



University of Cyprus  
Graduate School



DOCTORAL THESIS  
OF GRADUATES  
UNIVERSITY OF CYPRUS (ABSTRACTS)  
FEBRUARY 2022

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

The Senate of the University of Cyprus unanimously decided, on 8<sup>th</sup> September 2021 and on 9<sup>th</sup> February 2022 award 49 Ph.D. titles.

In this edition the research subject of the PhD student is presented in a short summary.

The information is presented in alphabetical order by Department.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

NAME/SURNAME	DEPARTMENT	TITLE OF THESIS/ ABSTRACT
Chrystala Psathiti	Architecture	<p><b><i>Assessing Educational Environments: A Temporal Socio-Spatial Approach to Lower Secondary School Buildings in Cyprus</i></b></p> <p><i>Supervisor: Nadia Charalambous, Assistant Professor</i></p> <p>This research is concerned with the interplay between school environment and school practices. It seeks to understand how the spatial layout and agency of lower secondary school buildings built in Cyprus after 2000 impact the socio-educational school life, and to what extent do those schools illustrate spatial, functional, and morphological consistencies.</p>
Stavroula Thravalou	Architecture	<p><b><i>Natural ventilation as a passive cooling strategy of vernacular buildings in historic urban centers, in the Mediterranean climate</i></b></p>

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Costi de Castrillo

Architecture

*Supervisor: Maria Philokyprou, Assistant Professor*

This research addresses the cooling potential of natural ventilation through the consideration of the airflow field on the neighbourhood, street canyon and building levels, using field measurements. The focus is on heavyweight vernacular buildings with “portico” and “sahnisi” spaces, located in organically developed historic urban centres, in the Mediterranean climate.

***Adobe Bricks From Built Heritage to Contemporary Sustainable Architecture. Experimental Investigation and Proposals For Site-And Use-Specific Applications***

*Supervisor: Maria Philokyprou, Department of Architecture, Assistant Professor / Ioannis Ioannou, Department of Civil and Environmental Engineering, Professor*

This doctoral thesis focuses on the production of optimized adobe bricks (straw - sawdust fibre, 30% - 70% v/v). It adopts an interdisciplinary applied research methodology, including documentation and analysis

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Nektarios Christodoulou

Architecture

of existing knowledge, experimental development of optimized adobe bricks, critical analysis and application of experimental outcomes through the proposal of site- and use-specific applications in existing and contemporary structures.

***Η Σημασία του Χώρου και ο Ρόλος του Σχεδιασμού σε Διαφιλονικούμενα Αστικά Περιβάλλοντα: Η περίπτωση της Αμμοχώστου***

*Supervisor: Andreas Savvides, Assistant Professor*

This dissertation investigates the importance of space and the role of planning in contested urban environments, having as a case study the city of Famagusta. The results aim to inform the relevant academic debate, as well as the public dialogue conducted in Cyprus regarding the urban future of the city.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Nikolas Michaelides

Biological Sciences

***Modelling The Marine Food Web In The Coastal Waters Of Cyprus***

***Supervisor: Spyros Sfenthourakis, Professor***

We develop the first ecosystem model for the shelf marine ecosystem of Cyprus, in order to describe its structure and functioning, identify keystone groups and species, evaluate the impact of fishing activities and assess the role of alien species.

Christina Demetriadou

Biological Sciences

***Dissecting The Role Of Histone N-Terminal Acetyltransferase NAA40 In Gene Regulation, Metabolism And Cancer***

***Supervisor: Antonis Kirmizis , Associate Professor***

Collectively, my Ph.D. thesis unveils the regulatory function of NAA40 and its mediated histone N-terminal acetylation in controlling gene expression and one-carbon metabolism to govern colorectal cancer cell

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Chryso Pallari

Biological Sciences

growth and chemoresistance.

***Investigating the Epidemiology of West Nile Virus in Its Primary Hosts and Potential Vectors in Cyprus***

*Supervisor: Alexander Kirchel, Associate Professor*

This PhD research study aimed to combine mosquito surveillance across the five districts of the government-controlled part of Cyprus and West Nile Virus surveillance in mosquitoes collected in 2019, as well as in wild birds captured between 2015-2020 to update the risk assessment and identify risk areas. Moreover, the relationship between the number of mosquitoes sampled and weather conditions was investigated for the identification of parameters that would predict mosquito presence and prevalence.

