






















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"> - Climate Change and Coastal Processes - Coastal Impacts and Mitigation Strategies
	Prof. Dr. Ayşen DENER AKKAYA Statistics <akkay@metu.edu.tr> Tel: 5329	<ul style="list-style-type: none"> -Robust stochastic regression analysis with spatially auto-correlated errors -Modeling the spatial distribution of soil properties by using stochastic regression -Comparison of stochastic climate models -Ranked set sampling methodology for environmental data -Contribution to thesis where “Robust Statistical Inference, Stochastic Models, Time Series, Autoregressive Models and their applications are involved.
	Prof. Dr. Ayşen YILMAZ Institute of Marine Sciences ESS Director <ayilmaz@metu.edu.tr> Tel: 3660 / 2908 / 7350	<ol style="list-style-type: none"> 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); Graduated (September-2013) 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), Graduated (June-2016) 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), Ongoing. 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) Ongoing. 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), Ongoing. 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), Ongoing. <ul style="list-style-type: none"> -Aquatic Environments under High Atmospheric CO₂, Ocean Acidification and Impacts on Marine Living Resources -Sustainable Development of Marine Fisheries / Aquaculture by Taking into account the Impacts on Marine Ecosystems -Marine Ecosystems under Anthropogenic Pressure – Marine Pollution and Economic Lost

	<p>Assoc. Prof. Dr. Bahar GEDIKLI City and Regional Planning <gedikli@metu.edu.tr>, Tel: 7030</p>	<ul style="list-style-type: none"> - Sustainable urban development - Climate change and urban planning
	<p>Prof. Dr. Bülent G. AKINOĞLU Physics <bulo@metu.edu.tr> 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) Graduated (Jan-2013)</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 Soytaş (BA) Graduated (Jan-2014)</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); Ongoing.</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 Soytaş (BA); Ongoing.</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 Üniv., EE), Ongoing.</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), Ongoing.</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), Ongoing.</p> <p>-Interrelations and possible links between the human induced climate change and natural climate variability:A historical & globalperspective</p>
	<p>Assoc. Prof. Dr. Cemal Can BILGIN Biology <cbilgin@metu.edu.tr> 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 MS-Without Thesis, Graduated (June-2015)</p> <p>2-“Quantifying the Ecological Footprint of Middle East Technical University: Towards Becoming an Ecological Campus”, Yeliz Galiçoğlu, MS, Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIOL), Co-advisor: Assoc. Prof. Dr. Bahar Gedikli (CRP), Graduated (September-2015).</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), Ongoing.</p> <p>4- “Sustainable Management of an Urban Habitat Island in Face of Climate Change: The Case of METU Campus Grounds”, Yeliz Galiçoğlu, , PhD, Advisor: Assoc. Prof. Dr. Can Cemal Bilgin (BIOL); Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), Ongoing.</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: <ercelebi@metu.edu.tr> Tel: 5061</p>	<p>Research Interests:</p> <ul style="list-style-type: none"> - Solar Cell Structures and Applications (Heterojunctions, Schottky Structures, ETA-Extremely Thin Absorber Layer Solar Cells). - 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. - Production and study of optical, electrical and device properties of the thin film heterojunction solar cells. - Application of a variety of experimental characterization techniques to thin film materials and device structures. <p>Thesis Topics:</p> <ul style="list-style-type: none"> - Recent Progress in the Thin Film Solar Cell Structures/ Thin Film Solar Module Applications: Cost-Efficiency Analysis - Recent Developments in the “Production and Application of CdS/CdTe Thin Film Solar Cell Structures and the Study of Environmental Impacts”
	<p>Assoc. Prof. Dr. Ebru VOYVODA Economics <voyvoda@metu.edu.tr> 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) Ongoing.</p> <ul style="list-style-type: none"> -Energy-economy-environment modeling -Macroeconomic Analysis of Environmentally Relevant Policies -International Climate Policy and Resource Management
	<p>Prof. Dr. Ela BABALIK SUTCLIFFE, City and Regional Planning <ebaba@metu.edu.tr> 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), Graduated (September-2014)</p>
	<p>Assoc. Prof. Dr. Elçin KENTEL Civil Eng. <ekentel@metu.edu.tr> 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), Ongoing.</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), Ongoing.</p> <ul style="list-style-type: none"> - Uncertainty modeling - Hydrologic modeling - Impact of climate change on water resources - Multi-criteria decision making for water resources structure - Renewable energy
	<p>Prof. Dr. Faika Dilek SANIN Environmental Eng. E-mail: <dsanin@metu.edu.tr> Tel: 2642</p>	<ul style="list-style-type: none"> -Wastewater treatment -Management of solid and hazardous wastes





