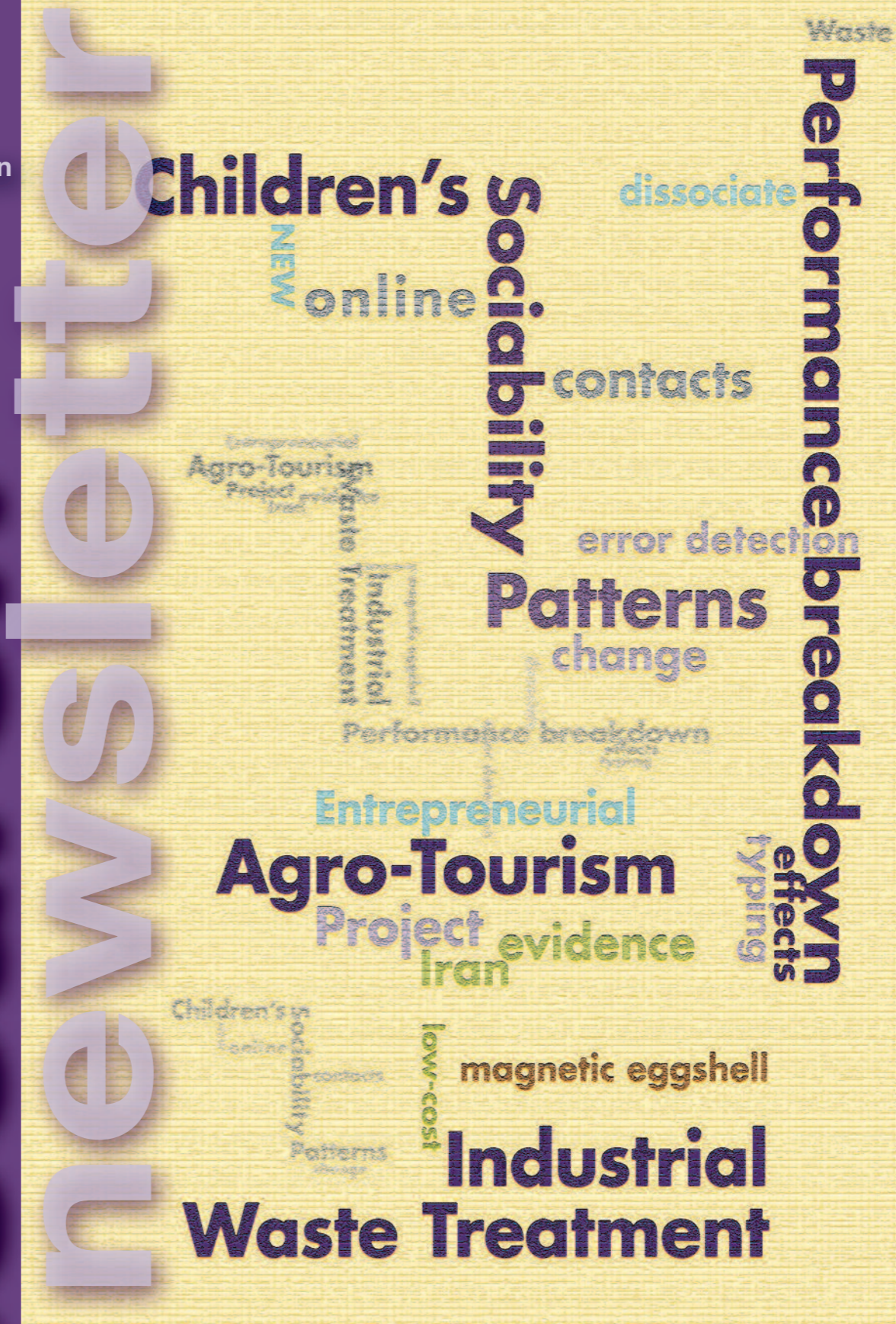




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# research newsletter



- An Entrepreneurial Tourism Project through Agro-Tourism: Evidence from in Iran. By Hossein G. T. Olya , Assoc. Prof. Dr. Habib Alipour and Sara Dalir
- Meeting of New Online Contacts: Changes in European Children's Patterns of Sociability. By Monica Barboschi, Vera Kontrikova, Asst. Prof. Dr. Fatih Bayraktar
- Performance Breakdown Effects Dissociate from error detection in Typing. By Dr. Çığır Kalfaoğlu and T. Stafford
- A Novel Magnetic Functionalized Eggshell for Adsorption and Detoxification of Multi-contaminants in Wastewater: A low-cost Approach to Industrial Waste Treatment. By Akeem Adeyemi Oladipo

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EMU Research Newsletter is published bi-annually through the office of the Research Advisory Board. The information presented in the *News Highlights* and *Recent Publications and Presentations* sections are as they are submitted by faculty members.

Please note that the research articles included here have not been processed through the peer review channels and as such, represent not only the summaries of published articles but also summaries of conference proceedings and researchers' endeavors to publish.

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Dear colleagues,

Welcome to the second issue of the biannual Research Newsletter, covering research activities and events for the period from January 2013 to July 2013. With the best of intentions, we, the editorial team, have tried to provide interesting and original research articles that our colleagues have been working on.

The research newsletter depends on your contributions to help further new research ideas and understanding of contemporary issues and topics within the scientific domain. Whether from the social sciences or pure sciences, the possibilities of new original research ideas enliven and challenge our staff to continue to excel and work within their fields of expertise as well as to explore multi-disciplinary areas of research.

Our newsletter section titled 'Research Spotlight' features three articles; one from the Tourism and Hospitality Department by Hossein G.T. Olya (PhD. candidate), Habib Alipour, and Sara Dalir, (M.S. Environmental Economics). Their article describes an entrepreneurial Tourism project with particular attention to the possibilities of Agro-Tourism in Iran. Two other articles were contributed from the Psychology Department co-authored by Monica Barboschi, Vera Kontrikova and Assoc Prof. Dr. Fatih Bayraktar. The first article is about the effects that social networking, such as meeting online and offline, has on young adolescents and their social patterns. The second co-authored article was contributed to us by Assist. Prof. Dr. Çığır Kalfaoğlu and T. Stafford. The article highlights studies done in neuropsychology and deals with the "performance breakdown effects dissociate from error detection effects in typing". Our 'Student Research Spotlight' section features an article submitted to us from the Chemistry Department by PhD. candidate Akeem Adeyemi Oladipo. This article highlights the novel idea of detoxifying and treating industrial wastewaters using a low-cost bio-friendly adsorption technique.

This will be the last edition of the newsletter for which I will be editor-in-chief as I am retiring from the University at the end of the term. I have found the work inspiring and very challenging. I would like to extend my deepest appreciation to those who have so kindly supported my efforts throughout the period during which I was editor. I extend a special thank you to the assistant editor, Olusegun A. Olugbade for his dedication and hard work in trying to gather material and create a professional newsletter format for the EMU Research Newsletter. The publication of this Research newsletter would never have been achieved without the 'behind-the-scenes' contribution from a great colleague of mine, Ersev Saper, who with imagination and creative energy designed the cover pages and set up the newsletter for distribution and for that I am eternally grateful. Likewise, I would like to thank Prof. Dr. Elvan Yılmaz, the Chair of the Research Advisory Board and Assoc. Prof. Dr. Ekrem Varoğlu, the Vice-Chair, for their unfailing support and guidance throughout some truly difficult periods and therefore helping to make the Newsletter a success. Last but not least, a great many thanks go to all those contributors who have so graciously provided us with interesting and provocative material; without them we would never have had such creative input over the years, and consequently the EMU Research Newsletter would never have materialized as an invaluable source for the University community.

Sincerely yours,

Senior Instructor, Ulrike Lerner  
Editor-in-Chief

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## News Highlights

### Research @ EMU

#### ■ EMU Faculty Staff chosen as member of the International Scientific Committee

Assist. Prof. Dr. Mostafa Ranjbar has been chosen to be a member of the International Scientific Committee of CMAME2013, International Conference on Mechanical, Automotive and Materials Engineering, which will be held in Hong Kong (see <http://www.cmame.net/committee.php>). He was also selected as a member of the committee for the 2<sup>nd</sup> International Conference on Mechanics and Control Engineering which will be held in Beijing, China (see <http://www.icmce.org/com.htm>).

He has collaborated on several research topics with external organizations such as the University of Kentucky in USA, University of Munich in Germany and University of Aalborg in Denmark in the field of vibro-acoustic design optimization.

#### ■ Conference Support Recipients

*In 2013 (January -June), EMU approved financial support for conferences. Below is the list of some of the recipients, the title of the papers and the abstracts.*

■ **Ülgen, A., J. Hjelmberg and W. Li. "Mediation of Genetic Effects". Paper presented for the European Society of Human Genetics conference, Paris, France, June, 2013.**

We applied genetic modeling via simulation to twin data from a Twin Registry for obesity and cancer related measurements. For obesity, we used both BMI and other quantities derived from BMI to measure the weight growth. More specifically, the  $\log(\text{BMI}_{ij})$  at the baseline is regressed over other factors:  $\ln(\text{BMI}_{ij}) = \beta_i + \alpha_i * j + \gamma * \text{age}_{ij} + \epsilon_{ij}$ , for individual  $i$  and time-point  $j$  (time since the baseline, in years). The  $\alpha_i$  is then the log-weight growth rate (Hjelmberg et al. Obesity, 16(4), 2008). For cancer data, we used phenotypes available from the registry. We followed the genetic modeling of the twin data proposed by (Dite et al. and Stone et al; Cancer Epidemiol Biomarkers Prev; 17(12), 2008 and 17(12), 2012, respectively.) In this modeling, the phenotype of a twin in a twin pair is regressed over both twins' co-variates. If the two twins in a twin pair are labeled as 1 and 2,  $Y$  denotes phenotype and  $X$  the co-variate, then  $E(Y) = \alpha + \beta_1 X_1 + \beta_2 X_2$ . It was shown that by varying a covariate experimentally, the expected value of the phenotype measure would change. In our analysis, we assumed a bivariate normal distribution for both

( $Y_1, Y_2$ ) and ( $X_1, X_2$ ). We treated the phenotype measurements such as BMI, growth rate, from the baseline time as  $X$ , and that at the later time as  $Y$ . This approach would incorporate measurements at two points along a time course, thus enhance the power to detect the genetic component. We also introduced a random effects model for the stratification effects.

■ **Karatepe O.M. and S. Vatankhah. "The effects of high performance work practices and job embeddedness on flight attendants' performance outcomes." Paper presented in the Proceedings of the 6th International Conference on Services Management: Managing Services Across Continents, Girne, Northern Cyprus, June 23-25, (2013): 57.**

**Purpose-** This paper proposes and tests a conceptual model that investigates job embeddedness as a mediator of the simultaneous effects of high-performance work practices, as manifested by selective staffing, job security, training, empowerment, rewards, teamwork, and career opportunities, on creative performance and extra-role customer service. **Design/methodology/approach-** Data obtained from a sample of flight attendants with a time lag of two weeks in Iran were used to test the aforementioned relationships through structural equation modeling. HPWP's were treated as a second-order latent variable in our study.

**Findings-** The results suggest that job embeddedness functions as a full mediator of the joint effects of high-performance work practices on creative performance and extra-role customer service. Specifically, high-performance work practices enhance job embeddedness. Job embeddedness in turn leads to elevated levels of performance outcomes.

**Practical implications-** Management of airline companies should invest in high performance work practices continuously to enhance flight attendants' knowledge, skills, and abilities. For example, utilising rigorous and selective staffing signals in which management pays utmost attention to the acquisition and retention of quality flight attendants who are expected to stay on their jobs, generate ideas for service improvements, and display extra-role customer service behaviours. **Originality/value-** This paper contributes to the service research by examining job embeddedness (the mediating mechanism) that links high performance work practices to performance outcomes using data collected from flight attendants in Iran.

**Keywords:** Flight Attendants, High-Performance Work Practices, Job Embeddedness, Performance Outcomes

■ **Çetin, I. N., R. Bashirov, and Ş. Tüzmen. "Petri Net Based Modeling and Simulation of the P16-CDK4/6-RB Pathway". Paper presented in the Proceedings of the 4<sup>th</sup> International Workshop on Biological Processes and Petri nets, CEUR, Vol. 988, Milan, June 24-25 (2013): 30-44.**

Tumor suppressor gene p16 is of utmost interest in the investigation of signal transduction pathways, due to its gatekeeper role at the

G1/S checkpoint of the cell cycle. Defects in p16 result in uncontrolled cell division which leads to the progression of malignancy in an organism. In the present research we focused on the p16-Cdk4/6-Rb pathway which is a cornerstone for the G1 phase of the cell cycle. We implemented Pet net formalism and Cell Illustrator software tools to create a model of the p16-Cdk4/6-Rb pathway and performed a series of simulations to validate the model.

**Keywords:** Replicative senescence, Cell cycle, p16-Cdk4/6-Rb pathway, Hybrid functional Petri net, Cell Illustrator

■ **Balcilar M, R. Demirel and S. Hammoudeh. "Do Global Shocks Drive Investor Herds in Oil-Rich Frontier Markets?" Paper presented at the 33<sup>rd</sup> Annual Meeting of The Middle East Economic Association (MEEA), Allied Social Science Associations (ASSA), San Diego, California, January, 2013.**

This paper examines the dynamic relationship between global factors and herding behavior in the oil-rich frontier stock markets of the Gulf Cooperation Council (GCC), using a time-varying transition probability Markov Switching model (TVTP-MS). Our results suggest that the GCC frontier stock markets respond significantly to the global market conditions in two distinct ways: (i) global factors play a significant role in determining volatility regimes in these frontier markets as well as their transitions from one regime to another; and (ii) shocks in global systematic risk factors significantly contribute to investor herding in these frontier markets. Higher levels of global risk indexes including the VTX and the FSI as well as positive changes in the U.S. stock market performance and in the price of oil, govern the transitions out of low into higher volatility states during which herding behavior is found to be present. Finally, we discuss policy and portfolio diversification implications.

■ **Besim, M. and T. Ekici. "A Small Economy with Large Informality". Paper presented at the 3<sup>rd</sup> Shadow Economy Conference on "The Shadow Economy, Tax Evasion and Governance" , University of Munster, Germany, July (2013): 39.**

We studied the informal labor market in North Cyprus, a small island economy, by using annual household surveys from 2004-2011. We found that informal employment is comprised of unregistered citizens (52%), illegally employed immigrants (48%) and second job holders (15%). Informality is high among young and those older than 55, with no significant difference with regards to gender. However, years of education was a significant factor as most of the work was carried out by unskilled labor in agriculture, retailing and construction. We also used two different approaches; population and migration, where the informal employment is measured to be 14,9% and 20,8% of the total employed for the years 2006 and 2011, respectively. A value added approach estimated the size of the informal sector that was excluded from the national accounts to be 9,1% and 13,6% of the official GNP for the period between 2006 and 2011. As for the fiscal perspective, tax losses were estimated to be as much as 5% of tax revenues and 22% of social

security contributions in 2011. This paper firstly, revisited the cross efficiency evaluation method, which was used as an extension tool for data envelopment

■ **Daneshvar, Sahand and Gökhan İzbirak. "Computing the Biennial Malmquist Index Using Modified Variable Returns to Scale DEA Model". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.**

In this paper, the malmquist productivity index was introduced. This index was used to compare two group's performance at the same period of time, as well as measuring the productivity change of decision making units between two different periods of time. The biennial malmquist index and its decomposition into technical, efficiency and scale changes were illustrated. Hence, the modification on the production possibility set of variable returns to the scale model of data envelopment analysis was proposed using facet analysis. Finally, the biennial malmquist index will be computed using the aforementioned modified model and the advantages of this approach will be illustrated with an example.

■ **Daneshvar, Sahand and Mozhgan Mansouri Kaleibar. "Application of Cross Efficiency in Stock Exchange". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.**

In this paper, we considered the DMUs as the players (institutions) in a cooperative game, where the characteristic function values of institutions were defined to compute the Shapely value of each DMU. The common weights associated with the imputation of the Shapely values were used to determine the ultimate cross efficiency scores for the institution of the Stock Exchange in Tehran. In the models, some weight may happen to be zero for all optimal solutions. This meant that the corresponding criterion was not accounted for in the solution of the game at all. The zero weight issue could thus be solved in this way. This paper introduced the models for the computing benefits for each institution. Using the Shapely value we obtained the effect of each institution, and through determining the common weight for each company, we found out the ultimate weight, which showed how much the existence or non- existence of that institution affected the competence interest.

■ **Daneshvar, Sahand, Gökhan İzbirak, and Merdad Alirezamohammadi. "Ranking All Units Based on Modified Constant Returns to Scale Data Envelopment Analysis Model". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.**

The motivation for this study was to propose an equitable method for ranking all decision making units based on modified constant returns to a scale data envelopment analysis model using facet analysis. For this purpose, first the minimum efficiency values of each unit were computed under the assumption that the sum of efficiency values for all decisions for making units was equal to the unity, by using the modified



data envelopment analysis model. Hence, the rank of each of the decision making units was determined in proportion to a combination of this minimum and maximum efficiency value.

■ Hashemipour, Majid, Sahand Daneshvar, Mohammad Hashem Davoodi Semiromi and Pooya Haghani. "On the Use of Modified Data Envelopment Analysis Models for Product Line Selection". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.

The product line selection problems is defined as selecting a subset of potential product variants that can simultaneously minimize product proliferation and maintain market coverage. Selecting the most efficient product mix is a complex problem, which requires the analyses of multi-criteria. This paper proposes a method based on Data Envelopment Analysis (DEA) for product line selection. Data Envelopment Analysis (DEA) is a linear programming based technique, used for measuring the relative performance of a group of decision making units with multiple inputs and outputs. Although DEA has been proved as an effective project evaluation tool, it has not been applied to solve the product line selection problem. In this study, the Modified Data Envelopment Analysis model that systematically adopts DEA to solve a product line selection problem is used. Afterwards the proposed model is applied to an existing line of staplers to provide quantitative evidence for managers to generate desirable decisions to maximize the company profits while fulfilling market demands.

■ Hashemipour, Majid, Sahand Daneshvar, Mohammad Hashem Davoodi Semiromi and Pooya Haghani. "Selection of Product Design Using Modified Data Envelopment Analysis Models". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.

Developing new products and releasing the best among them at the right time in competitive markets is inevitable for any company. In order to gain customer's confidence in the product, every manufacturer tries to maximize the satisfaction derived by the customers using their product. This is achieved by increasing the quality of the product by considering certain performance attributes of the product. Among the available designs developed by the manufacturer, selecting the best design is a complicated problem when the number of designs and the performance attributes are increasing. The success of the new product depends on the selection method used by the manufacturer to evaluate the different designs. The present paper applies the Modified Data Envelopment Analysis model to choose the best design among the available ones. The performance attributes of the products are recognized as either beneficial or non-beneficial. The beneficial attributes are considered as outputs and non beneficial attributes as inputs. The main advantage of the method is that there is no need to have a designer's preferences over the performance attributes and hence, the results are more accurate.