Giannis Maimaris

Biological Sciences

***Functional Characterization of the Endoplasmic Reticulum and Nuclear envelope Transmembrane protein TMEM147 in HeLa Cells***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Konstantina Neofytou

Biological Sciences

*Supervisor: Paris A. Skourides, Associate Professor*

TMEM147 protein is localized to the Endoplasmic Reticulum (ER) and Nuclear Envelope (NE) membranes and physically interacts with Inner NE membrane and sterol reductase protein lamin B receptor (LBR). Its downregulation negatively regulated both gene expression and protein levels of LBR, which is dispersed to the peripheral ER. Silencing of TMEM147 changed ER membrane domain organization, altered nuclear shape, caused loss of chromatin compaction and decreased cell viability. TMEM147 also interacts with DHCR7 and TM7SF2 sterol reductases and its silencing changed the lipidomic profile of the cells modulating the receptor-mediated uptake of cholesterol by cells. Pathway analysis implicated TMEM147 in G protein-coupled receptor activity, ribosome binding, oxidoreductase activity and transmembrane transport activity.

***Nutrient Transporters Control intestinal Stem Cell Mitosis and Host Microbiome Interactions***

*Supervisor: Chrysoula Pitsouli, Associate Professor*

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Monica Demetriou

Biological Sciences

Inflammation and carcinogenesis are intimately connected and recent studies have shown that infection can lead to cancer in individuals predisposed by oncogenic mutations. In this thesis, we show that dysbiosis can also result from impaired intestinal stem cell (ISC) metabolism and that microbiome-derived nutrients can directly regulate ISC function and ISC-related diseases.

***Phytoplankton in the Coastal Waters of Cyprus (Eastern Levantine): Phenology, Spatiotemporal Variations, and Microphytoplankton Community Structure***

*Supervisor: Spyros Sfenthourakis, Professor*

Phytoplankton phenology, spatiotemporal variations, and community structure were studied in the coastal waters of Cyprus. The results provide a first picture of the seasonal succession of phytoplankton in Cyprus, where the coastal waters reflect the ultra-oligotrophic conditions of the eastern Mediterranean and pave the way for any future environmental monitoring.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Andreas Demetriou

Biological Sciences

***Reconstructing the Evolutionary History Of Terrestrial Isopods (Isopoda: Oniscidea) at different Phylogenetic Levels***

*Supervisor: Spyros Sfenthourakis, Professor*

Within the framework of this thesis the evolutionary history of terrestrial isopods (Isopoda: Oniscidea) at different phylogenetic levels is explored. Generated data call for a re-evaluation of current terrestrial isopod taxonomy and provides new insights into the evolutionary history of this unique group that managed to conquer land.

Theofano Panagiotou

Biological Sciences

***The Human Papillomavirus E7 Oncoprotein Affects the Activity of Oct4 in Cervical Cancer***

*Supervisor: Katerina Strati, Associate Professor*

The HPV E7 oncoprotein interacts with Oct4 and this interaction is responsible for the Oct4-transcriptional output and Oct4-mediated phenotypes in cervical cancers. Proteomics and bioinformatics analyses

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Anna Routzaki

Byzantine and Modern  
Studies

demonstrated that Oct4 interacts with two different NuRD-variants in HPV-positive and HPV-negative cancer cells which can be responsible for the differential Oct4-associated functions.

***Η Φαναριώτικη Ποίηση της Εποχής του Διαφωτισμού: Η Μαρτυρία του Κώδικα 725 της Γενναδείου Βιβλιοθήκης***

*Supervisor: Iliia Chatzipanagioti, Professor*

This thesis focuses on the study and publication of the Gennadius Library Code 725. The aim of this study is to first determine the cultural identity of the Phanariot environment from which the authors of the manuscript and the writers of the verses, conserved in the code, originated and secondly, to examine the characteristics of the Phanariot verses. The second part of the dissertation includes the philological publication of the verses, a list of names of the lyricists and melodists mentioned in Code 725, a glossary, as well as the diplomatic transfer of the entire code.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Charalampos Modestou

