

REGIONAL DIRECTORATE OF PRIMARY & SECONDARY EDUCATION OF CRETE KALATHAKI MARIA

SCHOOL ADVISOR FOR SCIENCE TEACHERS OF WEST CRETE

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Chania, 5-12-2017

No Prot: 462

TO: 1. Science Teachers of West Crete

2. Teachers of Schools of myScientific and Pedagogical Guidance3. Teachers of any specialty who are

interesting in the subject

NOTIF: Regional Administration of Primary & Secondary Education of

Crete

Administrations of Secondary Education of Chania and

Rethymnon

SUBJECT: EDUCATIONAL CONFERENCE "TEACHING SCIENCES IN SCHOOLS WITH CREATIVITY AND INNOVATION: TRANSFORMING THE THEORY INTO PRACTICE", Crete 6-11 December 2017, Greece-Final Announcement

Youth Education and Training is the investment of the societies for the future. Teaching in Schools with Creativity and Innovation is National and European Strategy targeting to the economic development and progress of local societies. European Union, in accordance to the international academic trends, direct the transformation and reconstruction of Science Curricula and Teaching Methodologies from the traditional of teacher-centered lessons to student-centered learning events. There is the need, Research, Education, and Training to cooperate locally, think and work globally in order to cultivate the future science, environmental, digital literate students.

The School Advisors for Science Teachers of West Crete and Engineers (Civil Engineers, Architects, Topographers) of Peripheral Administration of Primary & Secondary Education of Crete, the Scientific & Technological Park of Crete (STEP-C) of Foundation of Research & Technology Hellas (FORTH), the Centre for Political Research & Documentation (KEPET) of University of Crete, the 1st Public Vocational Training Institute (IEK) of Heraklion, the Physicists' Association of Crete, the Science Laboratory Center of Rethymnon, the Secondary Education Directorate of Chania and the Municipality of Platanias Chanion organize the Educational Conference "Teaching Sciences in Schools with Creativity and Innovation: transforming the Theory into Practice" 6-11 December 2017 in Crete.

The Conference takes place in the framework of the Educational-Training Project "Mediterranean sea Connects Us" (Mesogeios-Isalos Grammi) and addressed to Executives of the three levels of Education, Research Institutes, Governing Bodies, Organizations and Companies who invest to the future of the Young People. They are invited representatives from the fields of Education, Training, Research, Entrepreneurship, Governance and Policy, to present initiatives and plans in a peer conference, sharing knowledge and experience, wisdom and visions, with teachers of Crete. The participants to the Conference are both trainers and trainees in English and Greek Language.

Participation is optional, with the expenses to be covered individually by the participants.

The Conference is dedicated to Kritsotakis Emmanuel, Scientific and Pedagogical Chief Guidance, Department of Secondary Education, Regional Administration of Primary & Secondary Education of Crete, Greece who supported all the international initiatives of Science Training in West Crete during his tenure and died in August 2017.

THEMATIC FIELDS

STEM Education and Youth Entrepreneurship, Design Thinking, Science and Engineering practices, Science Communication and Media Literacy, Professional Development, Lifelong Learning and Training, Learning Content Management, Research Strategies, Sustainable Development and Education, Development Infrastructure Projects, Leadership and Governance, Health Initiatives in Schools

