

**8<sup>th</sup> International Congress on 3D Printing (Additive Manufacturing)  
Technologies and Digital Industry 2024**

Links to the meeting rooms on Microsoft Teams are listed below.

<b>06 September 2024</b>		
09:30-10:00	Registration	
10:00-12:00	Session Chairman: Prof.Dr. Ismail Bogrekci	Salon1
10:00-10:30	Protocol Speeches	Prof. Dr. Pınar Demircioğlu Prof. Dr. Mustafa Fadıl Sözen
10:30-11:15	3D Printing for Cultural Heritage	Prof. Dr. Daniela Popescu
11:15-12:00	3D Printing of Glassy Carbon	Prof. Dr. Jan Torgersen
Coordinator	Ayşenur Karataş	

<b>06 September 2024</b>		
14:00-16:10	Session Chairman: Prof.Dr. Ömer Eyercioğlu	Salon1
14.00-14.30	Invited Speaker: Digital Technologies in Practice – Transforming Knowledge into Added Value	Dr. Balázs Barta
14.30-14.50	SYMMETRY AS A PROCESS OF CONTROL UNIVERSALIZATION OF NAVIGATION HIGH-SPEED COMPLEX TECHNICAL SYSTEMS	Natallia Punchenko
14.50-15.10	CLASSIFICATION OF 3D-PRINTING IMAGES FOR DETECTION OF DEFECTS	Hanane Zermane, Hassina Madjour, Ahcene Ziar
15.10-15.30	THE MOST INFLUENTIAL CHALLENGES IN INTEGRATING ADDITIVE MANUFACTURING WITH INDUSTRY 4.0	Aoufl Tayeb, Aksa Karima
15.30-15.50	INFORMATION SECURITY AND COMPETITIVE INTELLIGENCE: DEVELOPMENT PROSPECTS IN THE DIGITAL ECONOMY	Iryna Aksonova, Tetlana Milevska
15.50-16.10	IMPROVING SURFACE FINISH CHARACTERISTICS OF MULTI JET FUSION (MJF) 3D PRINTED POLYAMIDE PART USING ABRASIVE FLOW MACHINING (AFM) PROCESS	Ömer Eyercioğlu, Mehmet Ali Akeloğlu, Cenk Kılıçaslan
Coordinator	Sema Kırıcı	

<b>06 September 2024</b>		
14.10-16.30	Session Chairman: Prof.Dr. Anıl Nomak Akdoğan	Salon2
14.10-14.30	DEVELOPMENT OF A WASHING APPARATUS PLACED ON A TELESCOPIC PIPE	Hakan Maden, Bilal Özsarıkaya
14.30-14.50	FAUCET DESIGN AND CHARACTERISATION WITH 3D METAL PRINTER	Özüm Karabacaklar, Mustafa Aydın
14.50-15.10	EXAMINING THE USAGE AREAS OF THREE-D PRINTER IN FRUIT AND VEGETABLE TECHNOLOGY	Ahsen Ergün, Taner Baysal, İrem Akbulut, Elif Gürbüz, Denizhan Miraç Sertçelik, Salih Şener, Batuhan Durmaz
15.10-15.30	PLA-BASED 3D POROUS SCAFFOLDS WITH BIOCERAMICS FOR LOAD-BEARING BONE SUBSTITUTES	Hayrunnisa Özer, Büşra Mutlu, Fatma Demirci, Şeyma Duman
15.30.16.10	THE COMPARISON OF TWO DIFFERENT 3D PRINTING TECHNOLOGIES FOR A TARGETED OBJECT	Mustafa Can, Anıl Nomak Akdoğan, Ali Serdar Vanlı
16.10-16.30	THE ROLE OF MANUFACTURING PARAMETERS ON THE HARDNESS OF ALSI10MG ALLOY PRODUCED VIA SELECTIVE LASER MELTING	Furkan Umut, Yavuz Kaplan
Coordinator	Hüsnü Berat Yıldırım	

