



**3rd INTERNATIONAL CONGRESS ON ENGINEERING AND LIFE SCIENCE
20-22 SEPTEMBER 2023 TRABZON**

SCIENTIFIC PROGRAM

September 20, 2023 (Day 1), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Osman TURAN Hall

09.00-09.45	Arrival and Registration for Congress (KTÜ-Prof. Dr. Osman TURAN Culture and Congress Center)
09.45-11.00	Opening Ceramony
11.00-11.30	Coffee Break
11.30-12.00	Keynote Speech-1- Prof. Dr. Taşkın ÖZTAŞ Atatürk University- Türkiye Topic. Effective soil and plant management pratices for increasing soil organic-carbon stocks
12.00-13.30	Lunch
13.30-14.00	Keynote Speech-2- Dr. Ugo CHIAVETTA CREA - Research Centre for Forestry and Wood, Italy Topic. How forest management can improve carbon sequestration, carbon stock and other ecosystem services. a focus on Mediterranean environment.
14.00-14.30	Keynote Speech-3- Prof. Dr. Yusuf SERENGİL İstanbul Üniversitesi-Cerrahpaşa - Türkiye Topic. The roodmap to achieving climate neutrality in Türkiye. A comprehensive analysis of long term forestry strategies
14.30-14.40	Coffee Break

September 20, 2023 (Day 1), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Osman TURAN Hall		
Session Chair. Prof. Dr. Ali ÖMER ÜCLER & Assoc. Prof. Dr. Bojan SIMOVSKI		
14.40-14.50	Assisted migration of <i>Pinus brutia</i> in Türkiye. a potential tool for sustaining growth in the face of climate change	<i>Fatih TEMEL</i>
14.50-15.00	Effects of silvicultural interventions on carbon in high mountain forests in Turkey	<i>Ercan OKTAN, Ayşen KALENDER</i>
15.10-15.20	Evaluation of carbon sequestration capacities across varied forest types. an empirical study in northern part of Bangladesh	<i>Md. Shafiqul BARİ, Farhana Mim, Md Manik Ali</i>
15.20-15.30	Carbon binding of different provenances of Douglas fir (<i>Pseudotsuga menziesii</i> Mirb. Franco)	<i>Dalibor BALLIAN, Mirzeta MEMISEVIC HODZIC</i>
15.30-15.40	Discussion	
15.40-15.50	Coffee Break	

September 20, 2023 (Day 1), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, OsmanTURAN Hall		
Session Chair. Prof. Dr. Halil Barış ÖZEL & Assoc. Prof. Dr. Fatih TEMEL		
15.50-16.00	Silvicultural practices in the process of climate change in Turkish forests	<i>Sena YAVRUOĞLU, Zafer YÜCESAN</i>
16.00-16.10	Carbon storage of alder (<i>Alnus glutinosa</i>) by different stand structure	<i>Ercan OKTAN, Özcan ÖZKAN</i>
16.10-16.20	Suggestions on prevention of deforestation and erosion due to global climate change in Turkey	<i>Ercan OKTAN, Ayşen KALENDER</i>
16.20-16.30	Carbon and nitrogen storage capacities of soils of different land use in karstic ecosystems	<i>Ayşe Sena KÜÇÜK, Turgay DİNDAROĞLU, Emre BABUR</i>
16.50-17.00	Discussion	

September 20, 2023 (Day 1), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Prof. Dr. Zafer YÜCESAN & Assoc. Prof. Dr. Bülent TURGUT (ONLINE)		
14.40-14.50	Investigation of carbon stock changes in forests of Uludağ National Park	<i>Birsen DURKAYA, Asiya KARAEVLİ YÜKSEL, Sinan KAPTAN, Ali DURKAYA</i>
14.50-15.00	Estimating Above-ground carbon amount of Taurus cedar stands using sentinel-2 satellite image. a case study of Elmali forest enterprise	<i>Döndü DEMİREL, Alkan GÜNLÜ, Öyun Emre SAKICI</i>
15.10-15.20	Spatial pattern of trees in <i>Parrotia persica</i> - <i>Carpinus betulus</i> and <i>Parrotia persica</i> - <i>Quercus castaneifolia</i> types in Chafrood forests, Guilan, Iran	<i>Hassan Pourbabaei, Saman Pourabasi Shiraz, Amer MİRZAΖADEH</i>
15.20-15.30	Carbon concentrations of some shrub species involved in understory vegetation in İstanbul-Durusu sand dune afforestations	<i>Serbet PEHLİVAN, Alper Gün ÖZTÜRK</i>
15.30-15.40	Seeds reduplication features of flowering plants of the disturbed sites in the Northern Far-East of Asia	<i>Evgeny A. TİKHMELEV, P.E. Tikhmenev</i>
15.40-15.50	Discussion	
15.50-16.00	Coffee Break	