CHAIRMAN OF THE CONFERENCE

Tsigkris Miltiadis, Head of the Science Laboratory Center of Rethymnon, Crete

COORDINATOR

Kalathaki Maria 00306946500408, kalathakimaria.edu@gmail.com

ORGANIZATION COMMITTEE

- 1. Alogdianaki Marianna, Interconnection Office of the Technological Education Institute (TEI) of Crete
- 2. Archontaki Nektaria, Chemist, Teacher of Vrysses Gymnasium, Chania, Crete
- 3. Demetriou-Hatjichristou Chrysoula, Inspector of Mathematics, Cyprus
- 4. Fountoulakis Antonios, Teaching and Laboratory Staff of the Electrical Engineering Department, Technical Education Institute (TEI) Crete
- 5. Kalathaki Maria, School Advisor for Science Teachers, West Crete prefecture, Director of the Regional Training Center of Heraklion, Regional Administration of Primary & Secondary Education of Crete
- 6. Kokolaki Zacharania, Kindergarten, Directorate of the Regional Training Centre of Heraklion, Crete
- 7. Kornilaki Erika, Director of the 1st Public Institute of Professional Training of Heraklion, Crete, Greece
- 8. Malandraki Kleanthi, Physicist, Director of the Gymnasium of Profitis Helias, President of the Physicists' Association of Crete
- 9. Malandraki Sofia, Dentist, ex-President of the Parents' Association of Chania, Crete
- 10. Paraschou Thodoris, Geologist, Teacher of 4th Gymnasium of Chania, Greece
- 11. Saitakis Artemis, Director of the Scientific & Technological Park of Crete (STEP-C) of the Foundation of Research & Technology Hellas (FORTH)
- 12. Schoinoplokaki Evangelia, Chemist, Teacher of Kisamos Gymnasium of Chania, Greece
- 13. Tsigkris Miltiadis, Head of the Science Laboratory Center of Rethymnon, Crete
- 14. Xanthos George, Assistant Professor of the Technological Education Institute (TEI) of Crete, Scientific Coordinator of the Interconnection Office of TEI Crete

SCIENTIFIC COMMITTEE

- 1. Archontaki Nektaria, Chemist, Teacher of Vrysses Gymnasium, Chania, Crete
- 2. Argiropoulou Eleftheria, Assistant Professor of Pre-school Education, University of Crete, Greece
- 3. Cakmakci Gultekin, Associate Professor, Faculty of Education, Department of Science Education, Hacettepe University, Ancara, Turkey

- 4. Cavas Bullent, President-Elect of the International Council of Associations for Science Education (ICASE), Associate Professor of Science Education Dokuz Eylul University, Faculty of Education, Department of Science Education, Buca-Izmir, Turkey
- 5. Chaimala Foteini, Postdoc Researcher, Educational Research & Evaluation (ERE) Group, Institute of Applied & Computational Mathematics (IACM), Foundation for Research and Technology Hellas (FORTH), Heraklion, Crete
- 6. Chaniotakis Nikolaos, Professor of Chemistry, Dean of the School of Sciences and Engineering, University of Crete, Greece
- 7. Demetriou-Hatjichristou Chrysoula, Inspector of Mathematics, Cyprus
- 8. Drakaki Maria, Sociologist, PhD Candidate at the Department of Political Science of the University of Crete and Researcher at the Centre for Political Research and Documentation (KEPET)/UCRC of the University of CreteFountoulakis Antonios, Teaching and Laboratory Staff of the Electrical Engineering Department, Technical Education Institute (TEI) Crete
- 9. Garancini Gian Andrea Paolo, Appointed Counselor for Tourism in Heraklion Municipality, Crete
- 10. Kadir Demir, Associate Professor of Science Education, Associate Editor of School Science Mathematics, MSE- Department of Middle and Secondary Education, College of Education & Human Development, Georgia State University, Atlanta, USA
- 11. Kalathaki Maria, School Advisor for Science Teachers, West Crete prefecture, Director of the Regional Training Center of Heraklion, Regional Administration of Primary & Secondary Education of Crete, Greece
- 12. Kassimati Aikaterini, Associate Professor of ASPAITE, Scientific Head of the Annual Program of Pedagogical Training of the Higher School of Pedagogical and Technological Education (ASPAITE)
- 13. Kornilaki Erika, Director of the 1st Public Vocational Training Institute (IEK) of Heraklion, Crete, Greece
- 14. Matsopoulos Anastasios, Associate Professor in University of Crete
- 15. Meogrossi Piero, Architect, Speciale Soprintendenza Beni Archeologici Roma (SSBAR)/ Ministero Beni Culturali (MIBACT), Rome, Italy
- 16. Paraschou Thodoris, Geologist, Teacher of 4th Gymnasium of Chania, Greece
- 17. Saitakis Artemis, Director of the Scientific & Technological Park of Crete (STEP-C) of the Foundation of Research & Technology Hellas (FORTH)
- 18. Schoinoplokaki Evangelia, Chemist, Teacher of Kisamos Gymnasium of Chania, Greece
- 19. Tsigkris Miltiadis, Head of the Science Laboratory Center of Rethymnon, Crete
- 20. Ucar Sedat, Associate Professor, Faculty of Education, Elementary Science Education, Cukurova University, Adana, Turkey
- 21. Xanthos George, Assistant Professor of the Technological Education Institute (TEI) of Crete, Scientific Coordinator of the Interconnection Office of TEI Crete
- 22. Zaneka Stergiani, Greek Literature Teacher of 1st Lyceum of Chania, Crete