■ Daneshvar, Sahand, Gökhan İzbrak and Iman Roozbeh. "A Modified Data Envelopment Analysis Method for Priority

Determination in the Analytic Hierarchy Process". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.

The DEAHP method as a weight deviation and aggregation in the analytic hierarchy process (AHP) has been found to be suffering from considerable weaknesses. Recently, some investigations have been done on the DEAHP method, which calculated the rational efficiency through the derivation of relative efficiency. The new DEAHP brought out the defects in the AHP weight derivation. This paper provides a modified constant return to the scale data envelopment analysis model for priority determination in the AHP through the use of facet analysis. This modified model covers weaknesses involved in all previous proposed models and improves the weak efficiency frontier and calculates more accurate priority vectors.

■ Dizaji, Monireh, Sahand Daneshvar and Alireza Babai. "Iran's Position in Knowledge Based Economy in Selected Countries Using Data Envelopment Analysis". Paper presented at the First International Conference on new Directions in Business Management Finance and Economics, North Cyprus, Gazimagusa, EMU, April 12-14, 2013.

In this paper the position of Iran with regards to 40 selected countries with different levels of development will be reviewed and assessed in the field of knowledge based economy by calculating their performance using data envelopment analysis. Accordingly, performance of the selected countries' constant returns in a scaled model for data envelopment analysis purposes will be evaluated, including the input and output orientation using the 13 components of the 'knowledge based economy'. The results, using both methods were similar, with only their policy proposals differing from one another. Based on these results, Iran does not take its proper place among the selected countries. Fixed telephone lines, the number of people in the work force and the total expenditure of ICT were the three important criteria which must be considered in the evaluation of Iran and its relation to other countries. It appears that Iran's position in this particular field could be strengthened following the policies of the United States of America and China.

■ Daneshvar, Sahand and Gökhan İzbrak. "Computing the Biennial Malmquist Index Using Modified Variable Returns to the DEA Scale Model". Paper presented at The 11<sup>th</sup> International Conference on Data Envelopment Analysis (DEA2013), Turkey, Samsun, June 27-30, 2013.

This paper will introduce the malmquist productivity index. This index is used for the comparison of two group's performances during the same period of time and likewise will measure the productivity change for the decision making units between two different periods of time. The biennial malmquist index and its decomposition into technical, efficiency and scale changes will be illustrated. After which, the modifications based on the production possibility set of variable returns as indicated by the scale model through the use of data envelopment analysis will be proposed using the facet analysis approach. Finally, the biennial malmquist index will be computed using the aforementioned

modified model and the advantages of this approach will be illustrated with an example.

■ **Kunt, M. M. "Proposing an Efficient Report Generation Procedure Based on Python Modules and Latex". Paper presented at the 6<sup>th</sup> Annual Conference on Python in Science, EuroScipy 2013, Brussels, Belgium, August, 2013.**

In many disciplines, including engineering, frequent document production may be performed in an inefficient manner. If documents are produced in a routine manner, the process may benefit from automation of the content creation. While several tools are available for allowing people to generate reports, most of them are being developed for a specific purpose. Thus, extending those tools' abilities may be difficult. Python language, with its vast repository of modules may provide the best environment for overcoming the limitations of these tools. The aim of this research is to use Python language to develop a framework to generate reports in a flexible manner that will allow the use of both historical and Python-generated real-time information. For this research, recent efforts in using Python for similar purposes were carefully evaluated to develop a framework that results in an improvement. The idea is to use a script to guide the Python interpreter to carefully blend reference information, algorithm I/O such as figures, tables, modeling of data and statistical analysis to obtain reports that are informative and easier to read. This approach provides a scalable reference information database by utilizing sqlite3, numerical data processing with Numpy and Scipy, generating plots with matplotlib and pylab, modeling and analysis of data with Scipy and sklearn and performing network analysis with Networkx modules. The framework relies on properly organized data files, built-in and user-defined functions and developed algorithms to glue all of these components together. The algorithm outputs are in tex format for final processing in a LaTeX environment. The latex commands which include equations, table and figure numbering are being generated through the Python algorithm. Finally, the implementation and benefits of this approach will be presented through the application of the framework in Transportation Engineering fields. This framework can be easily implemented into other disciplines with similar needs.

■ **Kuter S. "An action research on developing prospective teachers' inquiry skills." Journal of Educational and Social Research (2013): MCSER Publishing, Rome-Italy, 3(7), 317-324.**

One of the ultimate aims of teacher education programs is to equip prospective teachers with the necessary professional skills and dispositions so that they can build and maintain a philosophy of teaching and learning that is constantly reviewed based on an understanding of research and practices. Developing student teachers' inquiry skills by engaging them in research is one of the indispensable parts of teacher education programs since it provides the basis for their ongoing professional development. The aim of this study is to examine how a process-oriented instructional design helps prospective teachers develop their inquiry skills in the educational research methods course. The sample of the study consisted of all forty-two student teachers

enrolled in the course in the Faculty of Education. The study adopted action research as a research methodology and gathered data using qualitative data collection instruments. A process research-based inquiry environment was designated to explore the factors influencing the developmental process of student teachers' inquiry skills. The credibility and objectivity of the study was ensured through inquiry audits and data triangulation. The analysis of multiple qualitative data sources provided invaluable findings as regards to the factors which have an impact on student teachers' development of inquiry skills. It was found that instructional processes, collaboration and instructional scaffolding played an integral part in the inquiry-based instruction. These elements were also considered to be influential on the development of student teachers' inquiry skills. The findings of the study revealed certain programmatic implications worthy of consideration.

■ **Timur, S. and A. T. Timur. "Employee Involvement in Sustainable Tourism: How to Sustain an Iconic Hotel and a Workplace". Paper presented at an International Conference: Sustainability Issues and Challenges in Tourism, 42, Istanbul, Turkey, October 3-5, 2013.**

This paper examines the challenges employees encountered in protecting their workplace from the perspectives of a stakeholder framework and discusses the contributions of employee ownership to socioeconomic notions of sustainable tourism by using a detailed case study. The study presents the involvement of a local stakeholder group in not only protecting their workplace but also preserving an iconic hotel; a built resource that attracted visitors to the city for many years. It was found that under the leadership of the union, employees managed to keep their jobs, turn their organization into a profitable one, and contribute to the local economy at large.

■ **Aleshinloye A., D. Uzun, H. Refker, I. Yuceskan, M. Pakserent, J. B. Bodapati, S. Asir and Icil Huriye. "Perylene and Naphthalene Diimide - Based materials for Photonic Applications". Paper presented at the Gordon Research Conference (GRC)-Photochemistry (Solar Energy Conversion and Light Harvesting), Massachusetts, USA, July, 2013.**

Organic electronic and photonic is an important and promising area of research. The whole field is highly interdisciplinary and will continue to enrich and be enriched by advances in many other disciplines such as nanotechnology, optics, biopolymers, chemical and biological sensing, systems and circuit developments, new materials and novel fabrication methods. Perylene and naphthalene diimides and polymers have been extensively studied due to their highly versatile photonic properties tailored through design [1-3]. They have been used in photovoltaic devices, bio-photonic applications, solar cells and dye lasers [2-4]. In general, the color, solubility, aggregation, thermal stability, melting point and fluorescence quantum yields of all perylene and naphthalene diimides are strongly affected by the substituents; tailoring of these parameters is therefore possible and important. Current research in our laboratory has focused on the synthesis and nanoparticle based applications of the tailored and electroactive perylene and naphthalene

materials. Importantly, the syntheses and properties of novel perylene and naphthalene-based materials achieved here for various energy applications will remain a noteworthy challenge in the field of organic electronic and photonics.

■ Güzer B. and H. Caner. "The Past, Present and Future of Blended Learning: An In-depth Analysis of Literature". Paper presented in the Proceedings of the 5<sup>th</sup> World Conference on Educational Sciences, Rome, Italy, February 2013.

Blended learning emerged as one of the most popular pedagogical concepts at the beginning of 2000. With an increasing tendency, many researches have reported on blended learning since it flourished. The lack of technological availability prevented blending of traditional face-to-face learning with distributed learning environments. However, within the recent 10 years the introduction of new technological innovations filled the gap between traditional face-to-face learning and distributed learning environments. The main purpose of this study is to review and analyze the studies carried out on blended learning through reflecting on the past, the present and the future. Graham (2006) stated that blended learning would have a great role in the future and it would be dominated by the distributed learning environments. To sum up, recent developments in technology encourage teacher educators to apply blended learning in their classrooms, but how it should be implemented will be one of the key questions to be discussed in this research.

■ Agazade A. S., H. Caner, H. N. Hasipoğlu and A. H. Civelek. "Turkish University Entrance Test and Academic Achievement in Undergraduate Programs: A Criterion-related Validity Study". Paper presented in the Proceedings of the 5<sup>th</sup> World Conference on Educational Sciences (WCES 2013), Sapienza University of Rome, Italy, February 5-8, 2013 (in press, *Procedia-Social and Behavioral Sciences* by Elsevier Ltd.).

In the Turkish community at large, especially among educators, there have been many controversial arguments about the validity of the Turkish University Entrance Test (TUET). The common belief is that the TUET is not a valid measure for academic achievement for undergraduate programs (AAUP). The current empirical research study attempted to investigate whether the TUET is a valid measure for AAUP or not. A Turkish university students' sample was selected and this issue was investigated by using two main variables. Namely, the TUET scores and the undergraduate program GPA's. The data was statistically analyzed and interpreted. This research study is important in that it can help provide a solid answer to the ongoing arguments against the TUET and, most important of all, its findings can be useful for some decision-making processes concerning the construction of the TUET and the student selection and placement for undergraduate programs.

■ Deryakulu, D., E. Öztürk and E. Erdem. "Student Teachers' Views on Using and Reusing Online Discussions". Paper presented in the Proceedings of ATEE, Winter Conference: Learning & Teaching with

**Media & Technology. The Association for Teacher Education in Europe (ATEE). Genoa, Italy, March 30-37, 2013.**

Online discussions are often used in teacher education to engage students in dialogue about certain teaching issues as well as teaching case analysis. However, limited research exists that examines students' views on using and reusing online discussions in teacher education. The purpose of this study is to determine the students' views on using and reusing online discussions in teacher education. Participants were 50 pre-service ICT teachers from a large Turkish university in Ankara, Turkey. Of the participants, 37 (74%) were male, 13 (26%) were female. The mean age was 21. The participants enrolled in a graduate course entitled 'ICT Teaching Methods I' and participated in a 14-week blended course which consisted of face-to-face lectures with video-case presentations, and asynchronous online discussions. Participants were assigned to one of the following two groups: (1) online discussion and (2) online discussion and reading former online discussion postings (reuse of former online discussions). The Moodle is an open-source learning management system (LMS) used in the study to provide an online discussion environment to the students. After the implementation of a 14-week blended ICT teaching methods course, three open-ended questions were administered to the participants. These questions were related to the perceived usefulness of online discussions, perceived pitfalls of online discussions, and recommendations for future practices. This paper is a report of the initial content analysis of student responses regarding above mentioned open-ended questions. Interpretations of results and potential directions for future research are presented..

## ■ Research leaves granted by EMU

The following is the list of those recipients who received a research grant from EMU, and their activities during this period of leave.

**Name and Surname:** Vedat Yorucu

**Title and Position:** Assoc. Prof. Dr. Department of Economics

**Duration of leave:** (1.07.2013 - 15.09.2013)

**Hosted university and country:** College of Europe (Europa College), Brugge-Belgium

As a visiting professor at Europa College in Bruges, a medieval city in Belgium, I was offered to do research on Natural Gas Exploration and Extraction in the Eastern Mediterranean region. I spent just over 10 weeks there, during the summer months covering the period from July 1<sup>st</sup> to September 15<sup>th</sup> 2013.

Aside from gleaning information pertaining to the diplomatic and political disputes surrounding the Eastern Mediterranean territorial waters, delimitation of maritime territories, and the sovereign rights of using Economic Exclusive Rights among Turkey, Cyprus, Greece and Israel, I also reviewed the related literature on natural gas reserves, extraction and exploration activities. The aforementioned information



retrieved was found mostly from articles published by the Institute of Energy Studies of Oxford University, European and International Energy Agency in Paris as well as the Claeys and Casteels Publishing Houses of Leuven. Through the initiation of Europa College, I was welcomed by Fluxys LNG Terminal of Zeebrugge, whose plants contained liquefaction and regasification as well as four retention tanks of \*45,000 and \*38,000 ton LNG capacity. I visited an LNG tanker of 266,000 ton LNG capacity, which was owned by Qatar and transported LNG's on a weekly basis. I also had a chance to investigate the security issues surrounding the LNG terminal. On top of this, I observed how inter-connector natural gas pipeline network transmissions were constructed between England and Belgium and also from Dutch Groningen to Zeebrugge both under the seabed and underground, respectively.

As well as the aforementioned investigative opportunities, I had a chance to gather statistical data regarding the pricing of Natural Gas in OECD countries. My intention is to further my research on the pricing model for natural gas in Turkey, using an empirical analysis approach.

I wish to thank the Eastern Mediterranean University Administration for giving me a research grant and the opportunity to pursue a research leave during the summer of 2013. The research grant helped me to undertake the aforementioned investigation which has enhanced my academic career. In fact, The European Commission has recently offered another short-term scholarship during the period from June 15th to Sept 15th, 2014, which will be a continuation of the previous ongoing research hosted by Europa College.

This research will certainly contribute towards new publications that will serve the academia as well as the practitioners in the field of energy studies.

**Name Surname:** Luca Zavagno

**Title & position:** Asst. Prof. Dr., Arts, Humanities and Social Science

**Duration of leave:** 6 months

**Host Organization and country:** Princeton University, USA

The Stanley J. Seeger Visiting Research Fellowship in Hellenic Studies at Princeton University funded the impending completion of my book about the island of Cyprus in the period between Late Antiquity to the early Middle Ages (ca.550-ca.800 C.E.) destined to be published by Cambridge University Press by early 2015. While in Princeton, my research proceeded along two main directions which included first, gathering the outstanding relevant sources which included literary, documentary and material evidence.

The second direction of my research, while at Princeton, involved access to library resources (mainly researching in the Firestone and at the McCormick-Marquand Libraries) which largely facilitated the task of writing the first two chapters of my book. The first chapter focused on the historiographical questions

regarding issues of status and the methodological concerns (as already mentioned above) with regard to the primary sources required in this research. That is, the testing and the setting of the most relevant contributions to the history of Byzantine Cyprus against the new archaeological data (especially those stemming from ceramic, seals and coins) must be regarded as essential to my project.

It was also quite fortunate to be in Princeton when the exhibition entitled, the "City of Gold" was held. This exhibition which was supported by Princeton university, and centered upon a thirty five year period of excavations in the area of Polis-Arsinoe. Indeed, this provided an opportunity to broaden the horizons of my research regarding Cypriot urban centers in the period under consideration. The context of Polis-Arsinoe is a good comparative case (to be contrasted with those sites I had already investigated and surveyed) and therefore, allowed me to highlight the degree of consistency among the Cypriot urban society and its economy.

The contribution of the Princeton Faculty was essential because, the archaeological aspect of my research benefited from the useful feedback provided by the Department of Archaeology.

Also, I have greatly benefited from my collaboration with the Museum of Numismatics in the Firestone Library, whose staff members have recently been involved in the re-appraisal of the excavations that were conducted in Antioch in the 1930s. The similarities between the preliminary results of the Antioch project and those stemming from my research in Cyprus have encouraged me to pursue new ideas which include changes affecting the nature of both commercial and exchange relationships in Cyprus. These changes have occurred without hinting at a catastrophic flip in the economic life of the island as Cyprus clearly remained a major producer and exporter of wares at both regional and interregional levels. The comparison with Antioch as compared with other urban and rural sites in Syria and Palestine- proved to be important when I wrote the chapter on the economic life of the island. This allowed me to shed light on the diversity of local differentiation of productive activities, as well as the substantial degree of continuity of agricultural resources, and also the persistence of coastal urban settlements having access to good trans-maritime commercial routes.

# An Entrepreneurial Tourism Project through Agro-Tourism: Evidence from Iran

By Hossein G. T. Olya , Habib Alipour, and Sara Dalir



Assoc. Prof. Dr. Habib Alipour



Sara Dalir



Hossein G. T. Olya

## Introduction

Annual precipitation in Iran is about 273 mm, less than one-third of the world's mean annual precipitation (Mahdavi 2004; Alizadeh 2005). The temporal and spatial distribution of rainfall is not uniform; about 75% of the nation's precipitation falls in a small area, mostly in the southern coast of the Caspian Sea, while the rest of the country receives insufficient precipitation (Ahmadi et al. 2009). Agro-tourism, as one of the newest types of tourism has attracted more attention in recent years. Nowadays, new concepts have emerged in this context with the development of the tourism industry in the world. Tourism is not just a trip (Fennell, 2006) but rather it is divided into various types of purposes and activities, such as new forms of leisure activities in the global market. Agro-tourism is one of these new forms of tourism where man and nature have close interactions. Concerns about ecological issues and the relation between man and nature as well as attention to the relevance between tourism and the environment have been of importance since the 1960's (Lancouvar, 2002). The considerable influence and impact of tourism on economic, political, social, culture and the environment have resulted in an evolutionary process in tourism, especially in the area of energy and community welfare with respect to the collaboration with

indigenous people and remote destinations.

Another entrepreneurial venture is desert tourism. According to Laing and Crouch, (2011, pg. 1516), 'Tourists in the modern era can visit remote and exotic 'frontier' locations, which may involve the re-enactment of exploration myths through the retracing of famous historical journeys'. In fact, many rural communities, especially in Iran, where deserts occupy a large land area, are located around the perimeter of the deserts. Most of these communities are dependent on specialized subsistence farming. Therefore, tourism can make a big difference in the livelihood of these communities. In this type of environment agro-tourism and desert tourism can be combined to offer a unique experience to tourists and the economic welfare of these communities as well as de-marginalizing them. Not to be overlooked is the fact that most of these communities are in a constant struggle for survival against the harsh environment (Papoli - Yazdi and Saghayi, 2006).

## Study Area

The south Khorasan province is a 102,460 square kilometer area and is located between 30° , 32' to 34° , 36' north latitudes and 57° , 01' to 60° , 57' east longitudes (Figure 1) (Badiee , 1983). It is 6.22 percent of the country's area. The south Khoarsen

province is bounded by the Razavi Khorasan province in the north, the Sistan and Balochestan province in the south, Afghanistan in the east and Yazd province in the west. This province consists of seven counties named: Birjand, Ghaenat, Ferdos, Nehbandan, Sarbisheh, Darmian and Sarayan. It also has 20 towns, 18 districts, 48 rural centers and 22,230 villages.

