





















## METU EARTH SYSTEM SCIENCE (ESS) ACADEMIC BOARD (Aug-2017)







PHOTO	NAME-SURNAME- DEPARTMENT-CONTACT INFO (TEL: 0312-210-)	RESEARCH INTERESTS / THESIS TITLES
	Prof. Dr. Ahmet Cevdet YALÇINER Civil Eng.-Coastal & Harbor Eng. <yalciner@metu.edu.tr>, Tel: 5438	<ul style="list-style-type: none"> <li>- Climate Change and Coastal Processes</li> <li>- Coastal Impacts and Mitigation Strategies</li> </ul>
	Prof. Dr. Ayşen DENER AKKAYA Statistics <akkay@metu.edu.tr> Tel: 5329	<ul style="list-style-type: none"> <li>-Robust stochastic regression analysis with spatially auto-correlated errors</li> <li>-Modeling the spatial distribution of soil properties by using stochastic regression</li> <li>-Comparison of stochastic climate models</li> <li>-Ranked set sampling methodology for environmental data</li> <li>-Contribution to thesis where “Robust Statistical Inference, Stochastic Models, Time Series, Autoregressive Models and their applications are involved.</li> </ul>
	Prof. Dr. Ayşen YILMAZ Institute of Marine Sciences <b>ESS Director</b> <ayilmaz@metu.edu.tr> Tel: 2291 / 7350	<ol style="list-style-type: none"> <li>1-“Climate Change Impacts on Primary Production and Economically Important Fish Stocks in the Black Sea; Selin Küçükavşar; MS; Advisor: Prof. Dr. Ayşen Yılmaz (IMS) /Co-advisor: Assoc. Prof. Dr. Hakan Ercan (ECON); <b>Graduated (September-2013)</b></li> <li>2-“Modelling of Carbon Sink Capacity of the Black Sea”, Yelis Cengiz, MS, Advisor: Prof. Dr. Ayşen Yılmaz (IMS) /Co-advisor: Assoc. Prof. Dr. İsmail Yücel (CE), <b>Graduated (June-2016)</b></li> <li>3-“Sustainable Development and Renewable Energy Policy Framework of the European Union and Turkey”, PhD, Burak Bural*, Advisor: Prof. Dr. Ayşen Yılmaz (IMS) /Co-advisor: Assoc. Prof. Dr. Şule Güneş (IR), <b>Ongoing.</b></li> <li>4- “Construction of an Electricity Sector Focused Social Accounting Matrix for Turkey, PhD., Serhat Atakul*, Advisor: Prof. Dr. Ayşen Yılmaz (IMS), Co-advisor: Dr. Bora Kat (ESS-TÜBİTAK) <b>Ongoing.</b></li> <li>5-“Integrated Assessment of Climate Change Adaptation and Disaster (Flood) Risk Management”, PhD, Sertaç Oruç, Advisor: Prof. Dr. Ayşen Yılmaz (IMS) /Co-advisor: Assoc. Prof. Dr. İsmail Yücel (CE), <b>Ongoing.</b></li> <li>6- “Climate Change Impacts on Water Resources in Ankara Region and Management Strategies”, MS, Şükrü Uzun, Advisor: Prof. Dr. Ayşen Yılmaz (IMS), Co-advisor: Prof. Dr. Ahmet Cevdet Yalçiner (CE), <b>Ongoing.</b></li> </ol> <ul style="list-style-type: none"> <li>-Aquatic Environments under High Atmospheric CO<sub>2</sub>, Ocean Acidification and Impacts on Marine Living Resources</li> <li>-Sustainable Development of Marine Fisheries / Aquaculture by Taking into account the Impacts on Marine Ecosystems</li> <li>-Marine Ecosystems under Anthropogenic Pressure – Marine Pollution and Economic Lost</li> </ul>




	<p>Assoc. Prof. Dr. Bahar GEDIKLI City and Regional Planning &lt;gedikli@metu.edu.tr&gt;, Tel: 7030</p>	<ul style="list-style-type: none"> <li>- Sustainable urban development</li> <li>- Climate change and urban planning</li> </ul>
	<p>Prof. Dr. Bülent G. AKINOĞLU Physics &lt;bulo@metu.edu.tr&gt; Tel: 5064</p>	<p>1-“Analysis of Sunshine Duration Between 1970 and 2010 for Turkey”, Uğur Yıldırım; MS; Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Assoc. Prof. Dr. İsmail Ömer Yılmaz (GEOE) <b>Graduated (Jan-2013)</b></p> <p>2-“Nuclear Energy versus Solar Energy (NUKE vs PV): The Comparison of their Economic Feasibilities and Environmental Aspects for Turkey, Abdullah Buğrahan Karaveli; MS; Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Prof. Dr. Uğur Soytas (BA) <b>Graduated (Jan-2014)</b></p> <p>3-“Paleo-estimations of Solar Irradiation and Other Climatic Variables”, Uğur Yıldırım; PhD; Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Prof. Dr. İsmail Ömer Yılmaz (GEOE); <b>Ongoing.</b></p> <p>4-“Turnkey Solar Electricity and Energy Planning for Turkey”, Abdullah Buğrahan Karaveli; PhD; Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Prof. Dr. Uğur Soytas (BA); <b>Ongoing.