CONFERENCE WEBSITE

https://teachscisch.wordpress.com/

PARTICIPANTS WITH LECTURES

- 1. Adamidis Adam, Chemist, Teacher in General Lyceum of Voukolies Chanion
- 2. Altas Evaggelos, Physicist, Teacher in 3rd Gymnasium of Rethymnon, Crete
- 3. Andreadis Emmanouel, Geologist, Teacher in Gymnasium Neas Kydonias, Chania, Crete
- 4. Archontaki Nectaria, Chemist, Teacher in Gymnasium of Vryses, Apokoronas, Crete

- 5. Argyropoulou Eleftheria, Assistant Professor [Organization, Management and Leadership in Education], University of Crete, Rethymnon
- 6. Cavas Bulent, Professor of Science Education, Dokuz Eylul University, Faculty of Education, Department of Science Education, President of the International Council of Associations for Science Education (ICASE), Board Member Council of Elementary Science International (CESI), Buca-Izmir, Turkey
- 7. Çakmakçı Gultekin, Assoc.Prof.Dr., Hacettepe University, Ancara, Turkey
- 8. Chaimala Foteini, Postdoc Researcher, Educational Research & Evaluation (ERE) Group, Institute of Applied & Computational Mathematics (IACM), Foundation for Research and Technology Hellas (FORTH), Heraklion, Crete
- 9. Chalkiadakis Konstantinos, Physicist, Teacher in 3rd Gymnasium of Rethymnon, Crete
- 10. Chaniotakis Nikolaos, Dean of the School of Sciences and Engineering, University of Crete
- 11. Deiktaki Anastasia, Teacher of Social Sciences, Experimental Lyceum of Rethymnon, Crete
- 12. Demetriou-Hatjichristou Chrysoula, Inspector of Mathematics Secondary Education of Cyprus
- 13. Dimitriou Polyxeni, Teacher-Economist, Adult Education, Director of Institute of Vocational Training of Epanomi, Thessaloniki
- 14. Drakaki Maria, School Advisor for Primary Teachers of Heraklion, Crete
- 15. Drakaki Maria, Sociologist, PhD Candidate at the Department of Political Science of the University of Crete and Researcher at the Centre for Political Research and Documentation (KEPET)/UCRC of the University of Crete
- 16. Eleftheriou Maria, Scientix Ambassador, STEM Secondary teacher, Heraklion, Crete
- 17. Fountoulakis Antonios, Physicist, Computing Science, Department of Electrical Engineering, Technological Educational Institute of Crete
- 18. Garancini Gian Andrea Paolo, Appointed Counselor for Tourism in Heraklion Municipality,
- 19. Gianella Stella, Adviser on School Vocational Guidance, Center for Counseling and Vocational Guidance (KE.SY.P.) of Rethymnon, Crete
- 20. Kadir Demir, Associate Professor of Science Education, Associate Editor of School Science Mathematics, MSE- Department of Middle and Secondary Education, College of Education & Human Development, Georgia State University, Atlanta, USA
- 21. Kalathaki Maria, School Advisor for Science Teachers, West Crete prefecture, Director of the Regional Training Center of Heraklion, Regional Administration of Primary & Secondary Education of Crete
- 22. Kalogerakis Antonios, Head of the Institute of Theology and Ecology, Department of the Orthodox Academy of Crete (OAC)
- 23. Kampourakis Lampros, Appointed Counselor for Education of Heraklion prefecture, Region of Crete
- 24. Kasimati Aikaterini, Associate Professor, School of Pedagogical and Technological Education (ASPAITE), Athens
- 25. Katsarakis Nikolaos, Rector Technological Educational Institute (TEI) of Crete
- 26. Katsarou Vasiliki, Teacher of Social Sciences, Experimental Lyceum of Rethymnon, Crete
- 27. Kokolaki Zacharania, Kindergarten, Directorate of the Regional Training Centre of Heraklion, Crete
- 28. Kornilaki Maria-Erika, Director of the 1st Public Institute for Vocational Training
- 29. Lampakis Stylianos, Doctor, National Ambulance, Crete
- 30. Malandraki Sofia, Dentist, ex-President of the Parents' Association of Chania, Crete