In the past, this region has experienced severe droughts and

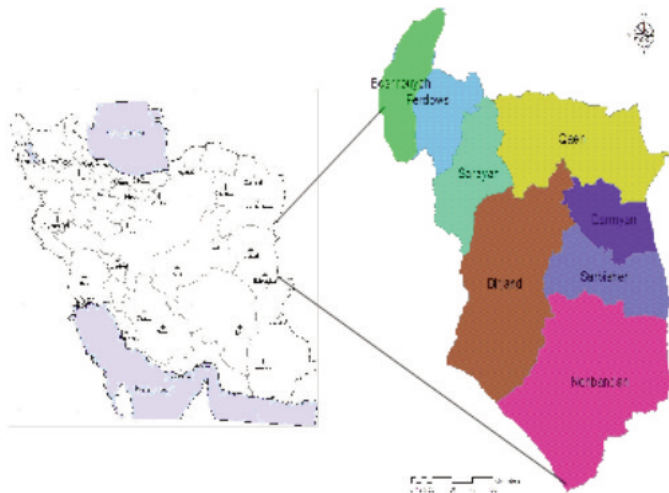


Figure 1. Location map of the study area. South Khorasan, Iran.

shortage of rainfall. This shortage has been pronounced even within this relatively humid region of the province in recent years. Prolonged droughts have threatened different sectors such as agriculture, natural resources and the environment resulting in enormous damages. In the region, where drought occurs on average once every four years, this uncertainty often results in conservative cropping strategies geared to the cultivation of low-risk, low water-consuming, low-value crops like wheat and barley (Nazari- Samani and Farzadmehr 2006). Therefore, the first stage of this research needs to map out the existing potentials within the province that are still compatible with deserts and arid biomes of the region and that are at least more profitable. Most of the saffron, barberry and jujube in the world is produced in the South Khorasan province of Iran. Climatic conditions, the elevation above sea level, and soil properties have led to a substantial commercial and medicinal value of these products which are exclusive to this province. It provides an extraordinary potential for the development of natural resources in this arid land. A case specific data collection and planning with regard to investment opportunities at the regional and local scale are some of the requirements needed to pursue the development of projects for such unique agricultural products such as saffron, barberry, and jujube. The existence of healthy and sustainable water resources and communication path through the communities is an important factor for the creation of agro-tourism centers.



Figure 2. Saffron plant endemic to the study area.

### The Design and Construction of Agro-Industry Complexes

After determining the potential areas and making a feasibility study based on the security of the region, a design and construction of the Agro-Industry can be initiated. Likewise, the design and selection of plant species for cultivation is crucial. Creation of recreational environmental sites and utilization of suitable plants to attract foreign and domestic tourists is necessary. Moreover, the breeding of some birds such as the ostrich, and mammals such as camels and livestock, aquaculture and the cultivation of ornamental flowers, may increase the benefits to and the authenticity of the environment.

### The Introduction of Scientific Knowledge at Different Levels

The installation of educational facilities as well as scientific research into plant species, phonological phases, and the application of these plants for medical and industrial use will bring extra income as well as a revival of some of the endemic species in this region. The following examples are some of the common plants in these areas.



Figure 3. Barberry as a commercial and medicinal shrub of the province





Figure 4. Jujube fruit.

### Saffron

Saffron, with its great potential, is the most important crop grown in South Khorasan province. The province is known for being the major producer of saffron in Iran and around the world. The cultivated area of this crop is about 10,554 hectares, which produce 50 tons of dry saffron per year (24.6 percent of the country's total production). That is, the dry saffron crop production is 4.54 kg per hectare (Figure 2).

### Barberry

The South Khorasan province produces 8,408 tons of barberry per hectare using 97 percent of the cultivated land and was the first to produce this crop in the country. The total yield comes from 6,442 hectares. The main regions for cultivation of this crop lie in the province of Darmian and portions from the Ghaenat towns (Figure 3).

### Jujube

The Jujube fruit is another crop cultivated and produced in South Khorasan province. This fruit is useful in culinary, medical and pharmaceutical industries (Figure 4). The province has a very high potential for cultivation of this crop and produces more than 96 percent in the country. Meanwhile, 93 percent of the cultivated land of Iran is in this province (about 699 ha). The cultivation yield of this crop is about 1,866 tons per year.

### Animal Husbandry and Fisheries

Previous studies have revealed that the existence of traditional and industrial cool and warm water pools make some of the semi-arid areas suitable for aquaculture. As well as the potential for aquaculture, there is a trend to export white meat from this province to other regions. The area can become self-sufficient in providing food supplies to the tourists. Especially, camel breeding is popular in the region, with about 15 percent of the total amount

of camels in the country raised here. In the fisheries sector, there are 127 aquaculture fields, both cold and warm water, with a total area of 43 hectares that produce more than 182 tons of fish per year. The number of honey bee units in the province is 12,740 units, with the resulting annual production of 20 tons of honey, which is mostly sold to domestic and regional markets. These products have numerous implications for entrepreneurial tourism.

### Conclusion

This study attempted to develop a practical model towards the development of marginalized rural areas with unique environments. This is possible through the combination of agro projects, tourism services, and entrepreneurial agro-tourism (See Figure 5). However, it must be adapted to these unique environments and their culture. This is a supply side approach; that is, the market/demand needs to be identified with respect to these potentials. With the strong

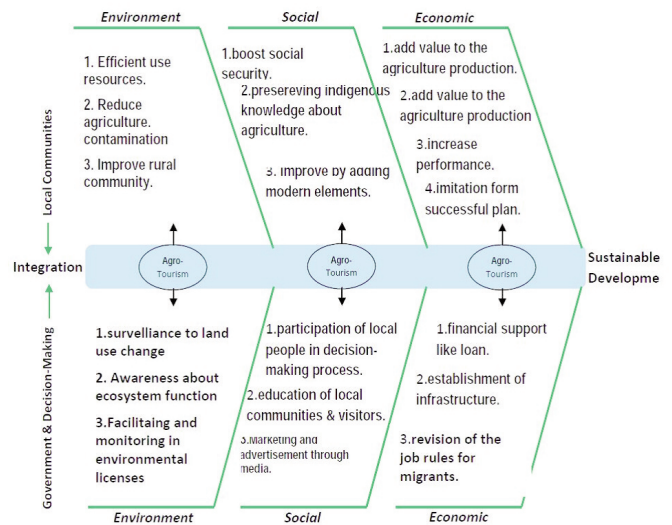


Figure 5. Multifunctional Agro Tourism model. Adopted from Yang et al (2010).

domestic market and a rapidly growing international market, both seeking unique tourism products, this issue can be tackled. It is believed that an entrepreneurial approach will stimulate innovative ideas in agriculture and tourism programs, which will result in the growth of agro-tourism (Yang et al, 2010).

This process and its practical nature have been considered as entrepreneurial activities because of the creativity and innovation of the farmers at cultivating and harvesting crops. Also, there are many orchards in this region as well as other unique products. In spite of many unfavorable conditions, the province of South Khorasan has great potential for viable plants such as saffron, barberry and jujube. Not only foreign tourists, but also, domestic tourists are interested in visiting the different phonological stages including the harvesting and processing stages. Consequently, with suitable management, desert land which bears unfavorable environmental conditions could be converted to a desert biome with commercial and medical value; not to mention the importance that natural resources and pristine

environments have for tourists from industrialized regions (Rahbar, 2000). Agro-tourism can contribute to the integration of the deprived rural areas and close the gap that exists between marginalized regions and urban areas. In addition, agro-tourism presents a pathway towards sustainable practice and rural institutional building capability .

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# Meeting of New Online Contacts: Changes in European Children's Patterns of Sociability

By Monica Barboschi, Vera Kontrikova, Fatih Bayraktar



*Asst. Prof. Dr. Fatih Bayraktar*

## Introduction

Children and adolescents contacting new people online and meeting them offline has been met with numerous concerns regarding the safety issues and the specific factors which might account for this practice. Previous works have dealt with explanations connected to internet access and type of use (Hasebrink et al, 2011; Livingstone et al, 2011), psychosocial factors and risk behaviour online and offline (Barbovschi et al, 2012; Smahel et al, 2012) and focused less on how children making contact with new people online and meeting them offline is connected with a new type of sociality enabled by internet and new media. Also, previous research has not yet taken into consideration country level predictors, which have been indicated as playing a significant role in shaping young people's online communication and patterns of internet use (Lobe and Olafsson, 2012). Drawing from the quantitative data collected by the 'EU Kids Online' network and data from the 'European Values Survey', 2008, this article contributes to the body of research on the changes in the nature of sociality and connectivity of children; changes fuelled by the widespread use of social media. This article looks at how different individual backgrounds (family type) and country-level measures of importance of family, friendship and interpersonal trust play a role in children's practices of expanding their social connections/ circle of friends via online communication and meetings offline with new people met online.

The internet (and especially social media) has radically changed the dynamics between individuals and their social

context, with the online communication bringing its own features to the child and adolescent development (see Valkenburg and Peter, 2011). Even before the internet, the rise of "personalized networks" (Wellman, 2001) has meant that traditional groups (family and other close social ties) have started to play a smaller role in individual choices in terms of breadth and depth of connections, while the emergence of computer mediated communication has contributed to the development of increasingly diverse social networks. The ubiquitous proliferation of social media among all age categories means that children and young people nowadays also enjoy greater flexibility in forming multiple, fragmentary and more diverse social bonds. The particular appeal of social media among young people has been linked to the enabling of peer-based sociality, identity formation and expression, and participation in cultural and public life (Boyd, 2007). Building on this theoretical corpus, this paper examines the impact of family type, perceived importance of family and friendships, and interpersonal trust on children's offline meetings with online contacts which is described as one of online risky behaviors (Livingstone et al., 2011) but at the same time can constitute a means for young people to expand their social circle. Late childhood and adolescence is a period of gaining autonomy, when peer relations and romantic partners become more important than family (Carlo et al., 1999). However, the family relations keep their decisiveness for the behavioral and cognitive outcomes of children and adolescents (Simpkins et al., 2009). From the viewpoint of the Ecological Theory (Bronfenbrenner, 1979), these two social agents (i.e. peer group and the family) form the Microsystem -the system which directly influences the development of the individual. Accordingly, peers and families might play an important role in young people's meetings offline with online contacts.

Although there is a lack of empirical evidence which shows direct associations between importance of family, family structure and meeting online contacts offline, the literature on parental mediation of children's internet use can give some hints. For example, perceived family support with high quality communication on internet use was found to be negatively related with risky online behaviors (Appel et al., 2012). The literature on social capital also can help us to understand this association: having new online contacts (especially the "bridging" type of social capital) was not related to the proximity with parents or the family structure (e.g.Best



and Krueger, 2006). In sum, the relation between specific family backgrounds and meeting online contacts offline remains unclear. As aforementioned, peers are one of the most important socializing agents for children and adolescents. Studies have shown that children and adolescents' offline relationships continue online (Bayraktar and Amca, 2012; Subrahmanyam and Greenfield, 2008) and one third of European children use internet to make new contacts (Livingstone et al, 2011). In other words, the internet works as a socialization context in which existing friendships continue and/or new contacts are made. Accordingly, meeting online contacts (but not complete strangers) "in real life" is generally for extending social networks (Best et al, 2006) and can be an indicator of giving importance to friendships. However, recent reports suggested that meetings offline with online strangers can increase the social risks especially for younger and vulnerable children (Barbovschi et al, 2012).

One of the key psychological constructs in offline and online relations is trust. Numerous studies indicate that young people form the roots of trust within the family and continue to develop it within peer relations (e.g. Schneider and Younger, 1996; Silver, 1989). Therefore, trust can be a tool for the adaptive social integration of youth. Accordingly, the literature on dyadic and general trust handled this construct as a protective factor against risk behaviors and a catalyzer of socialization (Uslaner, 2000). Recent research showed that trust of parents and friends might be related to a more secure social environment and less risk taking behaviors among young people (Engels, & ter Bogt, 2001) and general trust can increase the social networks via internet (Best et al, 2006). Nonetheless, the relationship between trust and risk is not unequivocal (Nickel & Vaesen, 2012), one approach pointing towards "risk-averse" (Gill, 2007) societies being more likely to discourage interpersonal trust (which includes trust in strangers) and risk-reduction strategies decreasing the actual need for trust (Nickel & Vaesen, 2012, p. 861). In addition to this, a number of researches showed that under certain conditions such as sensation seeking, interpersonal trust can increase risk behaviors (Jones, 2004).

## SAMPLE AND METHODS

The EU Kids Online II project (EUKOII) data collected in 2010 from 25 European countries was used. Each country's subsample is representative and contains at least 1000 children aged 9 to 16 (Görzig, 2012). The dependent variable was based on the question: "Have you ever gone to meet anyone face to face who you first met on the internet in this way?" Significant differences across countries in the rate of meeting online contacts offline were noted ( $\chi^2(24) = 674.39$ ,  $p < 0.001$ ), and for more information see Livingstone et al. (2011). The typical family was assessed as a household with two parents compared to a household with only one parent or other settings. In addition to the EUKOII data, European Values Study (EVS) data collected in 2008 from 47 European countries (EVS, 2011) was used. The country means of importance of family and importance of friends were computed to serve as country-level predictors. Interpersonal trust was created as the proportion of respondents from each country, who agreed with the statement that most people can be trusted. Importance of family, importance of friends and also interpersonal trust varied significantly across countries ( $F_{family(46)} = 57.20$ ,  $p < 0.001$ ;  $F_{friends(46)} = 152.98$ ,  $p < 0.001$ ;  $\chi^2_{trust(46)} = 8487.00$ ,  $p < 0.001$ ). Importance of family and importance of friends correlated only weakly ( $r = 0.20$ ,  $p < 0.001$ ). Descriptive statistics of all predictors are summarized in Table 1.

## RESULTS

A two-level hierarchical logistic regression was conducted using STATA (v. 12). The multilevel approach was necessary because children were nested within countries and cross-country differences were identified in previous analyses (Lobe and Olafsson, 2012). The odds of meeting online contacts offline increased nearly 1.5 times with every year of the children's age. No gender difference was found. Children living in households with both parents are less likely to engage in such meetings (the odds are reduced to 85%). If the importance of family is the only country-level predictor, it significantly lowers probability of meeting online contacts

Table 1. Description of predictors and their relationship with meeting online contact offline (based on EU Kids Online II dataset extended by variables computed from European Values Study data).

	N	M	SD	Min	Max	Have met online contact offline		
						Yes (%)	No (%)	Yes vs. No
<i>Individual-level (EUKOII)</i>								
Age (years)	25142	12.48	2.25	9	16	M = 14.17 (SD = 1.80)	M = 12.52 (SD = 2.22)	$\chi^2(3012.5) = 39.63^{***}$
Gender (male)	25142	1.50	0.5	0	1	49.1%	50.5%	$\chi^2(1) = 1.60$
Typical family (yes)	24901	0.78	0.41	0	1	74.8%	78.5%	$\chi^2(1) = 15.42^{***}$
<i>Country-level (EVS)</i>								
Importance of family	25142	3.83	0.08	1	4			
Importance of friends	25142	3.36	0.18	1	4			
Interpersonal trust	25142	35.97	18.80	9	76.1			

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

offline. But when importance of friends and trust in people are added, importance of family is no longer significant. However importance of friends lowers the odds of meeting online contact offline to 14% with every unit. Contrarily, the trust in people increases the odds of the meeting by 20% with every 10 units. Model generation process is captured in Table 2.

## CONCLUSION

Almost one third of European children and adolescents have contacted new persons online and nine percent have met face-to-face someone contacted in this way. Clearly, young people's new practices of extending their social circle via online tools can be linked to both changes in the means of connectivity and broader social factors. At an individual level, children from atypical families are more inclined to go to meetings with people met online. In countries with a decreased emphasis on family life, children are more inclined to extend their social networks through meetings with online contacts. Surprisingly, the decreased importance of friendship at the country level (which should more likely be interpreted as a reduced reliance on close, face to face interpersonal relationships) could signify a tendency towards a more flexible, expansive and fragmentary type of personal net-working. Interpersonal trust at country-levels increases the probability of meetings, which could indicate lower perceived risks from online relationships. Also, interpersonal trust has been positively linked to increased social and participatory media use (Romer, Jamieson and Pasek, 2009). However, trust works in a gradual way, meaning that as soon as enough trust is established, the relationships are moved from the online to the "real life" (Bargh and McKenna, 2004). The contribution of this piece of research is related to the incorporation of country-level predictors in explaining young people's formation of interpersonal relationships. However, the limitations stem from the quantitative design which offers an apriori modeling of the investigated phenomenon. More research should

investigate in-depth connections between psychosocial individual factors and societal tendencies in shaping young people's social integration

## ACKNOWLEDGEMENT

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Table 2 Estimated coefficients for the prediction of meeting online contacts offline among European children and adolescents: Multilevel logistic models with random intercept (N = 21161).

	Model M1		Model M2		Model M3	
	B (SE)	OR	B (SE)	OR	B (SE)	OR
Individual-level						
Age (years)	0.40 (0.01)***	1.48	0.40 (0.01)***	1.48	0.40 (0.01)***	1.48
Gender (male)	-0.03 (0.05)	0.97	-0.03 (0.05)	0.97	-0.03 (0.05)	0.97
Atypical family (yes)	-0.16 (0.06)**	0.85	-0.16 (0.06)**	0.85	-0.17 (0.06)**	0.85
Country-level						
Importance of family			-4.72 (1.26)**	0.01	-2.27 (1.32)	0.10
Importance of friends					-1.96 (0.65)**	0.14
Interpersonal trust					0.18 (0.05)***	1.20
Constant	-7.49 (0.23)***		10.59 (4.81)*		7.22 (3.99)	
Country-level						
Variance	0.414		0.258		0.159	
	(0.124)		(0.080)		(0.050)	
LL	-6123.6***		-6118.0***		-6112.4***	
C	12257.3		12248.0		12240.8	
C	12297.1		12295.8		12304.5	

Note: \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001, †LR-test: M1 vs. M2  $\chi^2(2) = 12.39, p < 0.01$ , ‡LR-test: M2 vs. M3  $\chi^2(1) = 0, p < 0.01$

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## About the Researcher

*Asst. Prof. Dr. Fatih Bayraktar* got his bachelor degree in Psychology at Middle East Technical University. He continued his postgraduate education in Developmental Psychology at Ege University and Hacettepe University. He worked in Masaryk University of the Czech Republic as a post-doctoral research fellow between 2012-2013. Some of his wide research interests are pro/anti-social behaviors among adolescents, traditional/cyber-bullying, and online behaviors among children and adolescents.



