

Programme DidSci 2020

8th International Conference on Research in Didactics of the Sciences

17.06.2020 - Wednesday

09:00 open ceremony

Vice-Rector for Development *Associate Professor Robert Stawarz, Ph.D.*

9:00 - 10:30 - Plenary session 1 (*English*) chairman *Paweł Cieśla*

Vesna Milanović, Martin Bílek *Chemistry as part of society through centuries – the first experience from Teachers' education*

Marcin M. Chrzanowski, Ostrowska Barbara E. *A student at school in PISA research - a conscious citizen?*

Martin Bílek *Chemistry Teachers Education New Approaches at Faculty of Education Charles University*

Kateřina Chroustová, Martin Rusek, Karel Vojř *An investigation into freshmen chemistry teacher students' difficulty in performing chemistry calculations*

11:00 - 12:30 - Paralell sesions

Section 2 (English) chairman Małgorzata Nodzyńska

Małgorzata Nodzyńska *Comparison of microworld models in Polish, Czech and Slovak textbooks*

Anna Baprowska, Małgorzata Nodzyńska *Impact of regularity and time own work of students for educational achievements - chapter salt*

Wioleta Kopek-Putała, Małgorzata Nodzyńska *Methods and tools for teaching chemistry to students with disabilities*

Paweł Cieśla, Anita Oczko-Cieśla *Distant teaching and learning in Poland in the covid19 pandemic time*

Section 3 (Mixed (Slavic) languages)) chairman Bartłomiej Zyśk, Wioleta Kopek-Putała

Václav Ríchtr, Kristýna Nová *Science research experiment in the preparation of future chemistry teachers*

Karolína Šromeková, Peter Demkanin *Reflecting upon measured data at the age of 12*

Jan Hrdlička, Václav Rypl *Methods of determination of total carbon and transformation of this problematic to the chemistry education*

Vladimír Sirotek, Jitka Štrofová *Analysis of Studying Failure among Students in the Initial Period of Chemistry Teaching Programs at FPE UWB in Pilsen*

Katarína Szarka, Fehér Zoltán, Jaruska Ladislav, Juhász György *Results of analysis of specific elements of science thinking through chemical tasks*

13:00 - 14:30

Section 4 (English) chairman Elżbieta Rożej-Pabijan

Abdeljalil Métioui, Louis Trudel *Elementary pre-service teachers conceptual representations about the charge polarization*

Louis Trudel, Abdeljalil Métioui *Use of technology for research and pedagogical purposes in Physics education*

Barbara Ostrowska, Marcin M. Chrzanowski *Why is the work of scientists important? On the education of science during lockdown.*

Piotr Mazowiecki-Kocyk *Bringing conceptual teaching to Biology in high school - a case study from Seoul Foreign School*

Elżbieta Rożej-Pabijan, Joanna Kajzer-Bonk *Supporting ecosystem services in the city - flower meadows in Krakow*

15:00 - 16:00

Poster session 1 (English) chairman Elżbieta Rożej-Pabijan

Miroslav Almáši, Zuzana Vargová, Renáta Oriňáková, Mária Ganajová, Rastislav Serbin, Rastislav Varháč, Jana Dinajová *The innovation of laboratory practices in cooperation with industrial companies*

David Fatka, Svatava Janoušková *Meta-review of student alternative conceptions in chemistry*

Ostrowska Barbara, Marcin M. Chrzanowski *We learn from mistakes*

Iveta Szencziova, Sarolta Darvay, Melinda Nagy, Éva Tóth Tar, Pál Balázs *Investigation of environmentally conscious behavior among pedagogical students of J. Selye University in Slovakia*

Martina Tóthová, Martin Rusek *Analysis of pre-service chemistry teachers' success and failure in solving multicomponent tasks with problematic elements*

Hurný David, Petrželová Simona *High School Chemistry Tasks for IBSE*

Petr Šmejkal, Zuzana Míková *Summer camps science*

18.06.2020 – Thursday

9:00 - 10:30 Section 5 (English) chairman Paweł Cieśla

Kristýna Nová, Jan Hrdlička *Brewing industry in the teaching of chemistry*

Žaneta Dodeková *Primary education pupils' aspirations in science: Science is attractive but it's not for me*

Iwona Maciejowska *PBL as a method used in a pre-service teacher training*

Marcin M. Chrzanowski, Sylwia Ciżła *What is the knowledge and attitudes of school and university students towards genetically modified organisms and GM food?*

Paweł Cieśla, Alicja Walosik *Shaping youth ecological awareness vs multimedia*

11:00 - 12:30 - Paralell sessions

Section 6 (English) chairman Małgorzata Nodzyńska

Timur Sadykov and Hana Čtrnáctová *The effects of mobile interactive apps for teaching chemistry in Czech and Kazakh schools*