Byzantine and Modern  
Studies

***Τα ποιήματα του Μανουήλ Φιλή προς τον Αυτοκράτορα και τον Πατριάρχη: Συμβολή στη Μελέτη της Γλώσσας και των Λογοτεχνικών Μοτίβων (Σχετικών με την Αυτοκρατορική Ιδεολογία και την Εκκλησιαστική Εξουσία)***

*Supervisor: Martin Hinterberger, Professor*

The present study focuses on two areas: (a) the language of Manuel Philes' poems and (b) the imperial and ecclesiastical ideology. Its aim is to highlight the importance that the function of the language has for a poetic text, but also to understand the way in which Manuel Philes composed his poems. Regarding the second area of focus, the aim is to give a clear picture of the evolution of imperial ideology during the early Palaeologan era, but also to compare it with the way ecclesiastical ideology is manifested through the poems to the patriarch. The metaphorical images with which both the emperor and the patriarch appear, were mainly used to reach the aforementioned goal.

Savvoulla Alexandraki

Chemistry

***Ορθολογικός Σχεδιασμός Πολυστρωματικών Γαλακτωμάτων για την Προστασία Ευαίσθητων στην Οξείδωση Συστατικών Τροφίμων***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Nicolaou

Chemistry

*Supervisor: Epaminondas Leontides, **Professor***

Subject of this Doctoral Thesis is the systematic design of multilayer oil in water (o/w) emulsions for the encapsulation of oil that contains the bioactive omega-3 fatty acids docosahexaenoic acid and eicosapentaenoic acid, in order to retain their long-term stability towards oxidation. The oxidative stability of the lipid phase increases because of the presence of the antioxidants at the droplet interfaces via non-polar coupling.

*"Πολυοξοφθορομεταλλικές Ενώσεις του Βαναδίου σε Υδατικά Διαλύματα: Δομή και Δραστικότητα"*

*Supervisor: Anastasios Keramidas, **Professor***

The main aim of the research study was to synthesize polyoxofluorometallic and mixed metal polyoxofluorometallic compounds of vanadium in one step using vanadium precursors with monodentate or bidentate ligands. These complexes were studied for their catalytic, electronic and electrochemical

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Atalanti Christou	Chemistry	properties.
Anna Mina	Civil and Environmental Engineering	properties.

properties.

***Ανάλυση Πολυφαινόλων σε δείγματα χαρουπιού με χρήση φασματοφωτομετρικών, ηλεκτροφορη χρωματογραφικών τεχνικών- Επίδραση παραγόντων στην φαινολική τους σύσταση***

***Supervisor: Constantina Kapnissi-Christodoulou, Associate Professor***

The phenolic composition of carobs and derived products was investigated by the use of spectrophotometric, electrophoretic and chromatographic methods of analysis. Factors significantly affecting the phenolic profile of carobs were determined through a complete statistical analysis.

***Συμπεριφορά Κατασκευών υπό Τυχηματικές Δράσεις και Επισκευή με Προηγμένα Υλικά και Τεχνολογίες***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Michalis Eleftheriou

Classics and Philosophy

*Supervisor: Michael Petrou, Professor / Konstantinos Trezos, Professor of the National Technical University of Athens*

The scope of this dissertation is the optimization of the mechanical properties of an Ultra High Performance Fiber Reinforced Concrete (UHPFRC) against projectile impact. Small dimensioned prefabricated UHPFRC slabs are specified, on which perforation is avoided, for use on new or existing structures to provide protection from terrorist attacks.

**Φιλοσοφική Μυθολογία : Ο μύθος στον Πλάτωνα**

*Supervisor: Maria Ypsilanti, Associate Professor*

This thesis provides a systematic philosophical study of Platonic mythmaking. Myths are categorized (epistemology, ethics) and their content is interpreted, in relation to the philosophical context they serve as well, while highlighting, simultaneously, the function of myth in Plato's opus.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Elpida Lazari	Classics and Philosophy	<p><b><i>Η Έννοια του Pudor στη Φαρσαλίδα του Λουκανού</i></b></p> <p><i>Supervisor: Demokritos Kaltsas, Associate Professor</i></p> <p>The topic of this doctoral dissertation is the study of the political virtue of pudor present within the epic of Lucan. The virtue of pudor in Lucan's epic was approached and studied with consideration of its political and social implications as well as in connection with other Roman virtues which constituted the mos maiorum and supported the ideal of libertas.</p>
Theocharis Zacharatos	Computer Science	<p><b><i>Automatic Emotion Recognition From Body Movements</i></b></p> <p><i>Supervisor: Yiorgos Chrysanthou, Professor</i></p> <p>Humans are emotional beings; their feelings influence the way they interact with computers. Emotion recognition is important in many applications: intelligent tutoring systems, computer games, robotics,</p>

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Iacovos Ioannou

Computer Science

medical and human computer interaction. This thesis addresses shortcomings in emotion recognition and it proposes various methods towards an automatic emotion recognition system.