- 31. Malandrakis Ioannis, Mayor of Platanias Municipaly, Chania, Crete
- 32. Manouras Faidonas, Teacher in Lyceum of Archanes, Heraklion, Crete
- 33. Markogiannakis Dimosthenis, Chemist, retired Head of the Laboratory Science Center of Chania
- 34. Maroukli Maria, Mathematician, Teacher in Archanes Lyceum, Heraklion, Crete
- 35. Mavromatakis Fotis, Professor, Laboratory of Energy and Photovoltaic Systems, Technological and Educational Institute of Crete
- 36. Mavromatakis Georgios, Biologist, Teacher in Alikianos Gymnasium, Chania, Crete
- 37. Meogrossi Piero, Architect, Speciale Soprintendenza Beni Archeologici Roma (SSBAR)/ Ministero Beni Culturali (MIBACT), Rome, Italy
- 38. Milathianaki Marilena, Primary Teacher, Regional Administration of Primary & secondary Education of Crete
- 39. Michailidi Afroditi, Scientix Ambassador, STEM Secondary teacher, Heraklion, Crete
- 40. Nadaban Laura, Linguistic Inspector, Arad County School Inspectorate, Romania
- 41. Owens Gareth, International Relations Office of Technological Educational Institute (TEI) of Crete
- 42. Pantelaki Eleftheria, Greek Literature Teacher in Archanes Gymnasium, Heraklion, Crete
- 43. Panteri Maria, Psychologist, Deputy Psychologist at the Center for Diagnosis, Differentiation & Support (KEDDY) of Heraklion, Crete
- 44. Papadakaki Maria, Professor, Laboratory of Health & Road Safety, Technological and Educational Institute of Crete
- 45. Papastefanaki Anna, Greek Literature Teacher in Meleses Lyceum, Heraklion, Crete
- 46. Paraschou Theodoros, Geologist, Teacher in 3rd Lyceum of Chania, Crete
- 47. Pentheroudakis Georgios, Biologist, Teacher in Experimental Lyceum of Rethymnon
- 48. Plaiti W, Cretaguarium
- 49. Podaras dimitrios, Cretaquarium
- 50. Polychronaki Thaleia, Cretaquarium
- 51. Rovithis Michael, Lecturer in Nursing Department, Technological Educational Institute (TEI) of Crete
- 52. Saitakis Artemis, Director of the Scientific & Technological Park of Crete (STEP-C), Foundation of Research and Technology-Hellas (FORTH), Heraklion, Crete
- 53. Schoinoplokaki Evaggelia, Chemist, Teacher in 1st Gymnasium of Kisamos, Chania
- 54. Siligardou Fotini, Scientix Ambassador, STEM Secondary teacher, Heraklion, Crete
- 55. Simandirakis Panagiotis, Appointed Counselor for Education of Chania prefecture, Region of Crete
- 56. Tsagtakakis Ioannis, Chemist, Trainer at the 1st Public Institute of Vocational Training (IEK) of Heraklion, Crete
- 57. Tsigkris Miltiadis, Chemist, Head of the Science Laboratory Center of Rethymnon, Crete
- 58. Tsoutsoudakis Astrinos, Physicist, Teacher in General Lyceum of Gazi, Heraklion, Crete
- 59. Tzianoudakis Georgios, owner of the Cretan Organic Olive Oil Company 'Cretanthos', Rethymnon, Crete
- 60. Tzianoudakis Leonidas, Chemist, Retired Teacher of Secondary Education of Rethymnon, Crete
- 61. Tziotis Stavros, Geologist, Teacher in Meleses Gymnasium, Heraklion, Crete
- 62. Ucar Sedat, Associate Prof. Dr., Cukurova University, Faculty of Education, Department of Mathematics and Science Education, Elementary Science Education, Saricam-Adana, Turkey
- 63. Venetis Konstantinos, Biologist, Member of the Pedagogical Team of SLC-R