</b></p> <p>5- “Probable Effects of Large Scale Solar Power Plants on Microclimate for Turkey”, Emre Demirezen; PhD; Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Assist. Prof. Dr. Talat Özden (Gümüşhane Univ., EE), <b>Ongoing.</b></p> <p>6- “Choosing a Building at Middle East Technical University and Providing a Retrofit Measure with Predefined Options by Using Building Energy Simulations” MS, Umut Uygun, Advisor: Prof. Dr. Bülent G. Akinoğlu (PHYS), Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), <b>Ongoing.</b></p> <p>7- Electric Load Management and Cost Optimal Electricity Supply Including Photovoltaic and Energy Storage System in Ostim Organized Industrial Site (OOIS) in Ankara, PhD, Mehmet Ozcan, Advisor: Prof. Dr. Bülent G. AKINOĞLU (PHYS), Co-advisor: Assist. Prof. Dr. Satır BENHÜR (Çankaya Univ., IE), <b>Ongoing.</b></p> <p>-Interrelations and possible links between the human induced climate change and natural climate variability:A historical &amp; globalperspective</p>
	<p>Assoc. Prof. Dr. Cemal Can BILGIN Biology &lt;cbilgin@metu.edu.tr&gt; Tel: 5017, 3128</p>	<p>1-“The Green Spaces of Ankara: Progress, Interconnections and Naturalness”, Aydan Özkil; MS; Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIO), Co-advisor: Assoc. Prof. Dr. Hüseyin Çağatay Keskinok (CRP), Transferred to <b>MS-Without Thesis, Graduated (June-2015)</b></p> <p>2-“Quantifying the Ecological Footprint of Middle East Technical University: Towards Becoming an Ecological Campus”, Yeliz Galioglu, MS, Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIOL), Co-advisor: Assoc. Prof. Dr. Bahar Gedikli (CRP), <b>Graduated (September-2015).</b></p> <p>3-“A Framework for Monitoring Protected Areas In Turkey Using Selected Essential Biodiversity Variables (EBVS)”, Semiha Demirbaş Çağlayan, PhD, Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIOL); Co-advisor: Prof. Dr. Sebnem H. Düzgün (MINE, GGIT), <b>Ongoing.</b></p> <p>4- “Sustainable Management of an Urban Habitat Island in Face of Climate Change: The Case of METU Campus Grounds”, Yeliz Galioglu, , PhD, Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIOL); Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), <b>Ongoing.</b></p> <p>-Impact of climate change on forestry in Mediterranean region of Turkey: Range shifts, productivity and recruitment</p> <p>-Land use change in a growing city and its ecological consequences</p>

	<p>Prof. Dr. Çiğdem ERÇELEBİ Physics E-mail: &lt;ercelebi@metu.edu.tr&gt; Tel: 5061</p>	<p><b>Research Interests:</b></p> <ul style="list-style-type: none"> <li>- Solar Cell Structures and Applications (Heterojunctions, Schottky Structures, ETA-Extremely Thin Absorber Layer Solar Cells).</li> <li>- Deposition (by different growth techniques) and electrical, optical and structural characterization of II-VI semiconducting thin films (CdTe, CdS, InSe, CuIn(Ga)Se(S) ) and optimization of material properties for the efficient solar cell applications.</li> <li>- Production and study of optical, electrical and device properties of the thin film heterojunction solar cells.</li> <li>- Application of a variety of experimental characterization techniques to thin film materials and device structures.</li> </ul> <p><b>Thesis Topics:</b></p> <ul style="list-style-type: none"> <li>- Recent Progress in the Thin Film Solar Cell Structures/ Thin Film Solar Module Applications: Cost-Efficiency Analysis</li> <li>- Recent Developments in the “Production and Application of CdS/CdTe Thin Film Solar Cell Structures and the Study of Environmental Impacts”</li> </ul>
	<p>Assoc. Prof. Dr. Ebru VOYVODA Economics &lt;voyvoda@metu.edu.tr&gt; Tel: 2056</p>	<p>1-“An Econometric Analysis of the Impact of Urbanization on Energy Consumption and Greenhouse Gas Emissions: Panel Estimation for Different Economic Development Stages”, Simay Erdoğan, PhD, Advisor: Assoc. Prof. Dr. Ebru Voyvoda (ECON), Co-advisor: Prof. Dr. Uğur Soytaş (BA) <b>Ongoing.</b></p> <ul style="list-style-type: none"> <li>-Energy-economy-environment modeling</li> <li>-Macroeconomic Analysis of Environmentally Relevant Policies</li> <li>-International Climate Policy and Resource Management</li> </ul>