***A novel Distributed Artificial Intelligence Framework with Machine Learning for 5G/6G Communication***

*Supervisor: Andreas Pitsillides, Professor*

In this dissertation, we propose and develop a new distributed AI (DAI) framework with Belief Desire Intention (BDI) agents extended with ML capabilities (called BDix agents), capable of facilitating the ambitious goals set in 5G/6G networks. The agents are located on mobile devices and form a multi-agent system that incorporates Fuzzy Logic and Back-Propagation Neural Networks at the cognitive part of the agents. To demonstrate the capabilities of the DAI framework, we focus on the device-to-device (D2D) communication.

Andreas Dalitis

Education

***Η Κατ'οίκον Εργασία μαθητών Δημοτικής Εκπαίδευσης στην Κύπρο και τα Αποτελέσματα της***

*Supervisor: Leonidas Kyriakides, Professor*

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Christina Kaili

Education

The aim of this research was to explore the form, the extend and the aims of homework in the Cypriot education system, the factors that influence homework and the relationship between homework and student performance, with the focus on Language and Mathematics. In order to answer the above research questions, exploratory-descriptive research was conducted, since the current literature on the above subject for Cyprus is scarce.

***Μελετώντας την Επίδραση της Συνεργασίας των Εκπαιδευτικών στα Μαθησιακά Αποτελέσματα: Μια Διαχρονική Μελέτη***

*Supervisor: Leonidas Kyriakides , Professor*

This study investigates the effect of teacher collaboration on learning outcomes. Structural Equation Modeling Analysis and Discriminant Function Analysis reveal that changes in school policy for collaboration, teachers' collaborative actions and quality of teaching practice can bring about changes in the effectiveness status of schools.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Filippou	Education	<p><b><i>Σύγχρονες Εκπαιδευτικές Πολιτικές και Οικοδόμηση Ταυτότητας Δασκάλου: Αναζητώντας τον "Όλο Άνθρωπο" Κάτω από Ένα Συγκριτικό Φακό</i></b></p> <p><i>Supervisor: Eleftherios Klerides, Assistant Professor</i></p> <p>The purpose of this dissertation is to investigate the construction of teacher's identity, through discourse analysis of educational policies of: Republic of Cyprus, the European Union and the World Bank. Through this analysis, we investigate whether the education policymakers recognize in the face of the teacher, the man as a "whole".</p>
Mark Debono	Education	<p><b><i>The shadow of Mount Moriah over education: Derrida, "donkeys" and the question of the hegemony of "truth" in dialogic practice</i></b></p> <p><i>Supervisor: Charoula Angeli, Professor</i></p> <p>The thesis critically examines the effects of hegemonic positions of 'truth' in educational dialogic practice. For the thinking of others to develop across less domineering channels, the thesis advances a rethinking of education for justice by searching alternative fairer positions of 'truth' in and through dialogue.</p>

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Irene Drymiotou

Education

***Enhancing Students Interest In Science And Stem Careers: An Investigation Of Career-Based Scenarios And Students' Self-Views In Relation To Science***

*Supervisor: Constantinos P. Constantinou, **Professor***

The purpose of the thesis was to examine to the impact of specially designed curriculum materials on students' development of situational interest as well as understandings of Science Technology Engineering Mathematics (STEM) careers and further investigate the evolution in their self-views in relation to science and STEM career aspirations.

Ioannis Ioannou

Education

***Links Between School Effectiveness and School Improvement Research: The Impact of the Dynamic Ap School Improvement***

*Supervisor: Leonidas Kyriakides, **Professor***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Elena Vasileiou

Education

This thesis deals with the issue of improving secondary level schools using integrated models and notably the DASI approach. It investigates effective links between SIR and SER, able to improve schools and student learning outcomes. The study is a result of a call made by the Ministry of Education in Cyprus who asked for theory-based methods to help schools upgrade their students' learning outcomes. The results show positive and statistically significant effect of using the DASI approach for improving student learning outcomes and the school-level factors. Implications for theory, policy and practice are drawn and suggestions for further research are made.