September 20, 2023 (Day 1), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Prof. Dr. Sezgin HACISALİHOĞLU & Assoc. Prof. Dr. Bülent TURGUT (ONLINE)		
16.00-16.10	Multistoried fruit production model for high carbon sequestration. A climate change mitigation approach in Bangladesh	<i>Md. Helal Uddin, Md. Main Uddin Miah, Md. Giashuddin Miah, Sohag Ahamed, Anika Reza, Md. Mizanur Rahman</i>
16.10-16.20	Breaking carbon bonds of the colors existing in the industrial wastewaters and color reduction by plant-based coagulants	<i>Hanieh Mirbalooki, Shamim moghadami</i>
16.20-16.30	Effect of carbon nanotube reinforcement and porosity on mechanical and viscoelastic properties of polylactic acid in material extrusion additive manufacturing	<i>Kamil FERATOĞLU, İlyas İSTİF</i>
16.30-16.40	Biochar/slag composite, a novel adsorbent for CO ₂ capture	<i>İlayda CALIS, Gülcihan GÜZEL KAYA</i>
16.40-16.50	Investigation of carbon sequestration model according to independent variables of DBH and height in <i>Populus deltoides</i> plantation, case study. West, Center and East of Gilan province, Iran	<i>Tooba ABEDÍ, Roya ABEDÍ, Hadi MODABERÍ, Hassan POURBABAEI</i>
16.50-17.00	Protected areas for biodiversity conservation in Morocco	<i>Assmaa ALAOUI</i>
17.00-17.10	Discussion	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Assoc. Prof. Dr. Guguli DUMBADZE & Assoc. Prof. Dr. Uzay KARAHALİL		
10.00-10.10	Changes in forest biomass carbon storage between 1971 and 2018 in Tonya	<i>Süleyman BORUCU, Uzay KARAHALİL</i>
10.10-10.20	New approaches to determining carbon capture potential	<i>Sümeyye GÜLER, Bülemt TURGUT, Sezgin AYAN</i>
10.20-10.30	Estimation of urban forest carbon stocks considering future land-use change scenarios. case of Izmir city core	<i>Ufuk ÖZKAN, Remzi Eker</i>
10.30-10.40	The role of monumental trees in carbon storage	<i>Ercan OKTAN, Neslihan ATAR</i>
10.40-10.50		<i>Guguli DUMBADZE, Davit BARATASHVILI, Khatuna CHICHILEISHVILI, Tsira KAMADADZE</i>
10.50-11.00	Discussion	
11.00-11.10	Coffee Break	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Prof. Dr. Dalibor BALLIAN & Assoc. Prof. Dr. Hakan ŞEVİK		
11.10-11.20	Some dendrological phenomena in Mavrovo National Park, North Macedonia	<i>Bojan SÍMOVSKÝ, Jane ACEVSKÝ</i>
11.20-11.30	Analysis of the state of degradation of the endemic argan tree (<i>Argania spinosa</i> (L.) Skeels) in Morocco	<i>Said LAARIÝA</i>
11.30-11.40	Forest laws and wildfire. A comparative legal study of Iran, France, Turkey and South Africa	<i>Hamidreza Afrand SORKHANI, Mohammad Avatefi HEMMAT, Taghi SHAMEKHİ, Elaheh MOHSENİ, Osman Devrim ELVAN</i>
11.40-11.50	Determination of the effect of forest road construction on existing forest assets with geographic information systems	<i>Gizem MISIRLIÖĞLU, Taha Yasin HATAY, Selçuk GÜMÜŞ</i>
11.50-12.00	Discussion	
12.00-12.10	Coffee Break	
12.10-13.30	Lunch	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Prof. Dr. Burak ARICAK & Doç. Dr. Salih ÜNVER		
13.30-13.40	Determination of 180-year variation of Li concentration in the atmosphere using <i>Corylus colurna</i> annual rings	<i>Kübra KEY, Şemsettin KULAÇ, İsmail KOC, Hakan ŞEVİK</i>
13.40-13.50	Variation of Gallium concentrations in some forest trees depending on species, organ and soil depth	<i>Ramazan ERDEM, Burak ARICAK, Mehmet ÇETİN, Hakan ŞEVİK</i>
13.50-14.00	Variation of Aluminum concentrations in annual rings of some trees growing in Ankara city center depending on years and species	<i>Emine Emel YAYLA, Hakan ŞEVİK</i>
14.10-14.20	Activated carbon fibers/zinc oxide nanorods fabrics for UV protection	<i>Borhan ALBISS, Muna ABU-DALO</i>
14.20-14.30	An analysis on the impact of spatial structure factors on travel behavior in Tabriz city with a low carbon city approach	<i>Rasoul Ghorbani, Rahim GOLAMHOSSAINI, Somayeh ALIZADEH</i>
14.30-14.40	Discussion	
14.40-14.50	Coffee Break	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-I Hall		