	<p>Prof. Dr. Ela BABALIK SUTCLIFFE, City and Regional Planning &lt;ebaba@metu.edu.tr&gt; Tel: 2263</p>	<p>1-“High Speed Rail Development in Turkey: Government Policy, Investments and Users Perspective”, Gülçin Dalkıç, MS, Advisor: Assoc. Prof. Dr. Ela Babalık Sutcliffe, Co-advisor: Assist. Prof. Dr. Hediye Tüydüş Yaman (CE), <b>Graduated (September-2014)</b></p>
	<p>Assoc. Prof. Dr. Elçin KENTEL Civil Eng. &lt;ekentel@metu.edu.tr&gt; Tel: 5412</p>	<p>1-“A guide for internalization of external costs: Economic costs of greenhouse gases (GHG) stemming from transportation in Turkey”, Sedef Yavuz Noyan, PhD, Advisor: Assoc. Prof. Dr. Elçin Kentel (CE), Co-advisor: Dr. Bora Kat (TÜBİTAK/ESS), <b>Ongoing.</b></p> <p>2- Assessment of Climate Change Impact on the Renewable Energy Potential of Turkey, MS, Buket Mesta, Advisor: Assoc. Prof. Dr. Elçin KENTEL (CE), Co-advisor: Prof. Dr. Alp EMRE (ENVE), <b>Ongoing.</b></p> <ul style="list-style-type: none"> <li>- Uncertainty modeling</li> <li>- Hydrologic modeling</li> <li>- Impact of climate change on water resources</li> <li>- Multi-criteria decision making for water resources structure</li> <li>- Renewable energy</li> </ul>
	<p>Prof. Dr. Faika Dilek SANIN Environmental Eng. E-mail: &lt;dsanin@metu.edu.tr&gt; Tel: 2642</p>	<ul style="list-style-type: none"> <li>-Wastewater treatment</li> <li>-Management of solid and hazardous wastes</li> </ul>

	<p>Prof. Dr. Filiz B. DILEK Dept. of Environmental Eng. E-mail: fdilek@metu.edu.tr Tel: 5877</p>	<p>-Water and wastewater treatment</p>
	<p>Prof. Dr. Göksel Niyazi DEMIRER Environmental Eng. &lt;goksel@metu.edu.tr&gt; Tel: 5867</p>	<p>1-“Integrated Wastewater Treatment, CO<sub>2</sub> Mitigation and Biohydrogen Production by using an Microalgal (Chlorella Vulgaris) and Anaerobic Culture”, Direniş Çaylı, MS, Advisor: Prof. Dr. Göksel Niyazi Demirer (ENVE), Co-advisor: Assoc. Prof. Dr. Tuba Hande Bayramoğlu (ENVE), <b>Graduated (March 2017)</b>.</p> <p>2-“ Climate-Energy Nexus: Impact of Climate Change on Energy Security”, Kemal Demirkol, PhD, Advisor: Prof. Dr. Göksel Niyazi Demirer (ENVE), Co-Advisor: Assoc. Prof. Dr. Ebru Voyvoda (ECON), <b>Ongoing</b>.</p> <p>-Integrated nutrient removal, greenhouse gas mitigation and bio-fuel and bio-product generation by using micro-algal and anaerobic microbial cultures -Production of Renewable Energy and Bio-based Industrial Chemical Products from Wastes -Preventative Environmental Management for Municipalities -Cleaner (sustainable) production in industry -Industrial symbiosis as a tool for climate change mitigation and adaptation - Life cycle assessment as a tool for environmental management</p>
	<p>Assoc. Prof. Dr. Gül İpek Tunç Economics &lt;ipek@metu.edu.tr&gt;, Tel 3047</p>	<p>1-Impacts of Climate Change on Turkish Agriculture: A General Equilibrium Integrated Sector Model Approach, Selin Özokcu, PhD, Advisor: Assos. Prof. Dr. Gül İpek Tunç, Co-advisor: Assoc. Prof. Dr. Ozan Eruygur (ECON-Gazi University), <b>Ongoing</b>.</p> <p>-Energy security -Rebound effects -Consumer-producer responsibility in pollution</p>
	<p>Assoc. Prof. Dr. Hakan ERCAN Economics &lt;hercan@metu.edu.tr&gt; Tel: 2068</p>	<p>1-“An Improvement Plan for Developing Emission Scenarios of Turkey”, Canet Cengiz, MS, Advisor: Assoc. Prof. Dr. Hakan Ercan (ECON), Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), <b>Ongoing</b>.</p> <p>2-“Environmental Cost Benefit Analysis of Power Generation Facilities”, Özge Önenli, PhD, Advisor: Prof. Dr. Hakan Ercan (ECON), Co-advisor: Dr. Bora Kat (ESS), <b>Ongoing</b>.</p> <p>3-Investigation of Alternative Energy and Green Employment Potential of Turkey Under Sustainable Development Context, PhD, Hasan Miraç Gül, PhD, Advisor: Prof. Dr. Hakan Ercan (ECON), Co-advisor: Prof. Dr. Bülent Gültekin Akınoğlu (PHYS), <b>Ongoing</b>.