	<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. <goksel@metu.edu.tr> Tel: 5867</p>	<p>1-“Integrated Wastewater Treatment, CO₂ 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), Graduated (March 2017).</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), Ongoing.</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 <ipek@metu.edu.tr>, 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), Ongoing.</p> <p>-Energy security -Rebound effects -Consumer-producer responsibility in pollution</p>
	<p>Assoc. Prof. Dr. Hakan ERCAN Economics <hercan@metu.edu.tr> 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), Ongoing.</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), Ongoing.</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), Ongoing.</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), Ongoing.</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), Graduated (December, 2016) . 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), Ongoing .
	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), Graduated (July 2016) . 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), Ongoing .
	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, Ongoing . -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), Ongoing . -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), Graduated (Feb 2015) . 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), Ongoing . 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), Ongoing . 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), Ongoing . -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. <kunlu@metu.edu.tr>, Tel: 5869</p>	<ul style="list-style-type: none"> -Development, numerical implementation and application of mathematical models for flow and contaminant transport in subsurface and waste disposal systems -Management of solid and hazardous wastes -Environmental risk and impact assessment -Contaminated site (soil and groundwater) remediation -Flow and contaminant fate and transport in the subsurface environment
	<p>Assoc. Prof. Dr. Koray Kamil YILMAZ, Geological Eng. <yilmazk@metu.edu.tr> Tel: 2682, 2689</p>	<ul style="list-style-type: none"> - Potential impacts of climate change on surface and groundwater resources - Surface water and groundwater hydrology - Application of system methods to identification and evaluation of models that simulate surface water and ground water flow processes and their interaction - Remote sensing applications in hydrology - Groundwater and surface water interaction - Integrated Watershed Modelling - Watershed Models - Systems Methods
	<p>Prof. Dr. Mahmut O. KARSLIOĞLU Civil Eng. <karsliog@metu.edu.tr>, Tel: 2440</p>	<ul style="list-style-type: none"> -GNSS (Global Navigation Satellite System) and Geodesy -Remote Sensing and GIS
	<p>Prof. Dr. Meryem BEKLIOĞLU YERLI Biology, <meryem@metu.edu.tr> 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), Ongoing.</p> <ul style="list-style-type: none"> - Evolution of Ecosystem Services (Many ecosystem services are assigned social and economic values). - Impact of climate change and eutrophication on zooplankton and fish community structure and distribution in shallow lakes. -Determination of the interactions between water level fluctuations and ecosystem structure induced through climate warming and human use using limnological and palaeological approaches
	<p>Prof. Dr. Musa DOĞAN Dept. of Biology <doganm@metu.edu.tr> Tel: 5158</p>	<ul style="list-style-type: none"> -Plant Taxonomy and Systematics -Ecosystem Assessment and Biodiversity Conservation -Plant Morphology and Anatomy
	<p>Assoc. Prof. Dr. Mustafa YÜCEL Institute of Marine Sciences <myucel@ims.metu.edu.tr> 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), Ongoing.</p> <ul style="list-style-type: none"> -Climate change and anthropogenic impacts on deep-sea ecosystems in the Turkish seas -Sustainable utilization of seafloor resources: Integrating scientific, societal and economical aspects of hydrocarbon extraction, deep-sea mining, etc. -Redox-dependent microbial ecosystems and their ecosystem services -Marine deoxygenation, impacts on coastal communities and sea economy -Deep-ocean exploration and underwater sensor technology development

		-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), Graduated (May, 2016) . 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), Ongoing . - 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), Graduated (Sept 2015) . 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), Ongoing . 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), Ongoing . 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:--- Ongoing . -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: ---, Graduated (June 2015) . 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), Graduated (September-2016) . -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 <rsari@ba.metu.edu.tr> 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, Graduated (Feb. 2015).</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), Graduated (Sept. 2015).</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.), Ongoing.</p> <p>4-“ Economic Implications of Electricity Storage”, Abdurrahman Kurucak, PhD, Advisor: Prof. Dr. Ramazan Sarı (BA), Co-advisor: Prof. Dr. Ayşen Yılmaz (IMS), Ongoing.</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), Ongoing.</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), Ongoing.</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), Ongoing.</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), Ongoing.</p> <p>9. “Energy Justice in Turkey”, Sinem Akkoçoğlu, MS, Prof. Dr. Ramazan Sarı (BA), Co-advisor: Dr. İzzet Arı (ESS-Ministry of Development), Ongoing.</p> <p>10. “Environmental Justice in Turkey”, Mert Ekşi, MS, Prof. Dr. Ramazan Sarı (BA), Co-advisor: Prof. Dr. Raşit Turan (PHYS), Ongoing.</p>
	<p>Prof. Dr. Raşit TURAN Physics, <turanr@metu.edu.tr> Tel: 5069, 7651</p>	<ul style="list-style-type: none"> -Solar energy and technologies -Photovoltaic, concentrating solar thermal, and cross cutting technologies -High performance buildings, smart grids, and smart cities
	<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), Graduated (Feb. 2014).</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), Ongoing.</p> <ul style="list-style-type: none"> -Heavy and toxic metals in the food products: and their importance in food product management. -Importance of harmful chemicals in food product economy -Carbon based nanomaterials: Surface activation and use for environmental remediation -Preparation and application of Fe-Nanomaterials for waste water treatment

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

	<p>Prof. Dr. Uğur SOYTAŞ Business Administration, <soytas@metu.edu.tr> 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), Graduated (March-2014).</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), Graduated (March-2014).</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), Ongoing.</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), Ongoing.</p> <p>- Global warming, productivity, and income.</p>
	<p>Assoc. Prof. Dr. Uğur Murat LELOĞLU, Petroleum Eng.-GGIT, <leloglu@metu.edu.tr> Tel: 4894</p>	<p>-Remote Sensing</p>
	<p>Assoc. Prof. Dr. Utku KANOĞLU Engineering Sciences <kanoglu@metu.edu.tr> 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. <uyetis@metu.edu.tr> 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), Graduated (January-2013).</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.), Ongoing.</p> <p>-Carbon Footprint of Wastewater Technologies -Hazardous waste management -Integrated pollution prevention and control</p>
	<p>Prof. Dr. Zeki KAYA, Biology, <kayaz@metu.edu.tr> 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 <zakyurek@metu.edu.tr> 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: Advisor: Prof. Dr. Zuhale Akyürek, Co-advisor: Assoc. Prof. Dr. Hakan Ercan, Ongoing.</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>