Citizenship and Development Project with VET Students
- Augmented Reality Applications in Preschool Science Education
- Best World Practices for Hearing Impaired Learners: the Project Overview
- Candasat II: a satellite in a soft drink can
- Chemical degradation of synthetic polymers surgical masks
- Contributions of Postgraduate Studies in Brazil to the Academic Impact of the United Nations: a rapid narrative review
- COVID-19 and the Plastic Crisis: two proposals for Environment Education Approaches
- COVID-19 Engineering Design Challenge
- Covid-19 Pandemic II Wave in India: Role of Scientoons and Scientoonics
- Demystifying the basics of Image Processing with OpenCV and Python
- Determining Preschool Children's Opinions About Science and Scientist Through Short Stories
- Determining The Opinions of Preschool Children About Science and Scientist Through Short Stories
- Down to Earth literally. Teaching soil
- Environmentally Friendly Homes Acoustic Isolation with Domestic Wastes
- Hands-on an everyday chemistry podcast: the case of Minuto da Química
- History of Science in promoting argumentation for future chemistry teachers
- Home Making Videos Help Students to be More Communicative
- Humanities, Science and Teaching: The case of vowels of the Portuguese language
- Interrupted Case Studies in Undergraduate Chemistry Teaching
- Introducing Programming to Basic Schools Students Using Robotics
- Introducing the International Council of Associations for Science Education (ICASE)
- IT-Based Visualization in Educating Hearing Impaired Learners
- Joint Training on Judo for Deaf and Ordinary Children
- Koffeeco a residue treating the environment
- Lab in a box, Future with Science
- Live streaming outreach: Twitch as an alternative in pandemic times
- MaiActing, Portugal changing! A Climate Action Project in an 8th grade CLIL class
- Miller polyhedron as a STEAM project
- Modeling a NETmix Reactor for Mixing and Chemical Reaction
- Monitoring of environmental parameters at schools for the improvement of academic performance and airborne diseases control
- Nanosystems for Environmental Remediation Optical Sensors
- Online and Remote Outreach Lectures on Physics Concepts
- Online STEM Practice Example Pythagoras Cup
- Perception of Recycling and Environmental Pollution in Preschool Children
- Photovoltaic Solar Energy. A Pedagogic Approach
- Physics from teaching to coaching Tesla Academy for Hands-on Science
- Planning STEM lessons with pre-service classroom teachers: Edible Car (Rolling vegetables)
- SAYANSI! Seeds of Science for a Sustainable Future

- Science Tech Weekend School "Welcome to Photovoltaic Universe!"
- Science, Play and Progression in Early Years
- Scientoon Creation and Teacher Education: A Case Study
- Study of socio-ecological sustainability in the continuing education of Pedagogy teachers from the perspective of gamification
- Tangible Objects in ESL Classroom
- Textual Understanding of Original Research Articles by Undergraduate Chemistry Students
- The Bacteria Geobacter as a Prospective Source of Green Electricity
- The Effect of STEM Activities on Preschool Children's Basic Process Skills
- The effect of the consequence wheel and the priority pyramid on the English speaking skills in online lessons
- The Experimental and Historical Foundations of Electricity
- The role of synchronous tools in online learning practices after the pandemics
- The Sea Starts Here. A success case in Sines (Portugal)
- The View of Secondary School Students on Using Digital Stories in Social Sciences
- Towards Socio-ecological Sustainability in Elementary School through Problem Based Learning
- Transferable Methodologies Between In-Class and Online Learning A Three-steps Learning Process
- Views of Students from an Integrated Middle Level Technical Course in Brazil on Scientific Inquiry
- Young Science Students as Asimov's Followers