</p> <p>4-“Economic Analysis Approach in River Basin Management Plans within the Context of EU Water Framework Directive and its Adaptability to Turkey”, Bahar Sel, PhD, Prof. Dr. Hakan Ercan (ECON), Co-advisor: Prof. Dr. Ayşen YILMAZ (IMS), <b>Ongoing</b>.</p> <p>-Economic Valuation of Agricultural Biodiversity in terms of Climate Change Adaptation -Climate Change and Energy Policy of Turkey -How will climate change affect agricultural crops in Turkey? An Economic Impact Analysis</p>





	Prof. Dr. Hakan Işık TARMAN Dept. Mechanical Eng. E-mail: tarman@metu.edu.tr Tel: 5299	-Global Numerical Simulation of Wave Propagation -Global Numerical Simulation of Atmospheric Convective Phenomena -Numerical Simulation of Mantle Convection -Numerical Simulation of Geomagnetic Phenomena
	Prof. Dr. Hami ALPAS Food Eng. imah@metu.edu.tr Tel: 5618	1-“Vulnerability of Global Primary Food Production Against Extreme Climatic Events in the Context of Food Governance”, Filiz Yeni, PhD, Advisor: Prof. Dr. Hami Alpas (FDE), Co-advisor: Assoc. Prof. Dr. Şule Güneş (IR), <b>Graduated (December, 2016)</b> . 2-“Analysis of Processes of The Turkish Food System in Terms of Sustainability via Life Cycle Assessment Approach”, MS, Serkan Naneci, Advisor: Prof. Dr. Hami Alpas (FDE), Co-advisor: Prof. Dr. Meryem Beklioğlu Yerli (BIOL), <b>Ongoing</b> .
	Prof. Dr. Helga Ida RITTERSBERGER TILIÇ Sociology helgat@metu.edu.tr Tel: 5987	1-“ An Analysis of Selected Cases of Environmental Movements in Turkey Through an Ecofeminist Approach”, Ecem Seçkin, MS, Advisor: Prof. Dr. Helga Ida Rittersberger Tiliç (SOC), Co-Advisor: Assoc. Prof. Dr. Osman Balaban (CRP), <b>Graduated (July 2016)</b> . 2-“Impacts of Climate Change on Agriculture and Ecosystem Services as Sources for Livelihood: The Case of Mardin” Melike Kuş, PhD, Advisor: Prof. Dr. Helga Ida Rittersberger Tiliç (SOC), Co-Advisor: Assoc. Prof. Dr. Uğur Murat Leloğlu (PETE-GGIT), <b>Ongoing</b> .
	Prof. Dr. İpek İMAMOĞLU Environmental Eng. <ipeki@metu.edu.tr> Tel: 5861	1-“Determination of Optimum HBCDD Degradation via Fenton Techniques”, MS, Yasin Güray Hatipoğlu, Adisor: Prof. Dr. İpek İMAMOĞLU (ENVE), Co-Advisor: Doç.Dr. Özlem İlk Dağ, <b>Ongoing</b> . -Fate of toxic organic chemicals in the environment and in wastewater treatment plant sludges -Use of receptor models for the identification of pollutant sources and their degradation in aquatic environments
	Prof. Dr. İsmail Ömer YILMAZ Geological Eng. <ioyilmaz@metu.edu.tr> Tel: 5717	1- Comparison of Sedimentary Rocks from Paleotime and Recent Anoxic Basins, MS, Uluc, Utku, Cırık, Advisor: Prof. Dr. İsmail Ömer YILMAZ (GEOE), Co-Advisor: Assoc Prof. Dr. Mustafa Yücel (IMS), <b>Ongoing</b> . -Paleo-climate and Sea-level Change Records in Marine and Terrestrial Environments and Their Applications
	Assoc. Prof. Dr. İsmail YÜCEL Dept. of Civil Eng. E-mail: iyucel@metu.edu.tr Tel: 2487	1-Uncertainty Assessment in Projection of the Extreme River Flows, The Case of Omerli”, Batuhan Eren Engin, MS, Advisor: Assoc. Prof. Dr. İsmail Yücel (CE), Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), <b>Graduated (Feb 2015)</b> . 2-“The Impact of Climate Change on Urban Infrastructure”, Saadet Gökçen Karaduman, MS, Advisor: Assoc. Prof. Dr. İsmail Yücel (CE), Co-advisor: Assist. Prof. Dr. Meltem Şenol Balaban (CRP), <b>Ongoing</b> . 3-“Determination of Economic Impacts and Risks of Possible Changes in Meteorological Parameters on Sectors Using the Long Term Weather Forecasts and Climate Predictions”, Elif Müdrike Koç, PhD, Advisor: Assoc. Prof. Dr. İsmail Yücel (CE), Co-advisor: Assoc. Prof. Dr. Hakan Ercan (ECON), <b>Ongoing</b> . 4-“Analyses of Wind Resources Using Computational Fluid Dynamics and Numerical Weather Prediction Model for Producing Potential Wind Power”, İrem Işık; MS; Advisor: Assoc. Prof. Dr. İsmail Yücel (CE), Co-advisor: Prof. Dr. Ramazan Sarı (BA), <b>Ongoing</b> . -Potential Effects of Global Climate Change on Groundwater Quantity and Quality -Climate change impacts on the hydro-climatologic extremes in Turkey: Floods, droughts and their economic consequences -Estimating changes in water resources of hydrologic basins in Turkey using climate projections -Earth system model performance improvement: Data assimilation, downscaling through statistical and dynamical approaches