***Queer Uderstandings of Prison Paradoxes in Ex-Prisoners; Narratives***

***Supervisor: Miranda Christou, Associate Professor***

This thesis, which draws on the author's five year professional experience at the Nicosia Central Prison (NCP), analyzes the experiences of 16 ex-prisoners and 4 prison professionals at the NCP through the analytical concepts of power/punishment, gender performativity, pleasure, and the death drive. The ontological, epistemological, and methodological foundations of this project draw on queer theory, psychoanalysis, and post structural feminist methodology.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Emilia Polydorou

Education

**Διαφοροποίηση συνδιδασκαλία για την ενιαία εκπαίδευση: Κατανοώντας την πορεία προς την επαγγελματική ανάπτυξη των εκπαιδευτικών και την ακαδημαϊκή και κοινωνική βελτίωση των μαθητών και μαθητριών**

*Supervisor: Simoni Symeonidou, Associate Professor*

The study was an action research. Two co-teachers (a special and a mainstream class teacher) developed and implemented 11 differentiated lessons, in a second grade class with 21 students, of a public primary school. The findings of the study showed that co-teaching has positive impact on students and teachers.

Elena Siakidou

Education

**Παράγοντες που ενισχύουν ή παρεμποδίζουν την εμπλοκή προπτυχιακών φοιτητών στην Αξιοποίηση της Γραπτής Ανατροφοδότησης**

*Supervisor: Constantinos P. Constantinou, Professor*

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Konstantinos Stefanis

Education

The present study reports on an empirical classroom-based study that sets out to highlight the factors that tend to either facilitate or impede students' attempt to act on the written feedback. The exploratory study aimed to investigate how pre-service teachers engage with the process of interpreting, and acting on, the feedback.

***Ο Άλλος ως Πλησίον: Παιδαγωγικές Διαστάσεις της Παραβολής του Καλού Σμαρείτη***

***Supervisor: Eleftherios Klerides, Assistant Professor***

The thesis attempts to confirm that the necessity for all theological texts to be revisited and to address present conditions becomes evident, through the disclosure of educational values, essential for the members of a modern, functional and law-abiding society. As closely linked with the parable of the Good Samaritan, the topics of inter-religious cooperation, of the promotion of intercultural education and of the fostering of antiracist culture, the tripartite moral model leading from a self-centered to a selfless way of life, are also examined.

Eleni Demarchou

Electrical and Computer  
Engineering

***Analysis And Design Of 5G/B5 | G Ultra Dense Networks: A System Level Perspective***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Michalis Florides

Electrical and Computer  
Engineering

*Supervisor: Georgios Ellinas, Professor*

The deployment of small cells aims to provide ubiquitous coverage and deliver substantial performance enhancements while managing the forthcoming traffic volume. This thesis deals with the design of small cells addressing the challenges brought by network densification, while incorporating key-enabling technologies in order to cope with the requirements of 5G/B5G.

***Early Detection Of Potential Induced Degradation In Photovoltaic Systems***

*Supervisor: George E. Georghiou, Professor*

Performance loss in photovoltaic (PV) systems could be caused by various degradation mechanisms (faults) which reduce their output power. A major degradation mechanism in PV systems is potential induced degradation (PID). PID appeared in the last decade due to the increasing operating voltage of PV systems in an effort to decrease the material cost and improve their efficiency. As its name implies, PID is driven (induced) by voltage (potential) and affects the PV system in such a way that the output power decreases. The output power could decrease (degrade) by more than 25% due to PID. In a typical PV installation under

Venizelos Venizelou

Electrical and Computer  
Engineering

outdoor uncontrolled climatic conditions, the degradation progresses slowly and could remain undetected for months to years. During this long period, there is unnoticed energy loss with negative financial and environmental impact. Conventional fault detection methods are either not cost-effective or are not able to detect power degradation at an early stage, therefore a new detection method is required to alleviate the negative effects of PID. The present doctoral study presents a novel method for the early detection of PID in PV systems. If PID is detected at an early stage, the power of PV modules is 100% recoverable. This will preserve their lifetime and enhance the overall reliability of the system. In addition, the developed method could be used in compliance tests of PV modules/cells to PID susceptibility. The high sensitivity of the method to PID will reduce the test time and, hence, the cost of PV modules. The developed method is based on the measurement of the forward DC resistance (FDCR) of PV modules. Theoretical and experimental studies, demonstrated that PID can be detected before 1% power loss occurs by using the FDCR method. Furthermore, the method can be embedded in a low-cost sensor since low-power electrical signals are used. The FDCR method can operate seamlessly, without human intervention and without interrupting PV generation.