<b>06 September 2024</b>		
14:10-16:30	Session Chairman: Prof.Dr. Mustafa Aydın	Salon3
14.10-14.30	A COMPARATIVE STUDY ON THE INFLUENCE OF WATER ABSORPTION AND INFILL RATE ON THE VIBRATIONAL BEHAVIOR OF ABS AND ABS-LIKE TAPERED BEAMS MANUFACTURED WITH FUSED FILAMENT FABRICATION AND STEREOLITHOGRAPHY	Berkay Ergene, Yahya Aktürk, Nurettin Mert Boyacıoğlu, Gökmen Atlıhan
14.30-14.50	DETERMINATION OF THE EFFECT OF PRODUCTION PARAMETERS AND TEST FORCE ON WEAR PERFORMANCE OF DENTAL RESIN PARTS PRODUCED BY VAT-PHOTOPOLYMERIZATION	Nurettin Mert Boyacıoğlu, Burak Aysu, Berkay Ergene, Gökmen Atlıhan
14.50-15.10	DESIGN VALIDATION IN CONSTRUCTION PROJECT MANAGEMENT USING 3D PRINTING	Dragomir Mihai, Popescu Daniela, Salem Tareq, Dragomir Diana, Chatelet Eric
15.10-15.30	INVESTIGATION OF SOFT MAGNETIC NANOPARTICLE-INFUSED PLA FILAMENTS: MAGNETIC AND MECHANICAL CHARACTERIZATION	Kutay Çava, Mustafa Aslan
15.30-16.10	CONSTRUCTION AND CLINICAL EVALUATION OF A PERSONALIZED ORAL STENT USING 3D PRINTING TECHNOLOGY IN HEAD AND NECK CANCER RADIOTHERAPY: A PROTOTYPE STUDY	Duygu Tunçman, Meltem Dağdelen, Hakan Amasya, Songül Çavdar Karaçam
16.10-16.30	CHARACTERIZATION OF COCRFEMNNIW HIGH ENTROPY ALLOY SUITABLE FOR ADDITIVE MANUFACTURING THROUGH COMPUTATIONAL MATERIALS ENGINEERING	Ahu Çelebi, Merve Balkan, Celalettin Çağın, Yağız Akyıldız
Coordinator	Tolga Palandız	

<b>07 September 2024</b>		
09:30-10:00	Registration	
10:00-12:00	Session Chairman: Assoc.Prof.Dr. Savas Dilibal	Salon1
10:00-10:20	A RESEARCH ON THE RECYCLABILITY OF ABS THERMOPLASTIC MATERIAL AND ITS REUSABILITY IN 3D PRINTERS	Kutay Çava, Günay Çelik Dudak, Altuğ Uşun, Mustafa Aslan
10:20-10:40	EXAMINATION OF 3D PRINTING PATTERN'S WEAR PERFORMANCE IN GLASS FIBER REINFORCED POLYAMIDE (GFRPA)	Hüseyin İpek, Kutay Çava, Altuğ Uşun
10:40-11:00	A METHOD OF SHORT FIBRE ORIENTATION BETWEEN LAYERS OF POLYMER MATRIX COMPOSITES IN LARGE-SCALE ADDITIVE MANUFACTURING	Ömer Eyercioğlu, Mustafa Emre Karadağ, Mehmet Aladağ
11:00-11:20	A NOVEL ULTRA-LIGHTWEIGHT LATTICE MANUFACTURING METHOD WITH CONTINUOUS CARBON FIBER REINFORCED PEEK	Recep Gümrük, Hamdi Kuleyin, Altuğ Uşun, Ali Haydar Çamtekne, Furkan Kebap, İsmail İncehasan
11:20-12:40	EFFECT OF DE-BINDING TEMPERATURE ON POROSITY VARIATION IN METAL PRINTED PARTS USING FUSED FILAMENT FABRICATION METHOD	Musa Yılmaz
11:40-12:00	AERODYNAMIC ANALYSIS OF SIMPLIFIED WHEEL BODIES FOR INDUSTRIAL VEHICLES	Pınar Demircioğlu, İsmail Bögrekci, Mehmet Köse, Akın Denizman, Mehmet Umur Kaya
Coordinator	Tolga Palandız	