	<p>Prof. Dr. Kahraman ÜNLÜ Environmental Eng. &lt;kunlu@metu.edu.tr&gt;, Tel: 5869</p>	<ul style="list-style-type: none"> <li>-Development, numerical implementation and application of mathematical models for flow and contaminant transport in subsurface and waste disposal systems</li> <li>-Management of solid and hazardous wastes</li> <li>-Environmental risk and impact assessment</li> <li>-Contaminated site (soil and groundwater) remediation</li> <li>-Flow and contaminant fate and transport in the subsurface environment</li> </ul>
	<p>Assoc. Prof. Dr. Koray Kamil YILMAZ, Geological Eng. &lt;yilmazk@metu.edu.tr&gt; Tel: 2682, 2689</p>	<ul style="list-style-type: none"> <li>- Potential impacts of climate change on surface and groundwater resources</li> <li>- Surface water and groundwater hydrology</li> <li>- Application of system methods to identification and evaluation of models that simulate surface water and ground water flow processes and their interaction</li> <li>- Remote sensing applications in hydrology</li> <li>- Groundwater and surface water interaction</li> <li>- Integrated Watershed Modelling</li> <li>- Watershed Models</li> <li>- Systems Methods</li> </ul>
	<p>Prof. Dr. Mahmut O. KARSLIOĞLU Civil Eng. &lt;karsliog@metu.edu.tr&gt;, Tel: 2440</p>	<ul style="list-style-type: none"> <li>-GNSS (Global Navigation Satellite System) and Geodesy</li> <li>-Remote Sensing and GIS</li> </ul>
	<p>Prof. Dr. Meryem BEKLIOĞLU YERLI Biology, &lt;meryem@metu.edu.tr&gt; Tel: 5154</p>	<p>1-“Analysis of the Environmental Impacts of the Turkish Dietary Consumption Patterns with Hybrid LCA - IOA Method”, Deniz Başoğlu, MS, Advisor: Prof. Dr. Meryem Beklioğlu Yerli (BIOL); Co-advisor: Prof. Dr. Hami Alpas (FDE), <b>Ongoing</b>.</p> <ul style="list-style-type: none"> <li>- Evolution of Ecosystem Services (Many ecosystem services are assigned social and economic values).</li> <li>- Impact of climate change and eutrophication on zooplankton and fish community structure and distribution in shallow lakes.</li> <li>-Determination of the interactions between water level fluctuations and ecosystem structure induced through climate warming and human use using limnological and palaeological approaches</li> </ul>
	<p>Prof. Dr. Musa DOĞAN Dept. of Biology &lt;doganm@metu.edu.tr&gt; Tel: 5158</p>	<ul style="list-style-type: none"> <li>-Plant Taxonomy and Systematics</li> <li>-Ecosystem Assessment and Biodiversity Conservation</li> <li>-Plant Morphology and Anatomy</li> </ul>
	<p>Assoc. Prof. Dr. Mustafa YÜCEL Institute of Marine Sciences &lt;myucel@ims.metu.edu.tr&gt; Tel: 121260 (Erdemli-Internet Tel)</p>	<p>1- “Modelling and Economic Interpretation of the Black Sea Biogeochemical Cycles”, Kadir Biçe, MS, Advisor: Assoc. Prof. Dr. Mustafa Yücel (IMS), Co-advisor: Prof. Dr. Ayşen Yılmaz (ESS), <b>Ongoing</b>.</p> <ul style="list-style-type: none"> <li>-Climate change and anthropogenic impacts on deep-sea ecosystems in the Turkish seas</li> <li>-Sustainable utilization of seafloor resources: Integrating scientific, societal and economical aspects of hydrocarbon extraction, deep-sea mining, etc.</li> <li>-Redox-dependent microbial ecosystems and their ecosystem services</li> <li>-Marine deoxygenation, impacts on coastal communities and sea economy</li> <li>-Deep-ocean exploration and underwater sensor technology development</li> </ul>

		-Extreme environment research: Integrating approaches of seemingly unrelated areas (deep sea, space research) to arrive at common methodologies and protocols