***Unlocking Value From Demand-Side Flexibility In Power Systems***

***Supervisor: George E. Georghiou , Professor***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Loizos A. Hadjivasiliou

French and European  
Studies

The contribution of this work lies in the introduction of a universally-applicable methodology for deploying a DSM scheme that focuses on flexibility extraction. This thesis delves further into flexibility maximization by presenting an innovative framework for DR that aims to minimise the Aggregator's cost through technical and performance parameters.

***From Schengen to Schengend? Challenges arising from the 2011-2016 migration and security crisis:  
A proposal for safeguarding the free movement area.***

*Supervisor: May Chehab, Professor*

Free movement of persons is the cornerstone of European integration. Over the past decade, challenges in migration management, external borders control and internal security have threatened the foundations of the Schengen idea. A new integrated model of cooperation is therefore proposed, with the aim of strengthening the Union's resilience, strengthening its global presence and building a spirit of strong solidarity, with a view to maintaining a sustainable Schengen area.

Marina Elia

History and Archaeology

***Socioeconomic Aspects of Pural Life In Venetian Cyprus***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Dimitrios Giannopoulos

History and Archaeology

*Supervisor: Angel Nicolaou-Konnari, Associate Professor*

The main aim of this thesis is to make a comprehensive study of unpublished documents, which may shed light on the social and economic aspects of the rural population during the Venetian Period (1474-1571) in the island of Cyprus. The four manuscripts used, were also published for the first time in volume II of this thesis.

***Ιταλοκρατία στα Δωδεκάνησα 1923-1936: Εκπαίδευση- Γλώσσα- Αρχαιολογία***

*Supervisor: George Kazamias, Associate Professor*

This thesis engages in a thorough examination of the educational policy of the Italian Administration of the Dodecanese during the tenure in office of Mario Lago (1923-1936) with the aim of italianizing the indigenous people.

Efstratios Fonias

***Numerical Simulations of Turbulent Particle-Laden Flows With Regard to Coastal Flows and Sediment Transport***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Mechanical and  
Manufacturing  
Engineering

*Supervisor: Dimokratis Grigoriadis, Associate Professor*

In the current thesis, particle-laden turbulent flows are investigated. The flow is simulated with Large Eddy Simulation and particle motion by means of a Lagrangian model. Solid boundaries of each computational domain are taken into account using the Immersed Boundary Method.

Charalambos Charalambous

Mathematics and  
Statistics

***Probability Inequalities and Related Asymptotic Results for U-statistics Based on Associated and Negatively Associated Random Variables***

*Supervisor: Tasos Christofides, Professors*

Our study is mainly focused on the asymptotic behavior of U-statistics based on associated and negatively associated random variables. Among our objectives in this thesis, is to prove moment and exponential inequalities for this type of U-statistics. Those results are crucial to obtain strong laws and to provide central limit theorems for U-statistics.

Stefani Valianti

Physics

***Molecular Charge-Transfer and Excitonic Processes: From Bridge-Mediated Electron Transfer and Transport to Bridge-Mediated Singlet Fission***

*Supervisor: Spiros Skourtis, Associate Professor*

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Elena Koumi

Psychology

This Ph.D. Thesis describes research work on molecular electron transfer and multi-excitonic processes. The underlying objective of the research is to develop a physical understanding of how to control electron transfer processes (coherent and incoherent) and singlet fission processes in molecules through the development of a semi-analytical / computational framework.