- 64. Ververidis Philipos, Professor, Dean of the School of Technology for Farming and Food of the Technological and Educational Institute (TEI) of Crete
- 65. Vogiatsi Eirini, Teacher of Greek Language, Experimental Lyceum of Rethymnon, Crete
- 66. Xanthos Georgios, Assistant Professor and Scientific Coordinator of the Interconnection Office of Technological Education Institute (TEI) of Crete
- 67. Xiraki Sofia, Mathematician, Teacher in Gymnasium Neas Kydonias, Chania, Crete
- 68. Zacharioudaki Adroniki, Doctor of Haematology, ex-Director of the Blood Bank of the General Hospital of Chania Crete
- 69. Zaneka Stergiani, Greel Literature Teacher in 1st Lyceum of Chania, Crete
- 70. Zormpas Konstantinos, General Director of the Orthodox Academy of Crete, Colibari, Chania

PROGRAM

WEDNESDAY 6 DECEMBER Amphitheatre of 1st Lyceum of Rethymnon

SESSION 1. OPENING OF THE CONFERENCE

CHAIR Giannela Stella

16.30 WELCOMING AND INTRODUCING OF THE PARTICIPANTS

SESSION 2.

CHAIR Tsigkris Miltiadis

- 17.00 <u>Giannela Stella</u> ACTIONS-PROFESSIONAL ORIENTATION PROGRAMS IN THE CENTERS FOR COUNSELING AND VOCATIONAL GUIDANCE (KE.SY.P.) OF SECONDARY EDUCATION
- 17.15 <u>Meogrossi Pierro</u>, LE FORME PREFERITE DELLA MENTE- THE LABORATORIUM IN VENICE 2017
- 17.30 Drakaki Maria, YOUTH IN GREECE IN THE ERA OF THE CRISIS: THE STATE OF PLAY
- 17.45 <u>Demetriou-Chatzichristou Chrysoula</u> THE ROLE OF TEACHER IN STUDENT ASSESSMENT IN CYPRUS EDUCATIONAL REFORMATION
- 18.00 <u>Kasimati Aikaterini</u> FOSTERING 21ST CENTURY SKILLS THROUGH AN AUTHENTIC LEARNING AND ASSESSMENT FRAMEWORK
- 18.15 <u>Kalathaki Maria</u> THE TEACHERS' TRAINING IN THE REGIONAL TRAINING CENTERS OF GREECE-25 YEARS EXPERIENCE
- 18.30 Round Table TRAINING AND RE-TRAINING OF SCIENCE TEACHERS, Coordinator: Tsigkris Miltiadis,
- 19.30 CONCLUSIONS AND SUGGESTIONS

THURSDAY 7 DECEMBER 2017 Polykendro of Platanias Municipality, Chania

SESSION 3.

CHAIR Malandrakis I

- 09.00 Arrivals of the Students and Teachers. Welcoming by Simandirakis Panagiotis, Appointed Counselor for Education of Chania prefecture, Region of Crete
- 09.30 Malandrakis I THE VISION FOR THE EDUCATION OF PLATANIAS MUNICIPALITY TO AVOID THE STRONG CONCEQUENCES OF THE ECONOMICAL CRISIS (in Greek)
- 10.00 Malandraki S WHAT THE STUDENTS NEED FROM THEIR LOCAL COMMUNITY- DISCUSSION WITH STUDENTS (in Greek)
- 10.30 Zorbas K, THE EDUCATIONAL WORK OF ORTHODOX ACADEMY OF CRETE

11.00 BRAKE WITH THE MUSIC SCHOOL OF CHANIA

SESSION 4.