	Prof. Dr. Oktay TANRISEVER International Relationship E-mail: oktay@metu.edu.tr Tel: 3063	1-“Natural Gas Diplomacy of Russia, the EU and Turkey: Political and Security versus Economic and Environmental Dimensions”, Kürşad Tosun, PhD, Advisor: Prof. Dr. Oktay Tanrisever (IR), Co-advisor: Assoc. Prof. Dr. Merih Aydınalp Köksal (Hacettepe Üniv. - ENVE), <b>Graduated (May, 2016)</b> . 2- “From Oil Economy to Low-Carbon Economy: New Energy Geopolitics and Implications for Turkey”, Alparslan Bayraktar, PhD, Advisor: Prof. Dr. Oktay Tanrisever), Co-advisor: Prof. Dr. Özlem Özdemir (BA), <b>Ongoing</b> .  - Energy Security - Energy Diplomacy
	Assoc. Prof. Dr. Osman BALABAN, City and Regional Planning <obalaban@metu.edu.tr> Tel: 2251	1-“A Comparative Analysis of Efficiency and Carbon Dioxide Mitigation Potential of Residential Heating Systems in Bursa (Turkey)”, Nezh Evren, MS, Advisor: Assoc. Prof. Dr. Osman Balaban (CRP), Co-advisor: Prof. Dr. Birol Kılış (Başkent Üniv.-ME), <b>Graduated (Sept 2015)</b> . 2- “Effects of Different City Forms on Local Transportation”, Sinem Ünal, MS, Advisor: Assoc. Prof. Dr. Osman Balaban (CRP), Co-advisor: Assoc. Prof. Dr. Hediye Tüdeş Yaman (CE), <b>Ongoing</b> . 3- “Analysis of the Deficiencies in Carbon Footprint-Related Data Production and Access in Turkey and Development of a Methodology to Reduce the Limitations Arising from These Deficiencies”, MS, Cansu Perdeli, Advisor: Assoc. Prof. Dr. Osman BALABAN (CRP), Co-advisor: Prof. Dr. Şebnem DÜZGÜN (MINE, GGIT), <b>Ongoing</b> . 4- “The Role of the Local Governments in Climate Change Adaptation: Barriers in Turkish Local Context”, MS, Gülin Özdemir, Advisor: Assoc. Prof. Dr. Osman BALABAN (CRP), Co-advisor:--- <b>Ongoing</b> . -Investigation of the links between urban development and climate change -Efficacy of strategies for urban sustainability and low-carbon urbanism -Energy efficiency in urban transportation and buildings sector
	Prof. Dr. Özlem ÖZDEMİR Business Administration <yozlem@metu.edu.tr>, Tel: 3061	1-“Economic Growth and Environment Nexus: Environmental Kuznets Curve”, Selin Özokçu, MS, Advisor: Prof. Dr. Özlem Özdemir (BA), Co-advisor: ---, <b>Graduated (June 2015)</b> . 2-“Investigating Preferences of Households for Residential Photovoltaic Systems: A Survey Study in Ankara, Turkey”, Eren Aslıhak, MS, Advisor: Özlem Özdemir (BA), Co-advisor: Prof. Dr. Bülent Gültekin Akınoğlu (PHYS), <b>Graduated (September-2016)</b> .  -Understanding household responses to natural hazards related to climate change -Investigating market mechanisms to mitigate risks occurring because of climate change -Energy economics -Behavioral economics

	<p>Prof. Dr. Ramazan SARI Business Administration &lt;rsari@ba.metu.edu.tr&gt; Tel: 3068</p>	<p>1-“A New Approach for the Classification of Country Parties in the UNFCCC”, İzzet Arı, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Dr. Sema Bayazıt, <b>Graduated (Feb. 2015)</b>.</p> <p>2-“Determination of Impacts of Climate Change on Some Sectors in Turkey and Making a Climate Change Policy for Turkey, Mehmet Ufuk Atay”, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Assoc. Prof. Dr. İsmail Yücel (CE), <b>Graduated (Sept. 2015)</b>.</p> <p>3-“Energy, Economy and Environment: Causal Relationship in New Nuclear Build Countries”, Görkem Güngör, MS, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Assoc. Prof. Dr. Şule Ergün (Hacettepe Üniv.-Nuclear Eng.), <b>Ongoing</b>.</p> <p>4-“ Economic Implications of Electricity Storage”, Abdurrahman Kurucak, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), <b>Ongoing</b>.</p> <p>5-“Defining a GHG Accounting Methodology for High Emission Geothermal Energy Generation”, Ayşe Yasemin Yeşilay, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Prof. Dr. Mahmut Parlaktuna (PETE), <b>Ongoing</b>.</p> <p>6-“Energy Efficiency Policy Making and the Rebound Effect in Turkey”, Zehra İlknur Yılmaz, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Dr. Bora Kat (ESS), <b>Ongoing</b>.