# Performance Breakdown Effects Dissociate from Error Detection Effects in Typing

By Dr. Çığır Kalfaoğlu and T. Stafford



Dr. Çığır Kalfaoğlu

Error actions during skilled actions such as piano playing or typing has been shown to be slower and weaker than correct actions in these tasks such that pressing of the letter 'a' when it is incorrect takes longer than when it is correct. This slowing down of incorrect actions in skilled performance is referred to as error slowing (Schaffer, 1975; Rabbitt, 1978). Typically, actions following the error actions are also slowed down, and are referred to as post-error slowing. More recently, piano players have been shown to slow down before an error is made. This finding has raised the possibility of early error detection. As such, it might be possible that piano-players 'knew' that they were going to make mistakes, and slow down up to three key-presses before the error (Herrojo-Ruiz et al. 2009). However, one competing explanation for pre-error slowing during piano-playing is left untested: Pre-error slowing in piano playing might be indicative of performance

breakdown which overshadows the upcoming error. This appears as slowing down before the error but should also be apparent as an increased variability before the error (compared to correct actions).

## Aim

The aim of the study was to study the changes in performance speed before, during and after error key-presses, and compare it to performance before, during and after correct key-presses matched for word length and letter position in the word. Namely, we compared pre-error variability and speed to those before matched correct key-presses; compared typing speed during and after an error to that during and after correct key-presses.

## Methods

We asked skilled typists to type 100 sentences as we recorded their key-presses. We extracted the time elapsed between each of the key-presses as an index of typing speed and whether the key-press was an error or not. We further split the errors into corrected (by backspace) and uncorrected errors. If pre-error slowing observed in piano-playing is caused by error awareness, then it should be greater during corrected errors than uncorrected errors.

## Results

We found that typing speed before the errors was no different than the typing speed before matched correct key-presses (neither for correct nor uncorrected errors). See the figure 1 below. We also found that typing performance

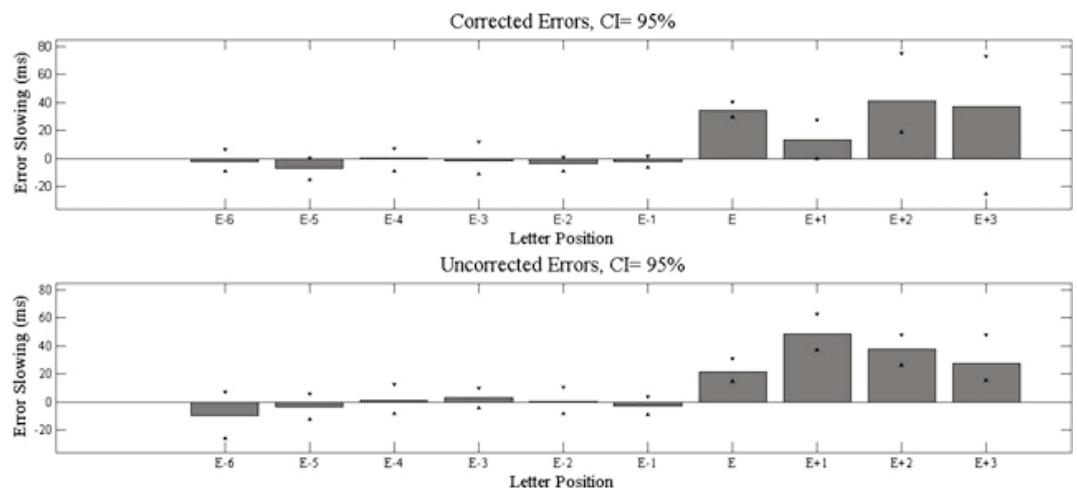


Figure 1: The bar charts show average error slowing in milliseconds. Letter positions are shown such that "E" corresponds to the error key-press, "E-1" corresponds to the letter typed before the error, and "E + 1" corresponds to the letter typed immediately after the error. CI = confidence interval. Error bars show 95% confidence intervals obtained by bootstrapping based on 1000 resamples.

before errors was associated with a much higher variability in speed compared to that before matched correct key-presses. Furthermore, variability before uncorrected errors was no different than that which occurred before corrected errors. See table 1

### Conclusions

In summary, we show that in typing, i) performance before errors was no slower or faster than that before correct key-presses, ii) error and post-error key-presses are slower than matched correct key-presses, and iii) errors were preceded by greater variability in speed than were matched slowing, which are sensitive to error detection can be disassociated from pre-error changes in performance, which is not affected by error detection, but rather by errors themselves

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All = **Table 1.** *Across-participant average variability in precorrect, preerror, precorrected error, and preuncorrected error key-presses*

<i>Key-press</i>	<i>Pre-key-press IPR (ms)</i>	
Correct	41.87 (8.21)	pre=correct, pre-error key-presses. Values in parentheses show the standard deviation associated with each average. Note that these values show the grand average of all variability measures, before matching the error words to correct words for word length and letter position.
All errors	54.52 (14.31)	
Corrected errors	53.73 (13.97)	
Uncorrected errors	55.79 (15.56)	

### About the Researcher

*Assistant Prof Dr. Çiğır Kalfaoğlu* was born in Nicosia in 1985. He graduated from the Faculty of Psychology, Wilfred Laurier University, Ontario, Canada with a BSc. degree. He completed his Masters in the field of cognition and neuro-science earning an MSc. from the University of Nottingham, England, where he studied how brain damage effected behavior. After completion of his Master’s degree, he continued to pursue his PhD. at the University of Sheffield, U.K. where he used electroencephalography to study how we could detect typing errors which gave rise to further interesting and intellectually challenging research projects. He is presently employed as a new staff member at EMU in the department of Psychology. He hopes to stimulate students by sparking their curiosity with the challenges involed in understanding the brain.

# A Novel Magnetic Functionalized Eggshell for Adsorption and Detoxification of Multi-contaminants in Wastewater: A Low-cost Approach to Industrial Waste treatment

By Akeem Adeyemi Oladipo



*Akeem Adeyemi Oladipo*

The following is a concise explanation of a novel idea to detoxify and treat industrial wastewaters using a low-cost bio-friendly adsorption technique. I am currently working on designing separable low-cost adsorbents or carriers for bio-environmental applications under the supervision of Assoc.Prof.Dr. Mustafa Gazi and collaborative efforts of Prof. Dr. Elvan Yilmaz and the entire polymer chemistry group of EMU.

## Introduction

The increasing presence of multi-contaminants in industrial wastewaters has gained wide public interest as a pervasive environmental problem. Industrial effluents containing stable and persistent environmental contaminants such as toxic heavy metals, hazardous dyes and carcinogenic pollutants are a serious threat to the health of both aquatic and human life (Oladipo et al. 2013). The detoxification of these contaminants is of paramount environmental concern. Although the use of varying adsorbents such as polymer matrix, activated carbon and agricultural wastes (Gazi and Shahmohammadi, 2012) have been reported, however, the separation of the adsorbents after use becomes difficult and little is known about the combined influences of two or more contaminants and simultaneous detoxification or removal of these contaminants from a mixture of pollutants in industrial wastes. It has been reported that the accumulation of contaminants in the human body causes serious health disorders (Oladipo et al. 2013) and the need to eradicate these threats efficiently by using low-cost adsorption techniques is the objective of my research. Some of the known techniques, such as ion -exchange, require high operational

costs. Electrolysis is inefficient to remove or detoxify low concentration contaminants and membrane techniques suffer from instability in a pH-sensitive medium. Chicken eggshells are one of the main by-products of the food and snacks industries. The eggshell amounts to approximately 9% of the whole mass (45g) of the chicken egg, constituting a major waste from egg-related products, and the chicken eggshells are traditionally and commonly thrown into landfills. The eggshell has been reported to contain magnesium carbonate (1%), organic matter (4%), calcium carbonates (94 %-) and calcium phosphate (1%) according to Chojnacka (2005). The chicken eggshell is highly porous and consists of a three-pillared structure; namely, the mammillary internal layer, the spongy calcareous layer and finally the outer cuticle surface. The eggshell has demonstrated to be a low-cost adsorbent as utilized by various researchers (Chojnacka, 2005). Even though the application of eggshell as adsorbent is economical, however, its capacity needs to be enhanced and its recovery after use is another important aspect to consider for sustainability. The rapid growth in industrial units and the high cost of effluent treatment has led to increasing health disorders, as most industries emptied their waste into the water bodies with less pre-treatment or inefficient low-cost treatment processes incapable of detoxifying multi-contaminants. In this study, eggshells were collected from restaurants in Famagusta, pre-treated and converted to fine powder particles of less than 2mm. The powder eggshell was then coated with iron oxides using a domestic microwave and modified with EDTA. The novel adsorbent is smart, economical and designed to detoxify multi-contaminants in waste-waters.

## Objectives

The overall objective of this study is to contribute to the improvement of the practical capabilities in industrial effluent treatment in rural and urban areas by means of developing novel, separable, low-cost adsorbents with enhanced adsorption capacity and reusability for sustainable treatment processing. The purpose of this paper is to apply biological, mathematical and economic models to formulate a relationship between the MEG-EDTA efficiency (output) and the cost-benefit of the adsorbent as well as the adsorption parameters (input).

## Innovations of the research

- Mathematical models (Box-Behnken and Taguchi) were applied to



understand the optimum adsorption conditions for a real treatment process.

- Economic models such as cost-benefit analyses, alternative selection and cash flow were utilized to evaluate the advantages of the synthesized adsorbent.
- Artificial Neural Network Model was applied to describe the relationship between the adsorbent efficiency and the adsorption factors.
- The adsorbent was designed to also proffer photocatalytic behavior to degrade multi-contaminants in wastewater.

## Methodology

Chicken eggshell wastes were collected from restaurants within Famagusta, washed with bi-distilled water and dried at 120 °C. The dried eggshell was ground and reduced to a fine powder, washed again and dried in an oven. A pre-weighed amount of eggshell powder was immersed in 40mL FeSO<sub>4</sub>.7H<sub>2</sub>O (20% w/v) and then irradiated in a domestic microwave (model no: Saachi 06345NL, 1200W) for 5min to precipitate the iron oxide on the eggshell surface and later modified with EDTA to produce an efficient adsorbent labeled MEG-EDTA.

Batch adsorption experiments were performed for a single-sorbate system for adsorption of crystal violet dye (CV), copper (II) ions, zinc (II) ions and Nickel (II) ions onto MEG-EDTA. In a multi-sorbate adsorption process, four tetra-sorbate systems of CV (Cu (II) + Zn (II) + Ni (II) as coexisting sorbates), Cu (II) (CV + Zn (II) + Ni (II) as coexisting sorbates), Zn (II) (CV + Cu (II) + Ni (II) as coexisting sorbates), Ni (II) (CV + Zn (II) + Cu (II) as coexisting sorbates) and four tri-sorbate systems and four bi-sorbates systems (other contaminants as coexisting sorbate) were prepared.

Effects of adsorption parameters such as pH, adsorbent dosage, agitation speed, temperature and initial concentrations were performed and optimum adsorption conditions were obtained. Adsorption efficiency was calculated in single and multi-sorbate systems using the following expression:

$$\text{Adsorption efficiency}(\%) = \frac{C_i - C_e}{C_i} \times 100 \quad (1)$$

Mathematical models were utilized to design a cost effective treatment plant and to achieve a specified pollutant removal percentage at a known volume of effluents in the adsorption process. Data obtained from the adsorption experiments were applied for determining the economic analyses.

## Results and Discussion

Effluent treatment requires major budgets worldwide, so the need to apply economic models becomes paramount for wastewater treatment processing on a simulated scale and real application scenario. In this research, economic models such as a cost-benefit technique, cash flow analysis and alternative selection models were utilized to evaluate the economic suitability of MEG-EDTA for single and multi-contaminants adsorptions. A commercially activated carbon was selected as an alternative adsorbent to MEG-EDTA due to its wide use and adsorption capacity.

Cash flow techniques have been designed for the use of MEG-EDTA and commercially activated carbon in the adsorption of contaminants in single- and multi-sorbate media. In the pilot experimental research, the process life (n) obtained was that of 4 years. The interest rate (i) also obtained was 14% in the cash flow models expressed as follows:

$$PC = G \left( \frac{1 - (1 + ni)(1 + i)^{-n}}{i^2} \right) \quad (2)$$

Where PC is the present cash (\$), n is process life, G is gradient (\$/period) and i is the interest rate per period.

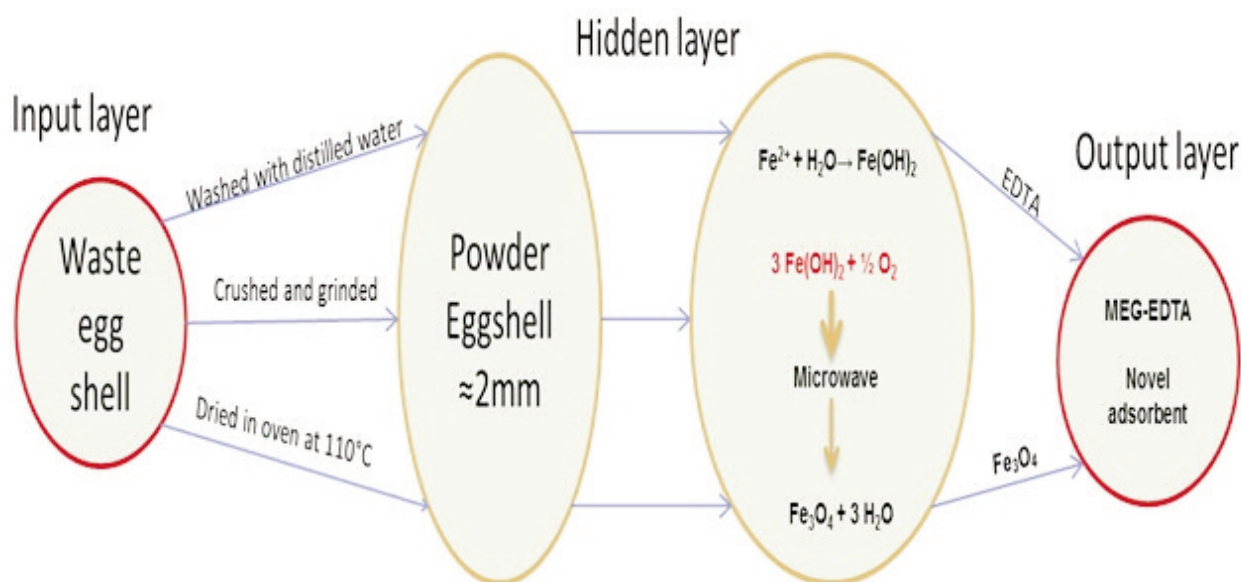


Figure 1. Artificial neural network structure for MEG-EDTA preparation

$$FC = \frac{G}{i} \left( \frac{(1+i)^n - 1}{i} - n \right) \quad (3)$$

Where FC is the future cash and is very paramount in the cash flow model.

The adsorption isotherms in a single-sorbate system indicated that CV was favorably adsorbed on MEG-EDTA over Cu (II), Zn (II) and Ni (II) and a similar result was obtained in the multi-sorbate systems at the same initial concentration. The presence of Cu (II) and Ni (II) in bi-sorbate systems appears to increase the adsorption capacity for Zn (II) and this synergistic effect can be interpreted as the surface complex formation changes of the MEG-EDTA surface characters, this further enhances the adsorption of Zn (II).

## Conclusion

In this research, economic models were applied to adsorption processing of multi-sorbate systems by utilizing results obtained from batch adsorption studies performed under optimized experimental conditions. The cost-benefit analysis was examined to evaluate the beneficial advantages of using low cost magnetic eggshell adsorbent (MEG-EDTA) and the expenses involved in a pilot-scaled plant. At the end of our research, it was concluded that MEG-EDTA displayed a high adsorption capacity of multi-contaminants in simulated wastewater and

was also highly efficient, reusable and more advantageous compared to commercially activated carbon. The models applied promise to achieve significant results in the field of environmental science.

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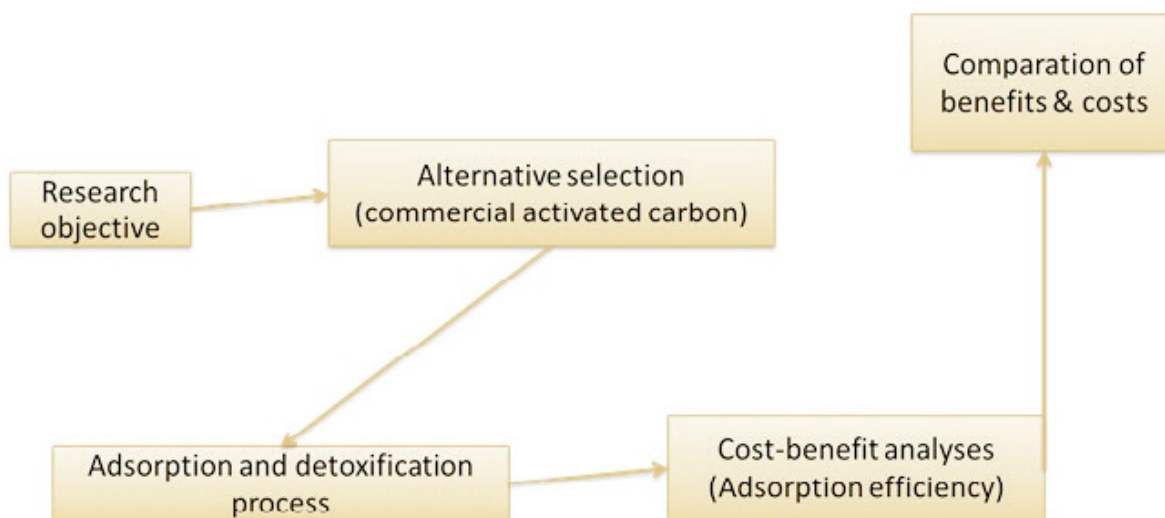


Figure 2. Economic analysis for the treatment process

## About the Researcher

*Akeem Adeyemi Oladipo* is currently pursuing his PhD at the Department of chemistry. He has been working as a research assistant in EMU since 2010. Akeem is a trained chemist and member of the American Chemical Society, Society of Chemical Industry and Society of Environmental Toxicology and Chemistry.

## Architecture Graduate Student



*In this issue, EMU Research Newsletter hosts a Ph.D. candidate, Timothy Onosahwo Iyendo from the Department of Architecture*

- **Could you tell us a bit about yourself? Your nationality, academic and professional background, experience, research activities.....?**

My name is Timothy Onosahwo Iyendo, and I am a Nigerian citizen. I came to study at EMU in February 2010 for the pursuit of an extensive educational career. I acquired my bachelor of technology degree in Architecture in 2006 from the Federal University of Technology, Yola (FUTY), Adamawa State, Nigeria. I obtained my master's degree in the field of Architectural Acoustics (multipurpose sport complex halls) from the Department of Architecture at EMU in August 2011. I am presently pursuing my doctor of philosophy (Ph.D.) education in the Department of Architecture, specializing in the field of Hospital Acoustics. I am also serving as a full time research assistant for the same Faculty. I have made some contributions towards the knowledge of various educational aspects in architecture and I believe that I have a flair for acquiring new skills.