CHAIR Kalathaki M

- 11.30 <u>Demetriou-Chatzichristou C,</u> THE ROLE OF PROJECT IN STUDENT ASSESSMENT IN MATHEMATICS AND SCIENCE EDUCATION
- 12.00 Adamidis A & Students of Lyceum Voukolies, APPLYING THE KNOWLEDGE OF CHEMISTRY AND BIOLOGY OF THE LYCEUM TO PRODUCE BIODIESEL FROM USED COOKING FATS AND SPIRITS OF FALLEN ORANGES
- 12.15 <u>Meogrossi P</u>, THINKING BEYOND THE USUAL: THE SAME SUNLIGHT NATURALLY ACCORDED TO AN ANCIENT CODE HERITAGE (in English)

13.00 BRAKE

SESSION 5.

CHAIR Chatzichristou Chrysoula

- 15.00 Kalathaki M, TRANSFORMING THE SCHOOL SCIENCE LABORATORIES INTO CIVIC TECH HUBS FOR SHARING KNOWLEDGE AND IDEAS (In Greek)
- 15.30 WORKSHOP with the subject 'UTOPIA & REALITY'. <u>Coordinator Piero Meogrossi</u> (in English and Greek)
- 16.30 DISCUSSION, CONCLUSIONS, SUGGESTIONS FOR SCIENCE FUTURE TEACHING IN SCHOOLS

FRIDAY 8 DECEMBER 2017

1st Public Institute of Vocational Training in Heraklion-Library

SESSION 6

CHAIR Saitakis Artemis

- 14.30-15.30 WORKING LUNCH ON "BUILDING PARTNERSHIPS IN STEM EDUCATION & TRAINING FOR YOUTH ENTREPRENEURESHIP"
- 15.30 Honorary Reception Ceremony for the Volunteers of the LIBRARY OF REGIONAL TRAINING CENTER OF HERAKLION, donors of books and services
- -Kalathaki Maria, INITIATIVES OF EDUCATIONAL ADMINISTRATION EXECUTIVES: CONSTRUCTION OF THE LIBRARY OF DIDACTIC AND PEDAGOGIC CONTENT, A CASE STUDY

FRIDAY 8 DECEMBER 2017

Regional Training Center of Heraklion-Classroom of History

SESSION 7

CHAIR Kalathaki Maria

- 16.00 <u>Chaimala F</u> SUPPORTING STEM TEACHERS' COMPETENCE DEVELOPMENT THROUGH INQUIRY BASED LEARNING: THE ELITE PROJECT APPROACH
- 16.30 Argyropoulou E, APPROACHES TO DEVELOP ETHICAL LEADERSHIP IN SCHOOLS'
- 17.00 Podaras D, Plaiti W, Polychronaki T HELLENIC CENTRE FOR MARINE RESEARCH: AIMING TOWARD, A STUDENT CENTERED, INNOVATIVE AND INTERACTIVE TEACHING OF MARINE SCIENCES 17.30 Tzianoudakis G, Tzianoudakis L YOUNG ENTREPRENEURSHIP IN CRISIS SEASONS: LESSONS

AND COMPLICATIONS **SESSION 8**

CHAIR Dimitriou Polyxeni

- 17.45 Tsigkris M WE START FROM SCIENCE, LIKE...S.T.E.M.
- 18.00 Nadaban L NON-FORMAL TECHNIQUES IN TEACHING
- 18.15 Tsagkatakis I THE PHILOSOPHY OF "VRISKOUMENO" IN THE CRETAN NUTRITION
- 18.30 Owens G FROM LINEAR B TO THE PHAISTOS DISC
- 18.45 Discussion with Erasmus Students hosting by the Technological Educational Institute of Crete about the importance of students mobility in the framework of Erasmus projects
- 19.00 Team of Astronomy of the University of Crete STARS OBSERVATION

21.30 DINNER

SATURDAY 9 DECEMBER 2017

Regional Training Center of Heraklion-Science Laboratory

SESSION 9.