</p> <p>7-“Risk-based Approaches for Climate Change Impacts: National Climate Change Risk Assessment for Turkey”, PhD, Dursun Baş, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Assoc. Prof. Dr. İsmail Yücel (CE), <b>Ongoing</b>.</p> <p>8-“Rebound Effects for Households Energy Efficient Vehicles”, Dilan Yüksel, MS, Prof. Dr. Ramazan Sarı (BA), Co-advisor: Dr. Bora Kat (ESS-TÜBİTAK), <b>Ongoing</b>.</p> <p>9. “Energy Justice in Turkey”, Sinem Akkoçoğlu, MS, Prof. Dr. Ramazan Sarı (BA), Co-advisor: Dr. İzzet Arı (ESS-Ministry of Development), <b>Ongoing</b>.</p> <p>10. “Environmental Justice in Turkey”, Mert Ekşi, MS, Prof. Dr. Ramazan Sarı (BA), Co-advisor: Prof. Dr. Raşit Turan (PHYS), <b>Ongoing</b>.</p>
	<p>Prof. Dr. Raşit TURAN Physics, &lt;turanr@metu.edu.tr&gt; Tel: 5069, 7651</p>	<ul style="list-style-type: none"> <li>-Solar energy and technologies</li> <li>-Photovoltaic, concentrating solar thermal, and cross cutting technologies</li> <li>-High performance buildings, smart grids, and smart cities</li> </ul>
	<p>Prof. Dr. Semra TUNCEL Chemistry semratun@metu.edu.tr Tel: 3195</p>	<p>1-“Biosecurity of Agricultural Products Through Speciation of Pesticides: Ayaş Tomato”, K.M. Sifatullah, MS, Advisor: Prof. Dr. Semra Tuncel (CHEM), Co-advisor: Prof.Dr. Gürdal Tuncel (ENVE), <b>Graduated (Feb. 2014)</b>.</p> <p>2-“Field to Table: Food Safety and Related Issues”, K.M. Sifatullah, PhD, Advisor: Prof. Dr. Semra Tuncel (CHEM), Co-advisor: Prof. Dr. Hami Alpas (FDE), <b>Ongoing</b>.</p> <ul style="list-style-type: none"> <li>-Heavy and toxic metals in the food products: and their importance in food product management.</li> <li>-Importance of harmful chemicals in food product economy</li> <li>-Carbon based nanomaterials: Surface activation and use for environmental remediation</li> <li>-Preparation and application of Fe-Nanomaterials for waste water treatment</li> </ul>



		<ul style="list-style-type: none"> <li>-Geochemical Mapping in Central Anatolia</li> <li>-Aerosol Transport to Eastern Mediterranean: Chemical &amp; physical Analyses. A Case Study in Northern Cyprus</li> <li>-Chemical Processes in the Eastern Mediterranean Atmosphere, Impact on Climate</li> <li>-Changes in the Chemical and Physical Properties of Saharan Dust During the Transport, Effect on Climate</li> </ul>
	<p>Assoc. Prof. Dr. Serap TÜRÜT AŞIK, Economics E-mail: sturut@metu.edu.tr Tel: 3038</p>	<ul style="list-style-type: none"> <li>-Environmental economics and politics</li> <li>-Energy Economics</li> <li>-Energy Efficiency</li> <li>-Methodologies on travel cost, hedonic pricing, contingent valuation, choice experiment, dose-response, etc.</li> </ul>
	<p>Prof. Dr. Şebnem DÜZGÜN Mining Eng.-GGIT &lt;duzgun@metu.edu.tr&gt; Tel: 2668</p>	<ul style="list-style-type: none"> <li>-Spatial energy resource planning</li> <li>-Spatio socio-economic vulnerability assessment</li> <li>-Assessment and management of land degradation due to nonrenewable resource extraction by using geospatial technologies</li> <li>-Contribution to thesis where spatial data analysis methods and remote sensing technologies are used (as Co-supervisor)</li> </ul>
	<p>Assoc. Prof. Dr. Şirin Saraçoğlu Economics E-mail: ssirin@metu.edu.tr Tel: 2058</p>	<p>Macroeconomics</p> <ul style="list-style-type: none"> <li>a. Economic Growth and Aggregate Productivity <ul style="list-style-type: none"> <li>i. One, Two and Multi-sector Economic Growth Models</li> <li>ii. Rural-urban migration; regional development</li> <li>iii. Human capital accumulation issues**Early child development (early child health and education)</li> <li>iv. Labor market issues: female employment; informal employment</li> </ul> </li> <li>b. Chinese economy, development and growth</li> <li>c. Trade and Labor Market Interactions</li> </ul>