- **Could you please give us some information on your department and the post graduate programmes?**

From a broader perspective, the Faculty of architecture is for me the most fascinating Faculty at EMU. One of the most attractive features that make this Faculty an ideal place for learning is its cool atmosphere and architectural landscaping. The Faculty accommodates intellectual, enthusiastic, dedicated and qualified Professors who are involved in diversified research. This diversification of research provides students with an interdisciplinary research approach and an authentic education. The graduate programs offered cover a variety of

architectural research topics which introduce students to a wide range of concepts, and theories which foster practical decision making skills and enable students to make better choices in architecture and other related interdisciplinary fields.

- **Could you define 'good research' for us?**

For research to be effective one has to pursue a rigorous investigation of the topic of interest and it must be written up using the scientific methodology. Once the topic has been established, the investigation should highlight the gaps that need to be addressed. It must also consist of a theoretical framework and avoid a lot of repetition of existing techniques. A description of the proposed data sets should be included as well as the appropriate statistical packages to be used for analysis. A research paper should offer substantial interpretation which includes new scientific ideas and presents a practical and significant application approach to the study and that also has implications for further studies.

- **Could you tell us about the research you've been working on with your supervisee and its significance in your research field?**

My research topic deals with a unique area of study. The main aim of the research is to investigate the effect of noise in hospitals on behavior. The study concentrates on determining how much noise might be mitigated through design and materials or equipment changes. The theoretical framework of the study would test a Famagusta Government hospital with the aid of acoustic model testing to identify the level of noise and other factors through a technique known as "Auralization". This will be finally achieved through the use of a personal computer software called "ODEAN" software to predict the acoustic defects of the hospital. Our study is expected to contribute to the body of knowledge on acoustics in architecture by familiarizing both practicing and potential designers and architects of the appropriate modern design strategies and the relevant options needed to effectively control and manage the effects of sound within Hospital spaces.

- **Do you have plans to promote this research to a wider audience? (conferences, publications)**

Yes, we are currently working on four conference papers; two of the papers are centered on hospital acoustics and the other two are in a related field, which include "Climate Responsive Building Designs in North Cypriot



Settlements" and "Day-lighting in Hospital Premises". Our main priority is to upgrade and publish the ascertained research outcomes in scientific indexed journals.

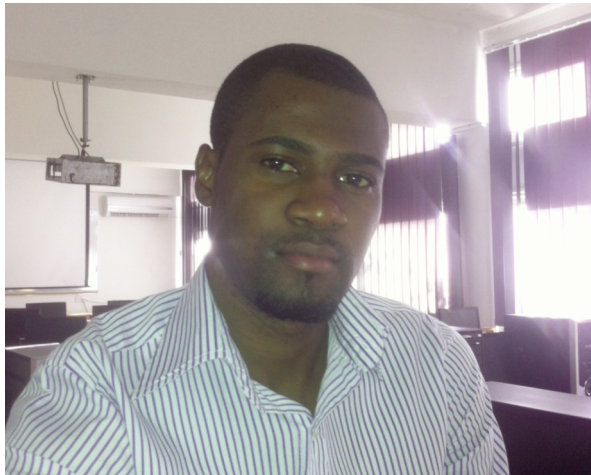
■ **What has been the most fruitful aspect of the collaboration between you and your supervisee?**

I am indebted to my indefatigable supervisors, Prof. Dr. Mesut B. Özdeniz (Department of architecture, European University of Lefke) and Asst. Prof. Dr. Halil Z. Alibaba (Department of architecture, EMU) for their keen interest and continuous guidance of my research work, despite their tight academic schedules. The finest contribution towards advancing my research was the conscientious effort and constant attention which they have shown me and hence, influencing my research outcome in a positive way, demonstrating their impeccable technical know-how and advanced knowledge in the field of Hospital acoustics. Our collaboration as a team has been so resourceful that it is taking us up to the next level as we continue to crave for excellence in research.

■ **What advice would you give to researchers involved in post-graduate research?**

Post graduate research requires determination, dedication and hard work. My advice for the already enrolled post graduate student is to be enthusiastic, committed, and show great interest in their research work. Perseverance is an essential attribute as is motivation to learn in order to glean the benefits of the advanced educational learning tools available at EMU and to successfully attain significant research goals.

## Mechanical Engineering Graduate Student



*In this issue, EMU Research Newsletter hosts a Master student, Ayoola Olamide Afolayan, from the Department of Mechanical Engineering*

- **Could you tell us a bit about yourself? Your nationality, academic and professional background, experience, research activities.....?**

My name is Ayoola Olamide Afolayan. I am a Nigerian. I completed my Bachelor's Degree in Mechanical Engineering at the Federal University of Technology, Minna, Nigeria. I came to North Cyprus in September of 2012 and I am currently enrolled in an MSc Program in the Department of Mechanical Engineering, EMU.

- **Could you please give us some information on your department and the post graduate programmes?**

It goes without saying that the Department of Mechanical Engineering is performing outstandingly well at EMU by producing unparalleled student performance which is a direct result of the relentless tutelage of the academic facilitators and instructors within the department. Also the range of courses offered both at the undergraduate and postgraduate level are structured primarily to ensure students' intellectual development. The conducive academic environment also accounts largely for the students' academic exposure. So far the experience here has been academically rewarding.

- **Could you define 'good research' for us?**

A research is a diligent, systematic and dogmatic inquiry or investigation into a subject matter in order to discover facts, theories and applications. It also involves the meshing

together of both synthetic and creative knowledge in solving both old and new problems thereby resulting in new developments and technological innovations.

- **Could you tell us about the research you've been working on with your supervisee and its significance in your research field?**

The purpose of my ongoing research is to investigate the effect of tank size on the temperature distribution for solar water heaters. The study focuses on the performance of solar water heaters under Cyprus conditions and I hope to propose alternative usage patterns together with different tank capacities in order to optimize the system. Solar hot water heating systems are a common phenomenon which most households in Cyprus employ in heating water for domestic consumption. Therefore, this study will help determine the optimum tank capacity required for daily domestic hot water usage.

- **Do you have plans to promote this research to a wider audience? (conferences, publications)**

Yes, we certainly have that in mind as a future prospect.

- **What has been the most fruitful aspect of the collaboration between you and your supervisee?**

My supervisor (Prof. Dr. Ugur Atikol) is an unparalleled intellect in this field of study and has extensively heightened my horizon in the course of this academic research. I can unequivocally describe him as a meticulous and dogmatic supervisor. He will go to any extent to ensure that he has fully impacted his supervisees with the necessary knowledge needed to carry on research of this nature. My collaboration with him has broadened my knowledge in this field of study tremendously..

- **What advice would you give to researchers involved in post-graduate research?**

My advice to them is that research is the key to an innovative future. Hence, the library, going by the standard of the EMU library, should be a one stop place for the execution of concise research work. This opportunity should be grabbed and maximally utilized by every researcher at EMU.

## Fall (2012- 2013) - Spring (2012- 2013) Postgraduate Degrees

The Following is the list of students who have successfully completed their postgraduate degrees in Fall 2012 - 2013 and Spring 2012 - 2013. This list has been provided by EMU Institute of Graduate Studies and Research on 22 November 2013.

### ■ LL.M. ■

Irmak Aslan

*Thesis Title:* Türk Milletlerarası Tahkim Hukukunda Hakem kararlarının İptali

*Supervisor:* Turgut Turhan

Pınar Alkım Bekar

*Thesis Title:* Türk İş Hukuku'nda Esneklik

*Supervisor:* Turgut Turhan

Mustafa Erçakıca

*Thesis Title:* Devletlerin Tanınması ve Kuzey Kıbrıs Türk Cumhuriyeti

*Supervisor:* Ayşe Füsun Arsava

Feride Hamzayeva

*Thesis Title:* İnsanlığa Karşı Suçlar Bağlamında Soykırım Örneği

*Supervisor:* Ayşe Füsun Arsava

### ■ M.A. ■

#### **Communication and Media Studies**

Fransis Adaobi Ezekwe

*Thesis Title:* A Histriography of Nigerian Government Image and Image Repair Efforts since independence : A Public Relations Approach

*Supervisor:* Baruck Opiyo

Ceyda Öztosun

*Thesis Title:* Representation of Women Politicians in the Turkish Media

*Supervisor:* Süleyman İrvan

Özlem Toren

*Thesis Title:* The Presentation of International Women's Day on TRNC Media

*Supervisor:* Nurten Kara

Benjamin Bailie

*Thesis Title:* Meaning Making in the News: A Discourse Analysis on Global Protest

*Supervisor:* Tuğrul İlter

Esma Sena Çatak

*Thesis Title:* FEMA and Feminism in Gaile's Back Page: A Content Analysis Study

*Supervisor:* Hanife Aliefendioğlu

Günay Sadikhova

*Thesis Title:* International News Coverage: Nagorno Karabakh Conflict in the New York Times Newspaper

*Supervisor:* Nurten Kara

Fredrick Leica Oloo

*Thesis Title:* "Instagratication": Uses and Gratification of Instagram by University Students for Interpersonal Communication

*Supervisor:* Agah Gümüş

Rosalyn Akpene

*Thesis Title:* The Role of Facebook on Nigerian Students' Personality Traits and Self-views

*Supervisor:* Bahire Özad

Onyedikachi Uzozie Nmezi

*Thesis Title:* University Students Response to Social Media Advertisements

*Supervisor:* Nurten Kara

Tolga Sevik

*Thesis Title:* The Influnce of Facebook on Interpersonal Communication

*Supervisor:* Ülfet Kutoğlu Kuruç

Fatma Nazlı Köksal

*Thesis Title:* The Use of Artwork Images in Advertising: A Visual Rhetorical Analysis

*Supervisor:* Ümit İnatçı

#### **English Language Teaching**

Fatemeh Norouzi

*Thesis Title:* Feminine Gender Anxiety Within a Patriarchal Structure in Shakespear and Queen Elizabeth 1

*Supervisor:* Can Sancar

Çiğdem Panter

*Thesis Title:* The Role of Evil in Shakespear's Othello, the Moor of Venice, Titus Andronicus, and the Tempest

*Supervisor:* Can Sancar

Haşim Volkan

*Thesis Title:* The Truman Show: Exposure of the Illuminati

*Supervisor:* Nicholas Pagan



Sıla Çerkez  
*Thesis Title:* Frankenstein or the Modern Prometheus and the Psychology of Mary Shelley  
*Supervisor:* Nicholas Pagan

Niyazi Korel  
*Thesis Title:* Representations of Exile in Palestinian Fiction  
*Supervisor:* Nicholas Osborne Pagan

Anna Hajizadeh  
*Thesis Title:* Investigating Iranian university students' perception of foreign language anxiety  
*Supervisor:* Naciyet Kunt

Mohsen Jafari  
*Thesis Title:* A Comparison Between Reading Aloud and Silent Reading Among Iranian EFL Learners  
*Supervisor:* Naciye Kunt

Fazl Ahmad Ghanbarzehi  
*Thesis Title:* A Survey Study of Language Learning Strategy Use in the Iranian EFL context: Teachers' and Learners' Views  
*Supervisor:* Gülşen M. Vefalı

Ehsan Amin  
*Thesis Title:* Investigating Foreign Language Anxiety Among the Iranian Students of English Language Teaching and English Literature  
*Supervisor:* Naciye Kunt

Tatyana Bashtovaya  
*Thesis Title:* Academic Lectures in an EFL Context: An Exploration of Student and Lecturer Perceptions  
*Supervisor:* Ülker Vancı Osam

Omid Nassery  
*Thesis Title:* An Investigation into Text Quality in Writing by Farsi Learners of English  
*Supervisor:* Necdet Osam

Raouya Al Farsi  
*Thesis Title:* An Investigation into Materials Used in English Courses Various Perspectives: A Case Study  
*Supervisor:* Djavançhir Chibliiev

Ammar Kamal Abdullah Shawahneh  
*Thesis Title:* EFL Reading Test-Takers' Characteristics and Performance at an English Medium University  
*Supervisor:* Ali Sıdkı Ağazade

### ***International Relations***

Anita Ogechi Obi  
*Thesis Title:* The African Regional Human Rights System: Comparing the African Human Rights Law System and the European and Inter -

-American Human Rights Systems Within a Normative and Institutional Framework  
*Supervisor:* Berna Numan

Ali Abo Rezeg  
*Thesis Title:* Turkish and Malaysian Experiences: Lessons for Egypt  
*Supervisor:* Günay Aylin Gürzel

Ruth Oluyemi Bamidele  
*Thesis Title:* Gender Equality and the United Nations: Implementation of CEDAW in Nigeria and South Africa  
*Supervisor:* Erol Kaymak

Bashar Jamal  
*Thesis Title:* Violation of Human Rights by Transnational Corporations: Issue of Responsibility under International Law  
*Supervisor:* Kudert Özersay

### ***Marketing Management***

Zeina Muhareb  
*Thesis Title:* Global Standards of International Patients  
*Supervisor:* Mustafa Tümer

Mahta Sadatrad  
*Thesis Title:* Measuring Customer Based-Brand Equity: Empirical Evidence from Fast Food Brands in Northern Cyprus  
*Supervisor:* Mustafa Tümer

Maryam Alsadat Seyedabolghasemi  
*Thesis Title:* The Impact of Brand Loyalty in Tourism Sector: Case of 5 Star Hotels in North Cyprus  
*Supervisor:* Mustafa Tümer

Gelareh Sayyar Dashti  
*Thesis Title:* Corporate Governance Practices in Turkey: Board Structure and Gender Issues  
*Supervisor:* Turhan Çetin Kaymak

Violet Uju Alola  
*Thesis Title:* Antecedent and Consequences of Brand Loyalty: Empirical Study  
*Supervisor:* Mustafa Tümer

### ***Turkish Language and Literature***

Elif Kap  
*Thesis Title:* Cahit Külebi' nin Şiirlerinde Sosyal Problemler  
*Supervisor:* Ömer Faruk Huyugüzel

Mustafa Demir  
*Thesis Title:* Resat Nuri Güntekin'in Sanatçı Romanları Üzerine bir İnceleme  
*Supervisor:* Ömer Faruk Huyugüzel

Feyza Sayar

*Thesis Title:* Nahid Sırrı Örik'in Romanlarında Aile

*Supervisor:* Adnan Akgün

Zeynep Özerdem

*Thesis Title:* Mustafa Miyasoğlu' nun Romanlarında Din

*Supervisor:* Adnan Akgün

Şenay Şireci

*Thesis Title:* Berkir Büyükarkin' in Romanlarında Milli Mücadele

*Supervisor:* Adnan Akgün

Hande Yanık

*Thesis Title:* Nihal Yeğınobalı' nın Romanlarında kadın problemi

*Supervisor:* Ömer Faruk Huyugüzel

## ■ MBA ■

### ***Business Administration***

Solmaz Sasani

*Thesis Title:* The Consequences of Customer Related Social Stressors on Frontline Staffs' Health Care Centers: An Empirical Study in North Cyprus

*Supervisor:* Halil Nadiri

Abdalbari Taleb

*Thesis Title:* Organizational Culture, Career Satisfaction and Work Outcomes in 3 , 4 and 5 Star Hotels in North Cyprus

*Supervisor:* Hüseyin Araslı

Uzoma David Chikwendu

*Thesis Title:* The Analysis of Consumer Attitudes towards Online And Mobile Banking in Nigeria

*Supervisor:* Mustafa Tümer

Somaiyeh Parvin

*Thesis Title:* Interactions between FDI and Real Exchange Rates: The Case of Turkey

*Supervisor:* Salih Katırcıoğlu

Amirhossein Kompanian

*Thesis Title:* The Relationship between Islamic Work Ethics, Job Related outcomes and Conflict Resolution Styles in Iran

*Supervisor:* Cem Tanova

Mikhail Miklyaev

*Thesis Title:* Key Success Factors for Knowledge Management and Knowledge Management System Initiative: Case Study of EMU

*Supervisor:* Mustafa İlkan

Hatef Kiafar

*Thesis Title:* Factors Influencing Purchase of Digital Electronic Devices from the Market in the North Cyprus. An Empirical Study

*Supervisor:* Sami Fethi

Milad Dehghani

*Thesis Title:* The Role of Social Media on Advertising: A Research on Effectiveness of Facebook Advertising on Enhancing Brand Image

*Supervisor:* Mustafa Tümer

Shabnam Ayrom

*Thesis Title:* The Effects of Complainant's Perception of Justice on their Satisfaction and Future Behavior: An Empirical Study in North Cyprus Financial Service Institutions

*Supervisor:* Halil Nadiri

Omobola Alagbe

*Thesis Title:* Comparison of Macroeconomic Performance of Selected Sub-saharan African Countries

*Supervisor:* Serhan Çiftçioğlu

Amatare Victor Tabai

*Thesis Title:* An Analysis of the Enterprising Tendencies and Personality Dimensions of the Independent Petroleum Marketers of Nigeria

*Supervisor:* Mustafa Tümer

Assietou Thiam

*Thesis Title:* Customer Satisfaction and Loyalty Intention of Customers of Financial Institutions in North Cyprus

*Supervisor:* Mustafa Tümer

Negar Farahmand

*Thesis Title:* Impact of Nepotism on Turnover Intention and Service Recovery Performance: The Case of Private Hospitals in TRNC

*Supervisor:* Mustafa Tümer

Niousha Amirrad

*Thesis Title:* Diagnosing Customer Orientation of Service Employees and Rapport on Customer Satisfaction and Future Behavior: An Empirical Study in Banks of North Cyprus

*Supervisor:* Halil Nadiri

Mohammad Ali Rahimov

*Thesis Title:* An Econometric Analysis of Selected Determinants of Foreign Direct Investment

*Supervisor:* Serhan Çiftçioğlu

Maryna Statva  
*Thesis Title:* Corporatocracy: New Abutment of the Economy and Politics of the United States of America  
*Supervisor:* Melek Şule Aker

Yernar Mukhitdin  
*Thesis Title:* Efficiency Enhancement of Marketing Activities, by Analysing the Levels of Customer Satisfaction and Loyalty  
*Supervisor:* Mustafa Tümer

Adilzhan Assanov  
*Thesis Title:* Consumer Preferences in Product Choice  
*Supervisor:* Mustafa Tümer

Farid Mahdavi Darsara  
*Thesis Title:* Sport Management Challenges in the Management of Football in the Case of Iran  
*Supervisor:* Doğan Ünlücan

Gülşen Dökmecioğlu  
*Thesis Title:* Measuring the Service Quality of Passenger Shipping: Case of Famagusta and Kyrenia Ports, North Cyprus  
*Supervisor:* Mustafa Tümer

Omid Gholizadehkivi  
*Thesis Title:* Estimation of Money Demand Function for Selected Countries: A Panel Data Analysis  
*Supervisor:* Serhan Çiftçioğlu

Raghda Louis Climis  
*Thesis Title:* Customer Retention in Airline Companies Case of North Cyprus  
*Supervisor:* Mustafa Tümer

Sabina Rajabova  
*Thesis Title:* Foreign Direct Investment Domestic Savings and Economic Growth: The Case of Russian Federation  
*Supervisor:* : Melek Şule Aker