CHAIR Ucar Sedat

- 10.00 <u>Fountoulakis A, Manouras F, Maroukli M</u> A STEM SCHOOL PROJECT: ABOUT EVERYTHING UNDER THE SUN
- 10.15 Ucar S A MODEL OF TEACHING TIDES
- 10.30 <u>Dimitriou P</u> THE ROLE OF THE LEADERSHIP OF THE INSTITUTION OF VOCATIONAL TRAINING AND ITS IMPACT ON THE MOTIVATION OF ITS EDUCATIONAL STAFF
- 10.45 <u>Paraschou T</u> INQUIRE BASED LEARNING AND EXPERIMENTS WITH DAILY MATERIALS. THE EXAMPLE OF TOOTHPASTE
- 11.00 Archontaki N CHEMISTRY CREATES LIQUEUR- AN EDUCATIONAL SEMINAR IN SCHOOL
- 11.15 Schoinoplokaki E MAKING HANDMADE SOAPS AT HOME AND SCHOOL LABORATORY
- **11.30 BRAKE**

SATURDAY 9 DECEMBER 2017

Regional Training Center of Heraklion-History Classroom

SESSION 10.

CHAIR Cakmakci Gultekin

- 12.00 Lampakis S DISASTER RESPONSE SKILLS AND ATTITUDES IN TEENAGE POPULATIONS: A SURVEY ON ADOLESCENT POPULATIONS
- 12.15 Rovithis M EFFECTIVE TEACHING SKILLS—HOW TO BECOME A BETTER EDUCATOR FOR HEALTH RELATED COURSES
- 12.30 <u>Demetriou–Hadjichristou C</u>, THE LAKATOSIAN METHOD FOSTERS TRANSITION FROM THE ALTERNATIVE CONCEPTIONS TO THE SCIENTIFIC CONCEPTS: AN EXAMPLE IN GEOMETRY OF THE COGNITIVE CONFLICT MAP BASED ON LAKATOSIAN METHOD.
- 12.45 <u>Tsoutsoudakis A</u> HIGH SCHOOL STUDENTS ON THEIR WAY TO SCIENCE—THE BEAMLINE FOR SCHOOLS COMPETITION
- 13.00 Zacharioudaki A DIOSCORIDES PEDANIUS, FATHER OF PHARMACOLOGY
- 13.15 Andreadis E, Xiraki Sofia SACRED? TRIANGLES OF ANTIQUITY
- 13.30 <u>Meogrossi P</u>, MEDITERRANEAN HERITAGE: A NOSTOS FROM CRETE TO ROME-L'ISOLA DI CRETA ESTREMITÀ E FUTURO DI EUROPA

14.00 BRAKE

SESSION 11.

CHAIR Kalathaki Maria

15.00 Workshop Coordinated by <u>Kalathaki M & Nadaban Laura</u> RETHINKING ON ESSEL: a European Project for collaborative didactic research and entrepreneurship in Education

SATURDAY 9 DECEMBER 2017 EXCURSION TO EAST CRETE - Agios Nikolaos, Lasithi

SESSION 11.

CHAIR Tziotis Stavros

16.00 Excursion to Agios Nikolaos, Elounda, Spinalonga

21.30 DINNER

SUNDAY 10 DECEMBER 2017 Regional Training Center of Heraklion

SESSION 12.