Petr Šmejkal, Jan Staníček, Tomáš Feltl *Probeware - corporate vs open source*

Milada Teplá *The influence of 3d models and animations on students' motivation and their level of knowledge in natural sciences - the results of the pilot stud*

Simona Petrželová *Secondary School Teachers and Pupils at the Faculty of Science, Charles University - The Autumn School of Chemistry*

Luděk Míka *3D printed models of organic molecules*

Section 7 (Mixed (Slavic) languages) chairman Bartłomiej Zyśk, Alicja Walosik

Jakub Čevajka, Klára Velmovská *The use of mobile technologies in teaching from the perspective of slovak physics teachers*

Kateřina Trčková, Petr Bujok *Mental mapping in the inquiry process*

Karel Vojř , Martina Tóthová, Martin Rusek *An analysis of tasks from lower-secondary chemistry textbooks*

Małgorzata Pietrzak *What is the future of drawings in geography education?*

Markéta Bartoňová, Dana Kričfaluši *Integrated teaching in secondary schools in the Czech Republic*

13:00 - 14:30 Paralell sesions

Section 8 (English) chairman *Elżbieta Rożej-Pabijan*

Abdeljalil Métioui, Louis Trudel *The Design of the Two-tier Test to Diagnose Students' Conceptions of Nature of Science*

Louis Trudel, Abdeljalil Métioui *High school students' conceptions about scientific phenomena and their use in the design of a computer environment: An interdisciplinary perspective*

Tiziana Altiero, Michele Cesari, Federico Corni, Elizabeth Daumont, Hans Fuchs, Andrzej Karbowski, Grzegorz Karwasz, Tabea Link, Katarzyna Wyborska *Fuel Cells HydroGen educational model for schools*

Linda Honskusová, Karel Vojř, Martin Rusek *Pre-service chemistry teachers' ability to notice when entering the Observation course*

Jan Hruběš, Simona Petrželová *Motivation of Gifted Students for Studying Science*

15:00 - 16:00

Poster session 2 (Mixed (Slavic) languages)) chairman *Bartłomiej Zyśk, Alicja Walosik*

Peter Demkanin, Karolína Šromeková *A holistic approach to the university course of physics education*

Małgorzata Krzeczowska, Iwona Maciejowska *A few words about assessing students during a pandemia time ...*

Kateřina Trčková, Dana Kričfaluši, Jana Lukášová *Didactic game as a means of developing research skills*

Stefania Elbanowska-Ciemuchowska *Physical carousel - experimental workshops*

19.06.2020 – Friday

9:00 - 10:30 - Section 9 (English) chairman *Danuta Jyż-Kuroś, Małgorzata Nodzyńska*

Irena Chlebounová *How Grammar School Students Evaluate the System of Laboratory Work in Chemistry*

Hurný David, Petrželová Simona *High school chemistry tasks for IBSE*

Lilpop Joanna, Chrzanowski Marcin M *Theory, practice and perspectives of one-year pre-service biology teachers training*

Mikołajczyk Justyna *Elementary school students' motivation in academic activities*

Danuta Jyż-Kuroś *Teaching chemistry during a pandemic from the perspective of primary school children*

11:00 - 12:30 - Paralell sesions

Section 10 (English) chairman *Małgorzata Nodzyńska*

Małgorzata Nodzyńska *Why does nobody like chemistry?*

Henrychova Hana, Machkova Veronika *The use of computer simulations to improve the learning of redox reactions*

Anna Baprowska, Małgorzata Nodzyńska *Scientific reasoning in natural sciences - research*

Luděk Míka *Different technologies of 3D printing - which one is suitable for your models?*

Paulina Zimak, Małgorzata Nodzyńska *Painted chemistry or how to combine art with chemistry teaching*

11:00 - 12:30 - Paralell sesions

Section 11 (Mixed (Slavic) languages) chairman Stratilova Urvalkova

workshop: Stratilova Urvalkova, Eva Brizdala, Jan *Why do chemists need mathematics? (a workshop on chemical didactic test distinguishing the extent of mathematical literacy)*

13:00 - 14:30 Section 16 (Mixed languages) chairman Małgorzata Nodzyńska, Paweł Cieśla

Jakub Muzik, Karel Kolar *Teaching models of the active site of enzymes*

Michał Palczewski *Challenges that faces physics teacher in polish programme and in programme of international baccalaureate*

Zuzana Vargová, Miroslav Almáši, Renáta Oriňáková, Rastislav Serbin, Rastislav Varháč, Mária Ganajová, Jana Dinajová, P. Chovan., M. Dzura , Š. Bova *Direct participation of experts from companies and institutions in chemical laboratory practices*

Andrejs Zaicenko, Madara Vingre, Mihails Gorskis *Students in secondary chemistry education*

Closing of the conference