Asil Azimli  
*Thesis Title:* Service Failure and Recovery in the Airline Industry: Evidence from the TRNC  
*Supervisor:* Seldjan Timur

Ahad Pezeshkpoor  
*Thesis Title:* Factors Affecting Retirement Behavior Before and After Retirement: A Comprative Approach  
*Supervisor:* Cem Tanova

Seyedeh Fatemeh Alavi Abkenar  
*Thesis Title:* The Relationship between Economics Growth, Budget Balance, Tax Revenue, and Government Debt  
*Supervisor:* Serhan Çiftçioğlu

Antony Kimondo Wanjau  
*Thesis Title:* Comparison of Macroeconomic Performance and Volatility in Kenya, Rwanda and Ethiopia: Time Series Evidence  
*Supervisor:* Serhan Çiftçioğlu

Amin Sokhanvar  
*Thesis Title:* Application of Time Series Models in Forecasting Exchange Rate  
*Supervisor:* Serhan Çiftçioğlu

Catherine Efuteba  
*Thesis Title:* Factors Influencing Customer Satisfaction in Health Care Services: The Case of Public and Private Hospitals in North Cyprus  
*Supervisor:* Mustafa Tümer

Shahrzad Amelshahbaz  
*Thesis Title:* The Effect of NOCs on Trade, Military Spending and Economic Growth in Middle East Countries  
*Supervisor:* Mustafa Tümer  
*Co-supervisor:* Mehmet İslamoğlu

Fatemeh Oladi  
*Thesis Title:* Factors Influencing Purchase of Pre-owned Home from Estate Market Place in North Cyprus-An Empirical Study  
*Supervisor:* Sami Fethi

Zeina Muhareb  
*Thesis Title:* Global Standards of International Patients  
*Supervisor:* Mustafa Tümer

Mahta Sadatrad  
*Thesis Title:* Measuring Customer Based-Brand Equity Empirical Evidence from Fast Food Brands in Northern Cyprus  
*Supervisor:* Mustafa Tümer

Gelareh Sayyar Dashti  
*Thesis Title:* Corporate Governance Practices in Turkey: Board Structure and Gender Issues  
*Supervisor:* Turhan Çetin Kaymak

## ■ M.Ed ■

### ***Educational Sciences***

Özgür Tasciaglu Güler  
*Thesis Title:* Faculty of Architecture Students and Teachers Perceptions Related to Students Academic Writing Performance  
*Supervisor:* Sıtkiye Kuter

## ■ MS ■

### **Architecture**

Kasra Talebian

*Thesis Title:* "Day for Night" The Role of Artificial Lighting in Returning People to Urban Public Spaces

*Supervisor:* Isaac Lerner

Gökhan Varol

*Thesis Title:* Identification of Bungalow Houses in North Cyprus

*Supervisor:* Özgür Dinçyürek

Ghazaleh Toutounchi Ghadim

*Thesis Title:* Geometry Form and Structure Relationship in Blob, Liquid and Formless Architecture

*Supervisor:* Yonca Hürol

Saloumeh Khayyat Kahouei

*Thesis Title:* An Analysis on the Proximity of Green Spaces in Housing Environments

*Supervisor:* Beril Özmen Mayer

Samira Forouzmand

*Thesis Title:* A Survey on Changing Socio-spatial Patterns in Contemporary Housing of Iran

*Supervisor:* Hifsiye Pulhan

Negar Houshang

*Thesis Title:* Monumental Architecture; National Identity; Conceptual Understanding of Iranian Monumental Architecture

*Supervisor:* Rafooneh Mokhtarshahi Sani

Armita Malekshahi

*Thesis Title:* Investigation on Restaurant Layout Design

*Supervisor:* Nazife Özyay

Mohammed Aliyu

*Thesis Title:* The Impacts of Postmodern Architecture in Contemporary Residential Buildings of Northern Nigeria

*Supervisor:* Nazife Özyay

Abolfazl Dehghanmongabadi

*Thesis Title:* Achieving Sustainable Transportation on EMU Campus

*Supervisor:* Şebnem Önal Hoşkara

Şüküfe Kocabaş

*Thesis Title:* Evaluation of Circulation Paths in Public Buildings in Terms of Accessibility: Re functioned Public Historic Buildings in the Nicosia Walled City

*Supervisor:* Özlem Olgaç Türker

Mustafa Arıkan

*Thesis Title:* Effects of Lighting in the Creation of the Character of Spaces in Hotel Environments: The Case Study of Lobbies of Hotels Designed by the Idea Mimarlık Company

*Supervisor:* Banu Çavuşoğlu

Fatemeh Ghafari Tavasoli

*Thesis Title:* The Fold as a Concept Structure in Architecture of Post-modern Time

*Supervisor:* Hifsiye Pulhan

Mohammad Ali Haghshenas Kashani

*Thesis Title:* Sustainability Indicators of Iranian Vernacular Architecture: The Case of Yazd

*Supervisor:* Özgür Dinçyürek

Shahab Eddin Yarmohammadi

*Thesis Title:* Evaluation of the Appropriateness of Photovoltaic Panels for Sustainable Building in North Cyprus

*Supervisor:* Nazife Özyay

Sara Davarpanah

*Thesis Title:* Analyzing the Characteristics of the British Period Residential Buildings Facades in the Walled City of Nicosia

*Supervisor:* Nazife Özyay

Pedram Razavi Ebrahimi

*Thesis Title:* Notes on Perceptual Qualities of Space Dwelling Spatial Organization

*Supervisor:* Türkan Uraz

Niusha Bahmani

*Thesis Title:* Understanding Territorial Behavior as a Key to Design of Formal Care Spaces for Children

*Supervisor:* Guita Farivarsadri

Mahsa Sadat Fard Moosavi

*Thesis Title:* Effects of Interior Changes on Earthquake Resistance of Buildings Case Reinforced Concrete Frame System

*Supervisor:* Yonca Hürol

Gelareh Sadeghi

*Thesis Title:* Symbolic Value of Transparency in Contemporary Architecture: An Evaluation of Recent Public Building in Famagusta

*Supervisor:* Rafooneh Mokhtar Shahi Sani

Fatemeh Amiri Najafabadi

*Thesis Title:* Effects of Atrium on Thermal Comfort

*Supervisor:* Halil Zafer Alibaba



Sahar Safavi

*Thesis Title:* Effect of Design Principles on Visitors Perception in Museum Spaces

*Supervisor:* Rafooneh Mokhtar Shahi Sani

Elmira Ardakani

*Thesis Title:* Sitting on the Ground as an Important Factor in Formation of Traditional Houses in Hot Arid Region of Iran

*Supervisor:* Guita Farivarsadri

Farzaneh Najjaran

*Thesis Title:* The Use of Renewable Energy in Residential by Means of PV Systems for Approaching Sustainability

*Supervisor:* Harun Sevinç

Alireza Jahanara

*Thesis Title:* Strategy towards Solar Architecture by Photovoltaic for Building Integration

*Supervisor:* Harun Sevinç

Aysen Atabey

*Thesis Title:* Across Cultural Comparative Study on the Personalization of Residential Living Spaces in North Cyprus

*Supervisor:* Nazife Özay

Seyed Nima Mousavi

*Thesis Title:* Livability in Historic Urban Quarters Case Study: Walled City of Famagusta

*Supervisor:* Naciye Doratlı

Farhad Tayyebi

*Thesis Title:* A Quest on the Relationship between Music and Architecture

*Supervisor:* Hifsiye Pulhan

Mojdeh Nikoofam

*Thesis Title:* Questioning Accessibility of Disabled People at Sea Front, Case Study: Kyrenia & Laguna Sea Fronts in North Cyprus

*Supervisor:* Mukaddes Fash

Leila Soosani

*Thesis Title:* Questioning the Compatibility of the Infill Architecture in Historic Environment, Case Study: Walled City of Nicosia

*Supervisor:* Beser Oktay Vehbi

Shirin Shahide

*Thesis Title:* Analyzing the Quality of Pedestrian Street in the Case of Istiklal Street in Walled City of Famagusta

*Supervisor:* Beser Oktay Vehbi

Nina Shir Khanloo

*Thesis Title:* Analyzing the Effects of Urban Sprawl on the Physical Environment in The Case of Kyrenia

*Supervisor:* Beser Oktay Vehbi

Abdolvahid Kahoorzadeh

*Thesis Title:* Improvement of Thermal Comfort in Residential Buildings by Passive Solar Strategies Using Direct Gain Techniques

*Supervisor:* Harun Sevinç

Nastaran Chegini

*Thesis Title:* An Overview of Participatory Design and its Effects on User Satisfaction

*Supervisor:* Beril Özmen Mayer

Oldouz Assadzadeh Anarjani

*Thesis Title:* Personalization of Social Housing District in Sakarya, Famagusta

*Supervisor:* Mukaddes Fash

Amir Rashidi

*Thesis Title:* University Campus as a Public Space of the City Case Study: Eastern Mediterranean University Campus

*Supervisor:* Şebnem Hoşkara

Negar Mahouti

*Thesis Title:* The Street Advertisements Influence on Ismet Inonu Boulevard, Famagusta

*Supervisor:* Mukaddes Fash

Burcu M. Esentepe

*Thesis Title:* Space Transformation and Change in Mass Housing in Nicosia, North Cyprus

*Supervisor:* Kağan Günç

Ibtisam Sh.Mousa Alsulaivany

*Thesis Title:* Understanding the Significance of Nature as an Integral Part of Interior Design vis-a-vis Kindergarten Architecture

*Supervisor:* Münevver Özgür Özersay

Rasiha Kayalar

*Thesis Title:* Comparison of Photovoltaic (PV) Panel Usage in Different Climates

*Supervisor:* Halil Zafer Alibaba

Aida Alizadeh Garmroudi

*Thesis Title:* An Investigation on Interior Spaces Related to Ornamentations (Based on Material) of Selected Spatial Houses of Kashan (Iran) in QAJAR Period(19)

*Supervisor:* Kutsal Öztürk

### ***Applied Mathematics and Computer Science***

Hülya Demez

*Thesis Title:* Combinatorial Optimization: Solution Methods of Traveling Salesman Problem

*Supervisor:* Arif Akkeleş

- Meral Selimi  
*Thesis Title:* Fourier Series and Integrals  
*Supervisor:* Agamirza Bashirov
- Simrui Hürol  
*Thesis Title:* Numerical Methods for Solving Systems of Ordinary Differential Equations  
*Supervisor:* Mehmet Bozer
- Lina Abed Al-Hakim Hamdan Al Shnaikat  
*Thesis Title:* Type-2 Fuzzy Logic in Modeling Uncertainty  
*Supervisor:* Rashad Aliyev
- Maysaa Jasim Mahmood Al-obaidi  
*Thesis Title:* Fuzzy Game Theory for Decision Analysis  
*Supervisor:* Rashad Aliyev
- Güneş Çatma  
*Thesis Title:* Bernoulli and Euler Polynomials  
*Supervisor:* Sonuç Zorlu
- Yılmaz Demirci  
*Thesis Title:* Security of Learning Management Systems  
*Supervisor:* Mustafa Rıza
- Banking and Finance**
- Azam Ghorbani  
*Thesis Title:* Evaluation Methodology for Private Equity Funds in Africa  
*Supervisor:* Glenn P. Jenkins
- Bahmanyar Hamedian  
*Thesis Title:* Financial Performance of Islamic Banks vs Conventional Banks: The Case of Malaysia  
*Supervisor:* Nesrin Özataç
- Ali A. R. Abdallah  
*Thesis Title:* Oil Price and Stock Market Interaction in the USA  
*Supervisor:* Salih Katırcıoğlu
- Maryam Shams  
*Thesis Title:* Weak-Form Efficiency of Carbon Trading Markets: Evidence From Bluenext Spot Market  
*Supervisor:* Salih Katırcıoğlu
- Çiğdem Arslan  
*Thesis Title:* The Systematic Risk Determinants of Tourism Industry in Turkey  
*Supervisor:* Salih Katırcıoğlu
- Ali Davud  
*Thesis Title:* The Trend and the Roles of Private Pension Plans.  
*Supervisor:* Glenn P. Jenkins
- Pradip Ghimire  
*Thesis Title:* Privatization of Water Distribution Systems and Impacts on Stakeholders  
*Supervisor:* Glenn P. Jenkins
- Azer Shiriyev  
*Thesis Title:* Evaluation of Insurance Sector in Azerbaijan  
*Supervisor:* Nesrin Özataç
- Aminu Bashir Aminu  
*Thesis Title:* The Determinants of Bank's Profitability in Nigeria  
*Supervisor:* Nesrin Özataç
- Amjad Taha  
*Thesis Title:* Profitability of the Jordan Banking Sector: Panel Evidence of Bank Specific and Microeconomics Determinants  
*Supervisor:* Nesrin Özataç
- Mohamed Dore  
*Thesis Title:* An Empirical Analysis of Bank Profitability in Ghana: Evidence from Bank Specific and Macroeconomic Factors  
*Supervisor:* Nesrin Özataç
- Sanzhar Toibolotov Myktybekovich  
*Thesis Title:* Factors Affecting the Profitability of the Banking System in Kyrgyzstan  
*Supervisor:* Nesrin Özataç
- Saniye Hiçyakmazer  
*Thesis Title:* Oil Price Shock, Stock Market and Economic Growth in OECD countries  
*Supervisor:* Salih Katırcıoğlu
- Hedieh Gharib  
*Thesis Title:* Interactions Between Financial Sector Development, Foreign Direct Investment, and Economic Growth in Japan  
*Supervisor:* Salih Katırcıoğlu
- Setareh Sodeyfi  
*Thesis Title:* Interactions Between Business Conditions, Economic Growth and Crude Oil Prices  
*Supervisor:* Salih Katırcıoğlu
- Hatice İmamoğlu  
*Thesis Title:* The Impact of Economics Growth, Energy, and Financial Sector Development on the Environmental Quality: Evidence from the Developed and Developing Countries  
*Supervisor:* Salih Katırcıoğlu
- Sara Farhangmehr  
*Thesis Title:* Interactions Between Business Conditions and Financial Performance of Airlines in Top Ranking Tourism Destination Countries: An Empirical Investigation from Panel Data Analysis  
*Supervisor:* Salih Katırcıoğlu

- Alaleh Abbasighadi  
*Thesis Title:* A cost Analysis of a Osmosis Desalination Plant with and without Advanced Energy Processing Devices  
*Supervisor:* Glenn P. Jenkins
- Zeynep Müge Şen  
*Thesis Title:* Customer Satisfaction in the North Cyprus Banking Industry  
*Supervisor:* Nesrin Özataç
- Komeil Shaeri  
*Thesis Title:* The Impact of Oil Price Shocks on the Stock Markets of the G8 Countries  
*Supervisor:* Salih Katırcıoğlu
- Bitra Gholizadeh Dabaghi  
*Thesis Title:* Determinants of Profitability in Domestic and Foreign Banks in Turkey  
*Supervisor:* Nesrin Özataç
- Samuel Ajeigbe Owolabi  
*Thesis Title:* An Investment Appraisal of Cogeneration of Electricity Using Bagasse  
*Supervisor:* Glen Paul Jenkins
- Arrey Tanyi Gilbert  
*Thesis Title:* Analysis, Financial Risk Management in Banks: Evidence of Liquidity, Credit and Capital Risk in South Africa  
*Supervisor:* Eralp Bektaş
- Maryam Almasifard  
*Thesis Title:* An Econometrics Analysis of Financial Developments Effect on the Share of Final Consumption Expenditure in Gross Domestic Products  
*Supervisor:* Serhan Çiftçioğlu
- Setareh Shirkhani  
*Thesis Title:* Total Quality Management Commitment and Recovery Performance in Commercial Banks of TRNC  
*Supervisor:* Salih Katırcıoğlu
- Erdem Öncü  
*Thesis Title:* An Empirical Analysis of the Cost-of-Carry Model and İstanbul Stock Exchange Futures Contract  
*Supervisor:* Salih Katırcıoğlu
- Baris Memduh Eren  
*Thesis Title:* Valuation of Opacity in Turkish Banking Industry  
*Supervisor:* Salih Katırcıoğlu
- Marzhan Tazhenova  
*Thesis Title:* Evaluation Profitability and Efficiency of Bank Performance: The Case of Kazakhstan Banks  
*Supervisor:* Mustafa Besim
- Mahdi Karazmodeh  
*Thesis Title:* Foreign Exchange Volatilities and Stock Prices: Evidence from London Stock Exchange  
*Supervisor:* Mustafa Besim
- Seyedmajid Hashemi  
*Thesis Title:* Financing and Risk Management of Investments in Mining Sector  
*Supervisor:* Glen Paul Jenkins
- Chidiebere Ezechi Nwosu  
*Thesis Title:* Post Consolidation Performance of the Nigerian Banks  
*Supervisor:* Eralp Bektaş
- Mohammad Samery  
*Thesis Title:* Determinants of Capital Structure: Evidence from İstanbul Stock Exchange  
*Supervisor:* Salih Katırcıoğlu
- Hamid Reza Khademi  
*Thesis Title:* Capital Structure and Global Financial Crisis: The Case of Non-Financial Firm in Netherlands  
*Supervisor:* Mustafa Besim
- Elaheh Behravesht  
*Thesis Title:* Determination of Net Interest Margin in BRIC Countries  
*Supervisor:* Eralp Bektaş
- Sina Nasiri Gheydari  
*Thesis Title:* Optimal Capital Structure and Global Financial Crisis: A Case Study of German Non-Financial Corporations  
*Supervisor:* Mustafa Besim
- Aidin Shojaei Rad  
*Thesis Title:* The Impact of Oil Prices on the Stock Returns of Textile Industry in BIST  
*Supervisor:* Salih Katırcıoğlu
- Nooruldeen Al-Behadili  
*Thesis Title:* Comparison of Profitability Indicators of Commercial Banks: The Case of Malaysia and Pakistan  
*Supervisor:* Nesrin Özataç
- Amir Abbas Jarollahi  
*Thesis Title:* Customers Trust of Electronic Payment System Use in Northern Cyprus  
*Supervisor:* Salih Katırcıoğlu
- Elaheh Biniyaz  
*Thesis Title:* The Relationship between Infrastructure Investment and Economic Growth  
*Supervisor:* Serhan Çiftçioğlu

Yasaman Pars Tabar

*Thesis Title:* Oil Price and Stock Market Index Co-integration Analysis in East Asia and Pacific Countries

*Supervisor:* Cahit Adaoglu

### **Chemistry**

Hamidu Ahmed

*Thesis Title:* Synthesis, Characterization and Spectroscopic Properties of Chiral Preylene 3, 4-Dicarboxylic-9, 10-(R)-+1-Phenylethyl) Carboximide for Solar Cell Application