Session Chair. Dr. Ahmet Nur & Dr. Ufuk ÖZKAN		
14.50-15.00	Manufacturing of aluminum-based alloy y-axis of laser machines and investigation of the impact on carbon footprint	<i>Gökan YILMAZ</i>
15.00-15.10	The Effects of electric vehicles on the carbon footprint in Turkey	<i>Ahmet NUR, Nur Sabah NUR</i>
15.10-15.20	Enhancing blue/green infrastructure for resilient urban environments, smart solutions and nature-based strategies	<i>Zahid HASSAN, Babar Shahbaz, Felipe Gallardo Lopez</i>
15.20-15.30	The role of wooden consumptions in climate change mitigation Case study. Forest-dwelling community of Nodeh, Razvanshahr, Gilan, Iran	<i>Nastaran Zolfi, Ramin Naghdı, Mehrdad Nikooy, Hamid Reza Afrand SORKHANI</i>
15.30-15.40	Low carbon technologies in smart buildings	<i>Ahmet NUR, Nur Sabah NUR</i>
15.40-15.50	Discussion	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-2 Hall		
Session Chair. Assoc. Prof. Dr. Ercan OKTAN & Dr. Murat YILDIZ (ONLINE)		
10.00-10.10	Factors affecting land use change around the Anzali wetland and the challenges ahead (ONLINE POSTER)	<i>Seyede Mohadese Hatami Shahkhali, Shahram Sharifi Hashjin, Farzane Nasiri Jan Agha, Habib Mahmoodi Chenari</i>
10.10-10.20	Carbon capture potential across northern forest of Iran, case study. Asalem forests (ONLINE POSTER)	<i>Maryam KAZEMPOUR LARSARY, Hassan POURBABAEI</i>
10.20-10.30	Evaluation of the tea accessions in the Lankaran-Astara region of Azerbaijan Republic based on morphological traits (ONLINE POSTER)	<i>Afsana ABDULLAYEVA, Agil Hasanov, Farman Abdullayev, Chinara Rzayeva, Javid Ojaghi</i>
10.30-10.40	Investigation of the effects of global warming on carbon storage capacity of pure and mixed forests of Zonguldak-Dirgine region by using climate change scenarios	<i>Halil Buras ÖZEL, Tuğrul VAROL, Uğur CANTÜRK, Burak AMAC, Güllizan ÖZYURT</i>
10.40-10.50	Design and optimization of PV/T solar collector system suitable for local climate conditions in Turkey – Iran	<i>Rezvan REZAEIZADEH, İlkınur ŞAHİN, Aybabा HANCERLİOĞULLARI</i>
10.50-11.00	Health risk assessment due to some potentially toxic elements in sepiolite mineral	<i>Şeref TURHAN, Aybabা HANCERLİOĞULLARI, Aslı KURNAZ</i>
11.00-11.10	Coffee Break	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-2 Hall		
Session Chair. Prof. Dr. Renato PACALDO & Assoc. Prof. Dr. Miraç AYDIN		
11.10-11.20	Winter soil respiration, temperature, and soil moisture in snow-manipulated postfire and undisturbed black pine forests in Taşköprü, Kastamonu District, Türkiye	<i>Renato S. PACALDO, Miraç AYDIN, Randell Keith AMARILLE</i>
11.20-11.30	Soil CO ₂ effluxes in post-fire and undisturbed <i>Pinus nigra</i> Forests. A soil moisture manipulation study	<i>Renato S. PACALDO, Miraç Aydin, Randell Keith Amarille</i>
11.30-11.40	Determining of carbon storage using remote sensing	<i>Mehmet MISIR, Nuray MISIR, Abdullah YILDIZ</i>
11.40-11.50	Determining of carbon storage in Anatolian black pine stands	<i>Nuray MISIR, Mehmet MISIR, Abdullah YILDIZ</i>
11.50-12.00	Effects of forest litter reduction on soil respiration rates across a chronosequence of black pine forest	<i>Randell Keith AMARILLE, Renato PACALDO, Miraç AYDIN</i>
12.00-12.10	Discussion	
12.10-13.30	Lunch	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-2 Hall		
Session Chair. Prof. Dr. Mustafa Fehmi TÜRKER & Öğr. Gör. Dr. Canan YILMAZ		
13.30-13.40	Approaches to environmental ethics	<i>Nihat Yilmaz</i>
13.40-13.50	Ethical value issues in corporate sustainability reports	<i>Murat Yıldız</i>
13.50-14.00	Sustainable use of biomass to assist the development of Turkey's economy towards green growth	<i>Melek AKAY</i>
14.10-14.20	Morphology and exposure studies in the Autonomous Republic of Abkhazia (West Georgia) on the background of modern climate change	<i>George KORDZAKHIA, Larisa SHENGELIA, Gennady TVAURI, Guguli DUMBADZE</i>
14.20-14.30	Discussion	
14.30-14.40	Coffee Break	