***Explicit and Implicit Emotion Regulation Ability and its link to Executive Functions: Towards the development of novel computerized interventions***

***Supervisor: Georgia Panayiotou, Professor***

The aim of the current study is the investigation of the relationship between Executive Functions, Emotion Regulation (Explicit and Implicit) and Psychopathology, via behavioural, psychometric and ERP Measures. Results revealed a greater role of Updating, and to a lesser extent, of Inhibition and Shifting in Emotion Regulation ability, and a significant correlation of Emotion Regulation with Psychopathology. The current study is expected to contribute to the identification of the common latent mechanisms involved in psychopathology, as well as to the development of novel computerized neurobehavioural interventions

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Rebecca Mouyi

Psychology

that target the neurobiological mechanisms and circuitries underlying both Executive Functions and Emotion Regulation and that have been found to be implicated in a range of psychological disorders.

***A dialogical case study in a Cypriot mental rehabilitation center: residents' and professionals' representations of mental illness causes, daily life and working experiences***

*Supervisor: Georgia Panayiotou , **Professor***

This thesis utilizes a dialogical case study design in a Cypriot community mental center and adopts a qualitative approach involving in-depth interviewing and observations at the center. It explores how 10 residents who had been given schizophrenia diagnosis with co-morbid conditions (e.g., personality disorder) and 8 professionals who had different specialties (i.e., nurses, psychologists) represent mental illness causes, daily life, working experiences, and relationships at the center, and how they construct the identity of the mentally ill.

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Petridou

Psychology

***Distinct Neurophysiological Patterns Associated with Differentiated Levels of Antisocial Behaviour, Callous- Unemotional Traits and Anxiety. The effectiveness of HRV Biofeedback training with video games***

***Supervisor: Panagiotis Stavrinides, Associate Professor***

It examined the executive function skills and emotional dysregulation towards stressors that associated with antisocial behavior, callous-unemotional traits and anxiety during young adulthood. It also examined the effectiveness of Heart Rate Variability (HRV) Biofeedback training with video games aiming to improve the emotional regulation skills of young adults.

Maria Orfanidou

Psychology

***Making Sense of Depression: A study of the representations and experience of depression in the Greek context***

***Supervisor: Irini Kadianaki, Associate Professor***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Maria Nikou

Psychology

This thesis examined the meanings ascribed to depression in the Greek-Cypriot press (Study 1), public (Study 2), and people diagnosed with depression (Study 3). Together, the findings revealed the benefits of the multi-level approach used, the polyphasic nature of meanings ascribed to depression and its individualisation in the Greek-Cypriot context.

### ***Interpreting Resilience Through Intelligence Theories in Populations With Autistic Traits***

*Supervisor: Alexandros Lordos, Lecturer*

In this dissertation, a brief screening instrument for persons with autistic traits was developed; suggestions were offered for the operationalization of autism and for the theoretical background of resilience; and the factors associated with resilience in Ukrainian adolescents with autistic traits were identified.

Danae Papageorgiou

Psychology

### ***Evaluating the Use of Brief Values Interventions in Increasing Willingness to Approach Behavior Toward Stimuli in Specific Phobias***

*Supervisor: Maria Karekla, Associate Professor*

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

Marina Michaelidou

Psychology

The dissertation aimed to evaluate the use of brief values interventions in increasing willingness to approach and approach behaviour towards phobic stimuli in individuals with flying phobia. Results indicated that values interventions lead to greater behavioural approach towards phobic stimuli.

***Ατομικά και Οικογενειακά Χαρακτηριστικά ως Παράγοντες Ενός Πολυσυστημικού Μοντέλου Ανθεκτικότητας***

*Supervisor: Alexandros Lordos, Lecturer*

The present study explores the phenomenon of resilience using both person focused and variable focused analyses. Two different systems (intrapersonal and family) were examined with regards to their contribution to the development of child resilience in three different dimensions: prosocial resilience, resilience, and mental health resilience.

Charalambos Zorbas

Turkish and Middle  
Eastern Studies

***Οι Σχέσεις Τουρκίας- Ισραήλ και η Πολιτική της Άγκυρας στο Παλαιστινιακό Ζήτημα από το Μανί Μαρμαρα στη Συμφωνία Εξομάλυνσης***

## ABSTRACTS OF PHD THESIS FEBRUARY 2022

*Supervisor: Nikos Moudouros, **Lecturer***

This thesis aims to present Turkey-Israel relations and the way they are influenced by Ankara's policy, regarding the Palestinian issue under the context of AKP's connection with the Palestinian Organization HAMAS.