*Supervisor:* Huriye İcil

Mustafa Basim Al Tameemi

*Thesis Title:* Chitosan Citrate Membranes for Naproxen Delivery

*Supervisor:* Elvan Yılmaz

Shemaa Abdul Sattar Soud

*Thesis Title:* Physical and Antibacterial Properties of Iodine Containing Pullulan/Poly(vinylpyrrolidone)/Poly(vinylalcohol) Polymer Film

*Supervisor:* Elvan Yılmaz

Paywand Jalal Hassan

*Thesis Title:* Synthesis and Characterization of p-Type Poly(2,7-carbazole) Materials for Solar Cell

*Supervisor:* Huriye İcil

Rizgar Mehr Zubair

*Thesis Title:* Electron Donating 2,7 Carbazole Derivatives Synthesis and Characterization

*Supervisor:* Huriye İcil

Shaban Rajab Shaban

*Thesis Title:* Energy Transfer Studies of Electron Donating Carbazole and Electron Accepting Perylene Dye Systems

*Supervisor:* Huriye İcil

Ramona Pasandideh

*Thesis Title:* Spectral studies on intermolecular interaction of chiral perylene diimide with DNA

*Supervisor:* Huriye İcil

Arshad Abd Ali Shihad

*Thesis Title:* Preparation and Spectrophotometric Study of 2[2-(5-Boromo thiazolyl)azo]-4-Methoxy Phenol

*Supervisor:* Mehmet Uygur Garip

Ameer Piro Shakir

*Thesis Title:* Graft Copolymerization of Benzyl Methacrylate onto Alginate

*Supervisor:* Elvan Yılmaz

Zirar Mohammed Taher Mizwari

*Thesis Title:* Preparation and Characterization of Phosphorylated Chitosan Films Via Graft Polymerization

*Supervisor:* Elvan Yılmaz

Elahe Maleki Birjandi

*Thesis Title:* A Miscibility Study on Pullulan/Poly(Ethylene Glycol) Blends

*Supervisor:* Elvan Yılmaz

Seyed Emad Talasaz

*Thesis Title:* Synthesis and Characterization of Pullulan/Poly(Acrylamide) Based IPN Hydrogels

*Supervisor:* Elvan Yılmaz

*Co-supervisor:* Mustafa Gazi

Chidozie Kingsley Nwokeji

*Thesis Title:* Chitin, Chitosan and Alginates Based Two Component Systems for Fe<sup>3+</sup> Adsorption

*Supervisor:* Elvan Yılmaz

### **Civil Engineering**

Nariman Ghodrati

*Thesis Title:* Project Lifecycle Optimization and Feasibility Study: The Way to Implementation of Sustainable Construction Management Practice

*Supervisor:* Alireza Rezaei

Abiola Ayopo Abiodun

*Thesis Title:* Improvement of Clay Soils using Lime Piles

*Supervisor:* Zalihe Sezai

Navid Sanei Sistani

*Thesis Title:* An investigation of Building Information Modeling Application in Design-Bid-Build Projects

*Supervisor:* Alireza Rezaei

Bryar Qadir Ahmed

*Thesis Title:* Developing of Pavement Management System (PMS) for EMU Campus Pavement in GIS Environment

*Supervisor:* Mehmet Metin Kunt

Sajjad Mirsalehi

*Thesis Title:* Simulation of the Numerical Behavior of Stone and Geosynthetic Encapsulated Sand Columns in Tuzla Area

*Supervisor:* Huriye Bilse

Soheil Ghadr

*Thesis Title:* The Effect of Sand Gradation on the Hydro-mechanical Characteristics of Sand Bentonite Mixtures as Buffer Material

*Supervisor:* Huriye Bilse



Arash Pir

*Thesis Title:* Experimental and Numerical Investigation on Steel Fibrous Reinforced Concrete Slab Strips with Traditional Longitudinal Steel Bars

*Supervisor:* Serhan Şensoy

Seyed Vahid Mirnoori

*Thesis Title:* Integration Between Building Information Modeling (BIM) and Energy Performance Modeling to Analyze the Effects of Building Shape and Orientation on Energy Consumption

*Supervisor:* Tahir Çelik

Njomo Wandji Wilfried

*Thesis Title:* Sequential Analysis: Optimazation of Substructure Technique Minimization of Differential Column Shortening and Result Approximation by ANN

*Supervisor:* Giray Özay

Hamidreza Pourfarid

*Thesis Title:* The Potential of Using Waste Tire as a Soil Stabilizer

*Supervisor:* Zalihe Sezai

Roshan Taheri Bonab

*Thesis Title:* Investigation of Regulatory Risk Implications Through Cost Benefit Analysis: A Water Supply Network Case in Poland

*Supervisor:* Tahir Çelik

Alireza Mafi

*Thesis Title:* Evaluation of Reinforced Concrete Buildings in Terms of Seismic Design Faults in North Cyprus

*Supervisor:* Giray Özay

Salwan Alamdar

*Thesis Title:* Location Based Scheduling in the Form of Flow Line and Its Comparison to CPM/bar Chart Scheduling

*Supervisor:* Alireza Rezaei

Amir Khosro Karimi

*Thesis Title:* Development of Lightweight Calcium-Magnesium Based Panels (LCMP) as a Thermal Insulation for Structures

*Supervisor:* Mürüde Çelikağ

Mostafa Ibrahim Ismael

*Thesis Title:* Analysis of the Recently Constructed Sewage Network of Gazi Magusa

*Supervisor:* Mustafa Ergil

Anmar Abdulwahid Sarray

*Thesis Title:* The Deterioration of Concrete in Wastewater Treatment Plants

*Supervisor:* Tulin Akçaoğlu

Mazen Al-Bdoor

*Thesis Title:* Behavior of composite columns subjected to lateral cyclic loading

*Supervisor:* Serhan Şensoy

Mohammad Mofeed Sehwail

*Thesis Title:* Lateral Torsional Buckling of Steel-Section Cellular Beams

*Supervisor:* Mürüde Çelikağ

Sina Darban Khales

*Thesis Title:* Modeling Transport by GIS: A Case Study of Famagusta

*Supervisor:* Mehmet Metin Kunt

Reza Nastaranpoor

*Thesis Title:* An Investigation for the Effects of Local Natural Pozzolans on Some Mechanical Properties of Concrete

*Supervisor:* Tahir Çelik

Aidin Ghaffari Oskouei

*Thesis Title:* Investigation of Knowledge Management Based on Nonaka and Takeuchi Model in Mashhad Municipality

*Supervisor:* Alireza Rezaei

Hooman Roughani

*Thesis Title:* Influence of Amount and Aspect Ratio on Direct Shear Behavior of Fiber Reinforced Concrete

*Supervisor:* Özgür Eren

Anthony Ifeanyi Okakpu

*Thesis Title:* Evaluation and Comparison of Strengthening Methods to Deliver a Safe, Efficient and Economical Solution

*Supervisor:* Giray Özay

Aliyu Bashir Aminu

*Thesis Title:* Risk Management in Nigerian Construction Industry

*Supervisor:* Alireza Rezaei

Muhammad Alizadeh Naderi

*Thesis Title:* Determination of the Critical Slip Surface in Slope Stability Analysis

*Supervisor:* Zalihe Nalbantoğlu Sezai

Soheil Mazhari

*Thesis Title:* Load Deformation Characteristics of Normal and Fiber Reinforced Concrete Columns

*Supervisor:* Özgür Eren

*Co-supervisor:* Serhan Şensoy

### **Computer Engineering**

Alparslan Kaplan

*Thesis Title:* Evolutionary Design of Radial Basis Function Neural Network for Data Modelling

*Supervisor:* Adnan Acan

Ahmad S. Salh

*Thesis Title:* Efficient Parallel Finite Difference Time Domain Algorithm for Modeling Electromagnetic Wave Interactions with Dispersive Objects

*Supervisor:* Omar Ramadan

Huthaifa M. Luay

*Thesis Title:* Design and Implementation of a Wireless Bulletin Board

*Supervisor:* Marifi Güler

Omar Hayman Fadhil

*Thesis Title:* An Investigation Into the Colored Stochastic Hodgkin-Huxley Equation Under Time Varying Input Currents

*Supervisor:* Marifi Güler

Zainab Murtadha

*Thesis Title:* Dentist Web Based Patient Information System and Services in Cloud

*Supervisor:* Erden Başar

Sharif Alagha

*Thesis Title:* Queuing-based Dynamic Multi-guard Channel Scheme For Voice/Data Integrated Cellular Wireless Networks

*Supervisor:* Muhammed Salamah

Ahmad Gasim

*Thesis Title:* Energy-Efficient Clustering for Wireless Sensor Networks with Mobile Base Station (ECMBS)

*Supervisor:* Muhammed Salamah

Reza Shokri Kalan

*Thesis Title:* Improving Video-on-Demand Performance by Multi-channel/Multicast Approach in Wireless Networks

*Supervisor:* Işık Aybay

Arash Fereidouni

*Thesis Title:* Analysis of Connectivity in Diffusion-Based Molecular Nano Communication Networks

*Supervisor:* Doğu Arifler

Şerife Uluçınar

*Thesis Title:* Coevolutionary Memetic Algorithms for Solving Traveling Salesman Problem (TSP)

*Supervisor:* Ahmet Ünveren

Humam M. Jassim

*Thesis Title:* An Investigation into the Dissipative Stochastic Mechanics Based Neuron Model Under Noisy Input Currents

*Supervisor:* Marifi Güler

Şengül Çobanoğlu

*Thesis Title:* A critical Evaluation of Web Service Modeling Language

*Supervisor:* Zeki Bayram

Kamran Kamei

*Thesis Title:* Editing the Nearest Feature Line Classifier

*Supervisor:* Hakan Altınçay

Mohamed Abdulmonim

*Thesis Title:* An investigation into the dissipative stochastic mechanics based neuron model under noisy input current pulses

*Supervisor:* Marifi Güler

Najdavan Kako

*Thesis Title:* An Investigation of the Coefficient of Variation Using the Colored Stochastic Hodgkin-Huxley Equations

*Supervisor:* Marifi Güler

Abdullah Ahmed Abdulrahman

*Thesis Title:* Performance Analysis and Comparison of Ad Hoc Routing Protocols AODV and OLSR on Video Conferencing using OPNET Simulator

*Supervisor:* Gürcü Öz

Farnoosh Falahatraftar

*Thesis Title:* Improving Video on Demand Performance with Prefetching

*Supervisor:* Hadi Işık Aybay

Mohammed Dalshad Khorsheed

*Thesis Title:* Investigate Performance of 802.11b and 802.11g Standards with DSR Protocol Using OPNET

*Supervisor:* Gürcü Öz

Araz Jameel Qasim

*Thesis Title:* Performance Evaluation of Wireless Standards 802/11g and 802.11 b on HTTP Application over AODV Protocol using OPNET

*Supervisor:* Gürcü Öz

Chukwudi James Ojukwu

*Thesis Title:* Propagation Delay Models in Bio-Inspired Nanonetworks

*Supervisor:* Doğu Arifler

Hadi Razzaghi Kouchaksaraei

*Thesis Title:* Vulnerability in Cloud Computing Securing SOAP Message Using SE Soap Method

*Supervisor:* Alexander Chefranov

- Ahmed Darghaoth  
*Thesis Title:* Real Time Implementation of Adaptive Line Enhancer  
*Supervisor:* Hasan Kömürçügil
- Teymur Haji-zada  
*Thesis Title:* Object Oriented Business Architecture on Online Exam and Assignment System  
*Supervisor:* Erden Başar
- Mehran Sahandi Far  
*Thesis Title:* Functional Magnetic Resonance Image (FMRI) Based Brain Activity Classification  
*Supervisor:* Hakan Altınçay
- Saeid Parvande  
*Thesis Title:* Bacteria Foraging Optimization with Genetic Operators for QAP and mQAP  
*Supervisor:* Ahmet Ünveren
- Seyed Masoud Alavi Abhari  
*Thesis Title:* Secure True Random Number Generator in Wireless Network  
*Supervisor:* Alexander Chefranov
- Hooman Alavizadeh  
*Thesis Title:* Secure True Random Number Generator in Distributed System Via Wireless LAN  
*Supervisor:* Alexander Chefranov
- Aws Nabeel Shehab  
*Thesis Title:* An Automation on Interactive Advertisement for Companies on Local Street in TRNC  
*Supervisor:* Yıltan Bitirim
- Hayder Jasim  
*Thesis Title:* Investigation Performance of IEEE 802.11 b Using OPNET  
*Supervisor:* Gürcü Öz
- Liwaa H. Alobaidi  
*Thesis Title:* A Comparative Study on the Fox and Lu Equations versus the Colored Stochastic Hodgkin-Huxley Equations  
*Supervisor:* Marifi Güler
- Mehran Hossein Zadeh Bazargani  
*Thesis Title:* Analysis of Molecular Nano Communication Channels with Relays  
*Supervisor:* Doğu Arifler
- Sinan Hazim Naife  
*Thesis Title:* An Investigation of the Coefficient of Variation Using The Dissipative Stochastic Mechanics Based Neuron Model  
*Supervisor:* Marifi Güler
- Reza Abri Vaighan  
*Thesis Title:* Investigation Performance of Strassen Matrix Multiplication Algorithm on Distributed Systems  
*Supervisor:* Gürcü Öz
- Shahram Mollahasani  
*Thesis Title:* Energy Aware Routing Protocol for Wireless Sensor Network (D-LEACH)  
*Supervisor:* Mohammed Salamah
- Jehan Kadhim Shareef  
*Thesis Title:* Prediction of International Stock Market Movements Using a Statistical Time Series Analysis Method  
*Supervisor:* Mehmet Bodur
- Ayman Nashwan Al-Dabbagh  
*Thesis Title:* Digital Nonrecursive FIR Filter Design Using Exponential Window  
*Supervisor:* Hasan Kömürçügil
- Hala Haseb Al-Ani  
*Thesis Title:* Group Delay Methods in FIR Digital Filters  
*Supervisor:* Hasan Kömürçügil
- Samaneh Azari  
*Thesis Title:* A Comparative Analysis of Chemical Named Entity Recognition Using Support Vector Machines  
*Supervisor:* Ekrem Varoğlu
- Alexandr Polisciuc  
*Thesis Title:* Performance of Differed and Forward Shading under Different Lighting Conditions  
*Supervisor:* Hakan Altınçay
- Osamah Yaseen Fadhil  
*Thesis Title:* Performance Evaluation of AODV and DSR Routing Protocols with PCM and GSM Voice Encoding Schemes  
*Supervisor:* Gürcü Öz
- Seyedreza Kazemirazi  
*Thesis Title:* Multi-Objective Artificial Bee Colony for Multi-Objective Quadratic Assignment Problem  
*Supervisor:* Ahmet Ünveren
- Economics***  
Zahra Ahanchian  
*Thesis Title:* House Price Effect on Consumption: An MSTVAR Approach, Three OECD Countries  
*Supervisor:* Mehmet Balcılar
- Manijeh Aliakbarian  
*Thesis Title:* Cost Effectiveness Analysis of the Ready-to-Use Therapeutic Food Program for Treating Acute Malnutrition in

Children of Uganda  
*Supervisor:* Glen Paul Jenkins

Mehmet Candemir  
*Thesis Title:* Oil Price Movements and Microeconomic Variables Evidence from High and Upper Middle Income Countries  
*Supervisor:* Kamil Sertoğlu

Olakunle Ishola Gbolahan  
*Thesis Title:* Household Consumption Pattern Empirical Evidence from Nigerian Survey  
*Supervisor:* Cem Eşref Payaslıoğlu

Pejman Bahramianfar  
*Thesis Title:* Forecasting US Home Prices with Artificial Neural Networks and fuzzy Methods Combination and Single Forecasts  
*Supervisor:* Mehmet Balcılar

Bekhruz Nurnazarov  
*Thesis Title:* Comparative Analysis of Uzbekistans Natural Gas Industry: Present Benefits and Future Costs  
*Supervisor:* Sevin Uğural

### ***Electrical and Eletronic Engineering***

Aysar Musa  
*Thesis Title:* Power System Stability Analysis Using Recursive Projection Method  
*Supervisor:* Osman Kükrcer

Shiva Mirshahi  
*Thesis Title:* Integration of Radio Frequency Identification and Wireless Sensor Networks  
*Supervisor:* Şener Uysal

Hamza A. M. Makhamreh  
*Thesis Title:* Sliding Mode Control Applied to UPS Inverter Using Norm of the State Error  
*Supervisor:* Osman Kükrcer

Şadi Cetinkaya  
*Thesis Title:* DFT Based High Resolution Frequency Estimation Using Three Samples  
*Supervisor:* Osman Kükrcer

Emad Mohamed  
*Thesis Title:* Performance of Transmit Diversity STBC-OFDM and Differential STBC-OFDM Over Fading Channels  
*Supervisor:* Erhan İnce

Keivan Bahmani  
*Thesis Title:* Priority Aware Frame Packing for OFDMA Systems in Distributed Permutation Mode  
*Supervisor:* Erhan İnce

Ahmed Samawi Ghthwan Al-Khafaji  
*Thesis Title:* Disturbance Estimator Based Predictive Current Control of Grid-Connected Inverters  
*Supervisor:* Osman Kükrcer

Reza Gholizadeh Dabaghi  
*Thesis Title:* Analysis of Electric Field Distribution Along Insulator Surface by Genetic Algorithms  
*Supervisor:* Suna Bolat

Ghassan Qas Marrogy  
*Thesis Title:* Performance Analysis of Routing Protocols and TCP Variants under HTTP and FTP Traffic in MANETS  
*Supervisor:* Ali Hakan Ulusoy  
*Co-supervisor:* Ahmet Rızaner

Hayder Mazin Makki  
*Thesis Title:* Multi-Band Fractal Antenna Modeling  
*Supervisor:* Rasime Üyguroğlu

Majid Rahmati  
*Thesis Title:* Image Transmission in Hierarchically Modulated Signals over Fading and Shadowing Channels  
*Supervisor:* Hasan Amca

Bashir Sadeghi  
*Thesis Title:* Shift-Variance of Linear Periodically Shift-Variant Systems and Non-Stationary of Wide-sense Cyclostationary Random Processes  
*Supervisor:* Runyi Yu

Pouyan Rezaei  
*Thesis Title:* Performance Estimation of DVB-T under Co-Channel Interference for Deployment of DVB-T in National Border Regions  
*Supervisor:* Hasan Amca

Fariba Beiramzadeh Azar  
*Thesis Title:* Detecting Lesions in MRI Brain Images Combining Pseudo-Color Segmentation with Fuzzy C-Means Clustering  
*Supervisor:* Hasan Demirel

Farnaz Farokhian  
*Thesis Title:* Blood Vessel Detection and Segmentation in Retina using Gabor Filters  
*Supervisor:* Hasan Demirel

Amirhossein Jofreh  
*Thesis Title:* Parallel Implementation Orthogonal Matching Pursuit in Open CL  
*Supervisor:* Runyi Yu



Farshid Allahakbari

*Thesis Title:* Double Band Hysteresis Current Control Method for Three Phase Shunt Active Power Filters