September 21, 2023 (Day 2), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Nihat Turan-2 Hall Session Chair. Assoc. Prof. Dr. Kuralay MAZARHANOVA & Dr. Sara KITAIBEKOVA (ONLINE)		
14.40-14.50	The chemical composition of birch leaves and the vital state of birch stands in the gradient of aerotechnogenic emissions of JSC "Karabashmed"	Viktoria GORBUNOVA, Sergei Menshikov
14.50-15.00	King of the desert	<i>Nurtore Omirzak, Zhumagul Boranbay</i>
15.10-15.20	Characteristics of carbon deposition of Salix alba L. forest plantations in Irtysh-Karagada Channel tract in Pavlodar State Institution	<i>Kadyrbekov Z.B., Boranbay Z.T.</i>
15.20-15.30	Paulownia in Kazakhstan	<i>Khamit Liza, Yesmurzayeva Aida</i>
15.30-15.40	Chitosan: A Potential New Adsorbent for CO ₂ Capture	<i>Ali Eslem Kadak</i>
15.40-15.50	Discussion	

20.00-23.00	GALA DINNER	September 21, 2023
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POSTER SESSION 20-22 SEPTEMBER, 2023

Face to Face	Investigating the amount of carbon sequestration of Oak seedling (<i>Quercus castaneifolia</i>)	<i>Javad TORKAMAN,</i> <i>Tooba Abedi</i>
Face to Face	Study on vegetation composition in broadleaved and coniferous plantations, Bibiyanlou's Forset Park, Astara, Iran	<i>Towhid SALAHI,</i> Hassan POURBABAEI, Mehrdad GHODSKHAH, Maziar SALAHI, Sarkhosh KARAMZADEH
Face to Face	Carbon emission and urban climate in Georgia	<i>Lortkipanidze Roza,</i> <i>Iakobashvili Giorgi,</i> <i>Chachkhiani-Anasashvili Nunu,</i> <i>Tskipurishvili RUSUDAN</i>
Face to Face	Impact of petroleum products on water resources, the example of the Bartskhanistskali River	<i>Nana ZARNADZE,</i> <i>N. Alasania,</i> <i>E. Jakeli,</i> <i>T. Bolkvadze,</i> <i>S. Manigaladze</i>
Face to Face	The importance of linden in terms of carbon sequestration. perspective in The World and Turkey	<i>Özlem AĞIRMAN HAN,</i> Ali Omer UÇLER

Implementing Organizations Panel and General Evaluation		
September 22, 2023 (Day 3), Venue. Prof. Dr. Osman TURAN Culture and Congress Center, Osman TURAN Hall		
Session Chairs. Prof. Dr. Taşkin ÖZTAŞ & Orman Genel Müdür Yrd. İbrahim YÜZER		
10.00-11.30	Speaker Organizations General Directorate of Forestry General Directorate of Agricultural Research and Policies Directorate of Climate Change	
11.40-12.15	General Evaluation	

SEPTEMBER 22, 2023 (Day 3-After Lunch)

CONGRESS TOUR