	<p>Assoc. Prof. Dr. Şule GÜNEŞ International Relations gunes@metu.edu.tr Tel: 2037</p>	<p>1-“Development of a Strategic Environmental Assessment Practice in Integrated Coastal Zone Management Methodologies”, PhD, Devrim ERSANLI, Advisor: Assoc. Prof. Dr. Şule Güneş (IR), Co-Advisor: Prof. Dr. Uğur Soytaş (BA), <b>Ongoing.</b></p> <p>2-“E-Navigation in Turkey: Identifying High-Level User Needs &amp; Protecting the Maritime Environment”, MS, Caner Pense, Advisor: Assoc. Prof. Dr. Şule Güneş (IR), Co-Advisor: Assist.Prof. Oğuz ATİK (Dokuz Eylül Univ. Faculty of Maritime), <b>Ongoing.</b></p> <p>3-“International Climate Change Law and Policy: A Human Rights Approach”, PhD, Funda Yakar, Advisor: Assoc. Prof. Dr. Şule GÜNEŞ (IR), Co-advisor: Prof. Dr. Ayşen YILMAZ (IMS), <b>Ongoing.</b></p> <ul style="list-style-type: none"> <li>-Protection and Preservation of Marine Environment: Legal Regime for the Protected Areas</li> <li>-Role of the United Nations in the Protection of Biological Diversity: Convention on Biological Diversity and Cartagena Protocol on Biosafety</li> </ul>

	<p>Prof. Dr. Uğur SOYTAŞ Business Administration, &lt;soytas@metu.edu.tr&gt; Tel: 2048</p>	<p>1-“Decarbonization of Turkish Public Electricity Sector: Adopting Sustainable Energy Portfolio”, Hasret Şahin, MS, Advisor: Prof. Dr. Uğur Soytaş (BA), Co-advisor: Prof. Dr. Bülent Akınoğlu (PHYS), <b>Graduated (March-2014)</b>.</p> <p>2-“Simulating Indonesian Fuel Subsidy Reform: A Social Accounting Matrix (SAM) Analysis”, Fahman Faturrahman, MS, Advisor: Prof. Dr. Uğur Soytaş (BA), Co-advisor: Dr. Bora Kat (ESS), <b>Graduated (March-2014)</b>.</p> <p>3-“An Ecologic Economics Perspective on Energy Efficiency Policies: Introducing Fair Use Into Energy Policy Making”, Mehmet Olcay Aydemir, PhD, Advisor: Prof. Dr. Uğur Soytaş* (BA), Co-advisor: Prof. Dr. Helga Ida Rittersberger Tılıç* (SOC), <b>Ongoing</b>.</p> <p>4-“Transformation Pathway Towards a Sustainable Energy System in Turkey”, PhD, Fahman Fathurrahman, Advisor: Prof. Dr. Uğur Soytaş (BA), Co-advisor: Prof. Dr. Bülent Akınoğlu (PHYS), <b>Ongoing</b>.</p> <p>- Global warming, productivity, and income.</p>
	<p>Assoc. Prof. Dr. Uğur Murat LELOĞLU, Petroleum Eng.-GGIT, &lt;leloglu@metu.edu.tr&gt; Tel: 4894</p>	<p>-Remote Sensing</p>
	<p>Assoc. Prof. Dr. Utku KANOĞLU Engineering Sciences &lt;kanoglu@metu.edu.tr&gt; Tel: 4789</p>	<p>-Tsunami hazard assessment, mitigation and planning -Climate change impact on tsunami coastal inundation -Evaluation of the resilience capacity of coastal communities to disasters</p>
	<p>Prof. Dr. Ülkü YETİŞ Environmental Eng. &lt;uyetis@metu.edu.tr&gt; Tel: 5868</p>	<p>1-“Implementation of Article 12 Of The Seveso II Directive in Turkey” Dursun Baş, MS, Advisor: Prof. Dr. Ülkü Yetiş (ENVE), Co-advisor: Assoc. Prof. Dr. Şule Güneş (IR), <b>Graduated (January-2013)</b>.</p> <p>2-“Defining New Political Tools for Municipal Solid Waste Management of Ankara Metropolitan Municipality after Revision of MM Law In 2014”, MS, Ali Emir İnce, Advisor: Prof. Dr. Ülkü Yetiş (ENVE), Co-advisor: Assoc. Prof. Dr. Şahin Savaş Zafer (Atılım Üniv. Siyaset Bilimi ve Kamu Yönetimi Böl.), <b>Ongoing</b>.</p> <p>-Carbon Footprint of Wastewater Technologies -Hazardous waste management -Integrated pollution prevention and control</p>
	<p>Prof. Dr. Zeki KAYA, Biology, &lt;kayaz@metu.edu.tr&gt; Tel: 5177</p>	<p>-Molecular genetics of trees and crops -Conservation of genetic resources of crop and tree species -Population genetics of forest trees, genetic adaptation, ecological genetics of plants -Breeding of forest trees</p>
	<p>Prof. Dr. Zuhale AKYÜREK Civil Eng. - GGIT &lt;zakyurek@metu.edu.tr&gt; Tel: 2481</p>	<p>1- Resilience of Water-energy Nexus: Assessing the Sensitivity of Hydropower Generation in Turkey to Changing Hydro-climatic Conditions”, MS, Tuba Demir Doğan, Advisor: Prof. Dr. Zuhale Akyürek, Co-advisor: Assoc. Prof. Dr. Hakan Ercan, <b>Ongoing</b>.</p> <p>-Flood frequency analysis according to non-stationary conditions. -Developing new strategies in water resources management according to climate change. -Flood forecasting modeling with data assimilation.</p>