*Supervisor:* Hasan Kömürçügil

### **Industrial Engineering**

Mehdi Davari

*Thesis Title:* Anthropometric Home Office Computer Workstation Setup

*Supervisor:* Orhan Korhan

Farhood Rismanchian

*Thesis Title:* Transient Analysis of Single Machine Production Line Dynamics

*Supervisor:* Alagar Rangan

Seyed Mahdi Shavarani

*Thesis Title:* Construction of an Expert System for Assessment of Work Related Musculoskeletal Disorders for VDT Users

*Supervisor:* Orhan Korhan

MehrdadAlirezamohammadi

*Thesis Title:* Ranking all units in DEA

*Supervisor:* Sahand Daneshvar

Faeza Saleh Dlhin

*Thesis Title:* Ergonomical Evaluation for the Design of the Computer Laboratory PC Lab3 in the Department of Industrial Engineering at EMU and Proposing a Better Design

*Supervisor:* Adham Mackieh

Morteza Karami

*Thesis Title:* Analysis and Performance Measurement of Existing Solution Methods of Quadratic Assignment Problem

*Supervisor:* Bela Vizvari

Mohammad Taghi Valipour Azizi

*Thesis Title:* Logistic Design and Facility Location for Organ Transplantation Centers

*Supervisor:* Bela Vizvari

Kemal Lale

*Thesis Title:* Anthropometric Computer Workstation Design to Reduce Perceived Musculoskeletal Discomfort

*Supervisor:* Orhan Korhan

### **Mathematics**

Olivia Ada Obi

*Thesis Title:* Stability of Autonomous and Non Autonomous Differential Equations

*Supervisor:* Sonuç Zorlu Oğurlu

### **Mechanical Engineering**

Layth Abed Hasnawi Al Rubae

*Thesis Title:* Maximizing the Lifespan of Hydraulic Power Plants with Application of the Integrated Preventive Maintenance Program

*Supervisor:* Hasan Hacısevki

Alireza Kazemeini

*Thesis Title:* Improving Control Mechanism of an Active Air Suspension System

*Supervisor:* Hasan Hacısevki

Aliakbar Akbari

*Thesis Title:* Application of Radio Frequency Identification in Intelligent Distributed Manufacturing System

*Supervisor:* Majid Hashemipour

Saeid Jafari

*Thesis Title:* Application and development of a new AGV in sprinkler irrigation

*Supervisor:* Majid Hashemipour

Mohammad Rahim Zeraat Talab

*Thesis Title:* Localization of Wireless Sensor Networks Using Triangulation in Industrial Environment

*Supervisor:* Majid Hashemipour

Sarvenaz Sobhansarbandi

*Thesis Title:* Performance of Flat Plate and CPC Solar Collectors in Underfloor Heating Systems

*Supervisor:* Uğur Atikol

Ali Akbar Emamverdian

*Thesis Title:* Design of a Competency Based Information and Knowledge Model for a Manufacturing System: Case Study EMU CIM Lab

*Supervisor:* Majid Hashemipour

Alireza Sadeghi

*Thesis Title:* Developing Equations for Ideal Gas Air Properties

*Supervisor:* Fuat Egelioglu

Farshad Tavallalinia

*Thesis Title:* Effect of Helmet in Preventing Human Head Brain Trauma in Traffic Accidents

*Supervisor:* Neriman Özada

Siavash Emami

*Thesis Title:* Finite Element Analysis of Reverse Shoulder Joint Prosthesis

*Supervisor:* Neriman Özada

Arash Cheraghpour Shiraz  
*Thesis Title:* Effect of Total Elbow Arthroplasty in Varus-Valgus Laxity and Stress Distribution of Elbow Joint  
*Supervisor:* Neriman Özada

Hamed Ensafisoroor  
*Thesis Title:* Investigation of Stepwise Basin Solar Still  
*Supervisor:* Fuat Egelioglu

Shadi Ayyad  
*Thesis Title:* Comparison of Three Single-Passage SAHs with Different Modification  
*Supervisor:* Hasan Hacısevki  
*Co-supervisor:* Fuat Egelioglu

Aminreza Mahna  
*Thesis Title:* Formability Analysis of Polymers Incremental Sheet Forming Process  
*Supervisor:* Ghulam Hussain

Ataollah Jalalian Alhashemi  
*Thesis Title:* Process Optimization in Hole Machining of Glass-Fiber Reinforced Polymer Composite  
*Supervisor:* Ghulam Hussain

Ali Vatankhah Barenji  
*Thesis Title:* An RFID-Based Distributed Control System for Flexible Manufacturing System  
*Supervisor:* Majid Hashemipour

Majid Mohammad Sadeghi  
*Thesis Title:* Design and Development of RFID-enabled Flexible Manufacturing Cell Control System  
*Supervisor:* Majid Hashemipour

Mohammadhossein Dadfar  
*Thesis Title:* Optimization of Rankine Cycle  
*Supervisor:* Fuat Egelioglu

Ramin Soufi  
*Thesis Title:* An Experimental Study on Friction Stir Processing of AA-6061 Aluminum Alloy  
*Supervisor:* Ghulam Hussain

### **Physics**

Yashar Alizadeh  
*Thesis Title:* Nonlinear Electromagnetics in Flat and Curved Spacetime  
*Supervisor:* S. Habib Mazharimousavi

Ali Ovgun  
*Thesis Title:* Dark Matter Modification of  $f(R)$  or Wimps Miracle  
*Supervisor:* Osman Yilmaz

Kiyment Emral  
*Thesis Title:* Self-adjoint Extensions of the Operators and Their Applications in Physics  
*Supervisor:* Özey Gürtuğ

Marzieh Parsa  
*Thesis Title:* Gravitational Lensing  
*Supervisor:* Seyedhabibollah Mazharimousavi  
*Co-supervisor:* Mustafa Halilsoy

Najm Abdola Saleh  
*Thesis Title:* Physics on the Rotating Earth  
*Supervisor:* Mustafa Halilsoy

Morteza Kerachian  
*Thesis Title:* Existence of Reissner - Nordstorm Type Black Hole in  $f(R)$  Gravity  
*Supervisor:* Mustafa Halilsoy

Ashwaq Eyad Kadhim Al-Aakol  
*Thesis Title:* Position Dependent Mass Quantum Particle  
*Supervisor:* Seyedhabibollah Mazharimousavi

Ashkan Roozbeh  
*Thesis Title:* Wave Propagation in a Medium with Position-Dependent Permittivity and Permeability  
*Supervisor:* Mustafa Halilsoy

### **Tourism Management**

Eda Demir  
*Thesis Title:* Core Self-evaluations, Work Engagement, and Work- Family Facilitation: An Empirical Study in the Hotel Industry  
*Supervisor:* Osman M. Karatepe

Kofoworola A. J. Oni  
*Thesis Title:* Environmental Impacts of Coastal Tourism on Small Island States: The Case of North Cyprus  
*Supervisor:* Mehmet Altunay

Winifred Lema Doh  
*Thesis Title:* Antecedents of Service Recovery Performance in 3 and 4 Star Hotels in Douala, Cameroon  
*Supervisor:* Huseyin Arash

Romana Puryova  
*Thesis Title:* Examining Main Motivational Factors in Dark Tourism Gallipoli, Turkey  
*Supervisor:* Hasan Kılıç

Orkhan Musa  
*Thesis Title:* Public Perceptions of Tourism Development: Baku Case  
*Supervisor:* Mehmet Altunay

*Co-supervisor:* Hüseyin Araslı

Sanaz Vatankhah

*Thesis Title:* Does job Embeddedness Mediate the Effects of High Performance Work Practices on Turnover Intentions? A study in the Airline Industry

*Supervisor:* Osman Mübin Karatepe

Hala Hussein Wajeih Zidan

*Thesis Title:* Interface between Strategic Orientations, Organizational Learning and Growth; Small, Medium Sized Enterprises (smes) in Syria

*Supervisor:* Hüseyin Araslı

Sogol Haddadi

*Thesis Title:* The Effect of External Information Sources on Destination Decision-Making: A Case of North Cyprus

*Supervisor:* Rüçhan Kayaman

Seyed Mani Sadatgol

*Thesis Title:* TRNC 's Destination Image Among Travelers: Preliminary Analysis of Distance Decay Theory

*Supervisor:* Rüçhan Kayaman

Hamed Rezapouraghdam

*Thesis Title:* Socio-Cultural Impacts of Educational Tourism on the Residents of Famagusta

*Supervisor:* İlkey Yorgancı Maloney

Ezgi Kılıç

*Thesis Title:* Comparative Analysis of European Internal Quality Standards with Tourism Faculty EMU Applications

*Supervisor:* Mehmet Altınay

Mehrnoush Rostampour

*Thesis Title:* Destination Personality, Satisfaction, and Tourist Future Behavior: The Case Of North Cyprus

*Supervisor:* Rüçhan Kayaman

Dilem Ramadan

*Thesis Title:* Budgeting in Hotels: A Contingency Base Study in Northern Cyprus

*Supervisor:* Mine Haktanır

Shehab N. Edais

*Thesis Title:* Personality Variables, Job Embeddedness and Job Outcome: A Study in Jerusalem, Israel

*Supervisor:* Hasan Kılıç

## ■ Ph.D. ■

### ***Applied Mathematics and Computer Science***

Mahmoud Jafari Shah Belashi

*Thesis Title:* On Continued Fractions

*Supervisor:* Agamirza Bashirov

Halil Gezer

*Thesis Title:* Equistatistical Convergence

*Supervisor:* Hüseyin Aktuğlu

Mustafa Kara

*Thesis Title:* Approximation by Kantorovich Type Operators

*Supervisor:* Nazım Mahmudov

### ***Architecture***

Payam Mahasti

*Thesis Title:* Place making for Silk Road Cities in Iran: Process and Strategies

*Supervisor:* Şebnem Hoşkara

Pınar Uluçay

*Thesis Title:* A Critical Evaluation of The Town Planning Law of Northern Cyprus in Line with the European Spatial Development Perspective

*Supervisor:* Ruşen Keleş

### ***Chemistry***

İlke Yuçekan

*Thesis Title:* Synthesis and Properties of Low Band Gap Organic Semiconductor for Solar Cell Application

*Supervisor:* Huriye İcil

Hasan Oylum

*Thesis Title:* Preparation and Characterization of Poly (4-vinyl pyridine) Grafted Chitin Beads

*Supervisor:* Elvan Yılmaz

Zülal Yalınca

*Thesis Title:* Modified Chitosans for Biomedical Applications

*Supervisor:* Elvan Yılmaz

### ***Civil Engineering***

Sepanta Naimi

*Thesis Title:* Behavior of Steel Reduced Beam Web(RBW) Connections with Multi Longitudinal Voids

*Supervisor:* Mürüde Çelikağ

Iman Aghayan

*Thesis Title:* Improved Traffic Crash Modeling Through Accuracy and Response Time Using Classification Algorithms: A Model Comparison Approach

*Supervisor:* Mehmet M. Kunt

### ***Computer Engineering***

Abdul Karim Abed

*Thesis Title:* Mobility Models and Efficient Multihop Routing Methods in MANETs

*Supervisor:* Gürcü Öz

Hüsnü Bayramoğlu

*Thesis Title:* Time Varying Sliding Coefficient Based Terminal Sliding Mode Control Methods for Underactuated Fourth Order Nonlinear Systems

*Supervisor:* Hasan Kömürçügil

### ***Economics***

Nezhat Kucuk

*Thesis Title:* The Impact of the Information and Communication Technology (ICT) on Gender Equality and Development

*Supervisor:* Mehmet Balcılar

Nuru Giritli

*Thesis Title:* Economic Impact of External Income Through Labor Mobility on Economic Well-being in North Cyprus CGE Model Approach

*Supervisor:* Sevin Uğural

Hesam Aldin Shahrivar

*Thesis Title:* On the Accuracy , Consistency and Predictive Performance of Credit Risk, Country Risk and Bond Ratings: A Comparative Analysis

*Supervisor:* Mehmet Balcılar

### ***Educational Sciences***

Gökhan Iskifoğlu

*Thesis Title:* An Investigation into the Cross-Cultural Measurement Equivalency of the CCTDI to Assess the Critical Thinking Dispositions of Pre-service Teachers Across Turkish and American Higher Education Institutions

*Supervisor:* Ali Sıdkı Ağazade

### ***English Language Teaching***

Yesim Betül Oktay

*Thesis Title:* Exploring Pre-service and In-service English Language Teachers Cognitions via Similes and Metaphors: A Cross Sectional Survey

*Supervisor:* Ülker Vancı Osam

Mine Sancar

*Thesis Title:* State School Principal's Perceived Leadership Behaviors in Relation to English Language and Other Subject Area Teacher's Job Satisfaction in TRNC

*Supervisor:* Mehmet Çağlar

Ismail Erkan Arkin

*Thesis Title:* English-Medium Instruction in Higher Education: A

Case Study in a Turkish University Context

*Supervisor:* Necdet Osam

### ***Industrial Engineering***

Sadegh Niroomand

*Thesis Title:* Studies on Different Types of Facility Layout problems

*Supervisor:* Orhan Korhan

Nima Mirzaei

*Thesis Title:* Reconstruction of World Bank Classification of Countries and Moody's Rating System

*Supervisor:* Bela Vizvari

### ***Mathematics***

Övgü Çidar İyikal

*Thesis Title:* Smoothing Based on Stretched Interpolated Moving Average Approach

*Supervisor:* Yücel Tandoğdu

### ***Mechanical Engineering***

Houman Farzad

*Thesis Title:* Aluminum Pigmenten Chromate Free Metal Effect Coatings on Steel Substrates

*Supervisor:* Murat Bengisu

Hussein Mohammad Ali İbraheem

*Thesis Title:* Numerical Optimization for Cutting Process in Glass Fiber Reinforced Plastic Using Conventional and Non-Conventional Methods

*Supervisor:* Asif Iqbal

### ***Physics***

Tayebeh Tahamtan

*Thesis Title:* New Exact solution in a Model of  $f(R)$  Gravity and their Physical Properties

*Supervisor:* Özey Gürtuğ

Akbar Abbasi

*Thesis Title:* Environmental Radiation in High Exposure Building Materials

*Supervisor:* Mustafa Halilsoy



## Recent Publications and Presentations (January - June 2013)

### ■ Journal Publications (SCI, SSCI, AHCI) ■

The journal publications listed here are those that are listed in Arts & Humanities Citation Index (A&HCI), Science Citation Index (SCI), Science Citation Index Expanded (SCI-Expanded), or Social Sciences Citation Index (SSCI). A search on ISI Web of Science was performed on 30 October 2013 to retrieve articles with at least one author having EMU affiliation. **This list may not be comprehensive as some articles could be deposited to ISI after the query date.**

Abbasi, A. (2013). "Calculation of gamma radiation dose rate and radon concentration due to granites used as building materials in Iran." *Radiation Protection Dosimetry*, 155(3): 335-342.

Abbasi, A. and Bashiry, V. (2013). "Strong coupling constant of vector bottomonium to the pseudoscalar and vector B-c mesons via QCD sum rules." *European Physical Journal A*, 49(8): 103.

Abrishambaf, R., Hashemipour, M. and Bal, M. (2013). "Structural modeling of industrial wireless sensor and actuator networks for reconfigurable mechatronic systems." *International Journal of Advanced Manufacturing Technology*, 64(5-8): 793-811.

Abuhilal, H., Hocanin, A. and Bilgekul, H. (2013). "Successive interference cancellation for a CDMA system with diversity reception in non-Gaussian noise." *International Journal of Communication Systems*, 26(7): 875-887.

Ahmad, M. S., Kukrer, O. and Hocanin, A. (2013). "A 2-D recursive inverse adaptive algorithm." *Signal Image and Video Processing*, 7(2): 221-226.

Aktuglu, H. and Ozarslan, M. A. (2013). "On the solvability of Caputo  $q$ -fractional boundary value problem involving  $p$ -laplacian operator." *Abstract and Applied Analysis*, 658617.

Altincay, H. and Erenel, Z. (2013). "Avoiding the interpolation inaccuracy in nearest feature line classifier by spectral feature analysis." *Pattern Recognition Letters*, 34(12): 1372-1380.

Altiok, H. U. and Jenkins, G. P. (2013). "The fiscal burden of the legacy of the civil service pension systems in northern Cyprus." *Journal of Pension Economics & Finance*, 12(1): 92-110.

Altun, M. L., Yilmaz, B. S., Orhan, I. E. and Citoglu, G. S. (2013). "Assessment of cholinesterase and tyrosinase inhibitory and antioxidant effects of *Hypericum perforatum* L. (St. John's wort)." *Industrial Crops and Products*, 43: 87-92.

Amira, B., Mouldi, D. and Feridun, M. (2013). "Growth effects of inflation targeting revisited: empirical evidence from emerging markets." *Applied Economics Letters*, 20(6): 587-591.

Atikol, U. (2013). "Editorial for special issue on "clean energy technologies." *International Journal of Energy Research*, 37(5): 377-377.

Atikol, U., Abbasoglu, S. and Nowzari, R. (2013). "A feasibility integrated approach in the promotion of solar house design." *International Journal of Energy Research*, 37(5): 378-388.

Aydin, S., Palabiyik, S. S., Erkekoglu, P., Sahin, G., Basaran, N. and Giray, B. K. (2013). "The carotenoid lycopene protects rats against DNA damage induced by Ochratoxin A." *Toxicol*, 73: 96-103.

Balcilar, M. and Ozdemir, Z. A. (2013). "Asymmetric and time-varying causality between inflation and inflation uncertainty in G-7 countries." *Scottish Journal of Political Economy*, 60(1): 1-42.

Balcilar, M. and Ozdemir, Z. A. (2013). "The causal nexus between oil prices and equity market in the US: A regime switching model." *Energy Economics*, 39: 271-282.

Balcilar, M. and Ozdemir, Z. A. (2013). "The export-output growth nexus in Japan: a bootstrap rolling window approach." *Empirical Economics*, 44(2): 639-660.

Balcilar, M., Beyene, A., Gupta, R. and Seleteng, M. (2013). "Ripple Effects in South African House Prices." *Urban Studies*, 50(5): 876-894.

Balcilar, M., Demirel, R. and Hammoudeh, S. (2013). "Investor herds and regime-switching: evidence from Gulf Arab stock markets." *Journal of International Financial Markets Institutions & Money*, 23: 295-321.

Balcilar, M., Gupta, R., Majumdar, A. and Miller, S. M. (2013). "Forecasting Nevada gross gaming revenue and taxable sales using coincident and leading employment indexes." *Empirical Economics*, 44(2): 387-417.

Bashirov, A. E. and Jneid, M. (2013). "On Partial Complete Controllability of Semilinear Systems." *Abstract and Applied Analysis*, 521052.

Bashirov, A., Mazhar, Z., Etikan, H. and Erturk, S. (2013). "Delay structure of wideband noises with application to filtering problems." *Optimal Control Applications & Methods*, 34(1): 69-79.

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