CHAIR Kadir Demir

09.30 <u>Michailidi A, Eleftheriou M, Siligardou F</u> SCIENTIX THE COMMUNITY FOR STEM EDUCATION IN EUROPE

10.00 Venetis C, Pentheroudakis G and Tsigris M "LAB-MADE" INSTRUMENTS IN BIOLOGY TEACHING

10.15 Chalkiadakis C WALKING AROUND THE SOLAR SYSTEM

10.30 Mavromatakis G A SIMULATION OF THE HUMAN DIGESTIVE SYSTEM

10.45 <u>Altas E AN EXPERIENCE OF PARTICIPATING IN A ESA ROBOTICS TEACHER TRAINING WORKSHOP</u>

11.00 <u>Vogiatsi E, Deiktaki A, Katsarou V</u> STUDENTS4EUROPE: EDUCATING/TRAINING STUDENTS AS CITIZENS THROUGH THE SIMULATION OF THE EUROPEAN PARLIAMENT, SCIENTIFIC LITERACY AND ACTIVE CITIZENSHIP

11.15 Zaneka S ASCLEPIUS AND THE HEALING CHARACTER OF THE TEMPLES OF ASCLEPIUS

11.30 BRAKE

SESSION 13.

CHAIR Chaniotakis N

12.00 <u>Kadir D</u> EXAMINING USA'S VISION OF STEM EDUCATION: ISSUES, CHALLENGES, AND PROMISES

12.30 Cavas B

13.00 Cakmakci G ENGINEERING PRACTICES IN EDUCATION: DESIGN THINKING

13.30 Ucar S THE CONNECTION BETWEEN THE STEM AND ENTREPRENEURSHIP EDUCATION

14.00 BRAKE

SESSION 14.

CHAIR Cavas Bulent

15.00 Round Table with Professors of Higher Education with the issue of "The future of Secondary Education Teachers' Training in Science Education: international trends, challenges and initiatives'. The professors will have a short presentation of 5 minutes and then discussion <u>Coordinator: Bulent Cavas</u>.

Professors Panel:

- Teacher training and beyond: Prof.Dr.Bulent Cavas, Dokuz Eylul University, Turkey, ICASE Moderator
- Strengths and weaknesses in teacher training and challenges in USA: Assoc.Prof.Dr.Kadir Demir, Georgia State University, USA
- Strengths and weaknesses in teacher training challenges in UK: Assoc.Prof.Dr.Gultekin Çakmakçı, Hacettepe University, Turkey
- Preparing the new generation of Science Teachers: Chaniotakis Nikolaos, Dean of the School of Sciences & Engineering, University of Crete
- Beyond the teacher training: Professional Developments of Teachers: Assoc.Prof.Dr.Sedat Uçar, Çukurova University, Turkey
- Research tendencies on Science Teachers' Training: Foteini Chaimala, Postdoc Researcher, Educational Research & Evaluation (ERE) Group, Institute of Applied & Computational Mathematics (IACM), Foundation for Research and Technology Hellas (FORTH), Greece
- The past and the unknown future in teacher training in Greece: Maria Kalathaki, Director of the Regional Training Center of Heraklion, Greece

SESSION 15.

CHAIR Tsigkris Miltiadis

16.00 Award of honorary diploma for the retirement of the Head of the Laboratory Science Center of Chania Mr Markogiannakis Dimosthenis

SUNDAY 10 DECEMBER 2017 GUIDED TOUR IN THE HISTORICAL CITY OF HERAKLION

SESSION 16.

CHAIR Papastefanaki A

17.30 Papastefanaki A, Pantelaki E HISTORICAL BUILDINGS & DETERMINATIONS IN THE CITY OF HERAKLION

FREE NIGHT

MONDAY 11 DECEMBER 2017

IN THE LABORATORIES OF THE TECHNOLOGICAL AND EDUCATIONAL INSTITUTE OF CRETE SESSION 17.

CHAIR Xanthos Georgios

09.30 Mavromatakis F, LABORATORY OF ENERGY AND PHOTOVOLTAIC SYSTEMS 10.30 Papadakaki M, LABORATORY OF HEALTH & ROAD SAFETY

SESSION 18.

CHAIR Kalathaki Maria

11.30 Ververidis Ph. Guide in the TEI FARM.

12.30 CONCLUSIONS & SUGGESTIONS CLOSING OF THE CONFERENCE, DEPARTURE OF DELEGATIONS

The diet of meetings is a voluntary affair of many locals The participation is optional

Honorably

Maria Kalathaki, Med, Ph.D School Director of Primary & Secondary Education of Crete