<b>07 September 2024</b>		
10:00-12:00	Session Chairman: Prof.Dr. Serap Celen	Salon2
10:00-10:20	DEVELOPMENT OF AN ADVANCED SSL/TLS PROTOCOL FOR TRANSFERRING REQUESTS TO A 3D-PRINTER	Alla Havrylova, Vladyslav Khvostenko, Stanislav Milevskii
10:20-10:40	THE PULL-OUT TEST PERFORMANCE OF THE HYDROXYAPATITE (HAP) REINFORCED VAT POLYMERIZED BONE MIMIC	Hüseyin İpek, Mustafa Aslan, Yüşranur Terzi, Ebru Elmas
10:40-11:00	UNMANNED GROUND VEHICLE SELECTION WITH ARTIFICIAL NEURAL NETWORKS	Cüneyd Demir, Cengiz Eldem, Mustafa Bozdemir
11:00-11:20	TEL-BESLEMELI EKLEMELI IMALATTA YENI GELİŞMELER	Serap Celen
11:20-11:40	DESIGN AND SLM-BASED ADDITIVE MANUFACTURING OF CUSTOMIZED STAINLESS STEEL BIOMEDICAL GRIPPERS FOR SURGICAL APPLICATIONS	Savas Dilibal, Emre Tugberk Gurlnergiz, Ozgur Yurtsever, Aytac Ugur Yerden
Coordinator	Ayşenur Karataş	

<b>07 September 2024</b>		
10:00-12:00	Session Chairman: Assoc.Prof.Dr. Ayça Akın	Salon3
10:00-10:20	COMPARISON OF MECHANICAL PROPERTIES OF SAMPLES TAKEN FROM POLYMER PLATES PRODUCED WITH JOINING METHOD AND STANDARD SPECIMEN	Ahmet Köbeloğlu, Kerim Çetinkaya, Suat Altun
10:20-10:40	EXPLAINABLE ARTIFICIAL INTELLIGENCE (XAI) FOR COMMERCIAL CREDIT LIMIT PREDICTION MODEL: SHAP-LIME COMPARISON	Enes Koçoğlu, Filiz Ersöz
10:40-11:00	DETERMINING ACID ETCHING ON TOPOGRAPHICAL AND DIMENSIONAL PROPERTIES OF ADDITIVE MANUFACTURED LATTICE STRUCTURES	Doruk Gürkan, Binnur Sağbaş
11:00-11:20	TRENDS AND CHANGES IN EVALUATION OF MACHINE TRAINING APPLICATIONS FOR CREDIT RISK PREDICTION	Enes Koçoğlu, Taner Ersöz
11:20-12:40	ENHANCING IMAGE-BASED SURFACE TEXTURE AND DEFECT DETECTION IN THE AUTOMOTIVE INDUSTRY USING UNET	Pınar Demircioğlu, Jan Torgersen
11:40-12:00	MANUFACTURING AND CHARACTERIZATION OF FEW Å€ LAYERED GRAPHENE REINFORCED ABS THERMOPLASTIC COMPOSITES BY THE FDM	Hurşit Sefa Aydın, Ömer Yunus Gümüş, Deniz Uzunsoy
Coordinator	Sema Kırıcı	

<b>07 September 2024</b>		
14:10-15:30	Session Chairman: Dr. Maria Dragomir	Salon1
14.10-14.30	IMPROVING HUMAN PLURIPOTENT STEM CELLS MAINTENANCE WITH ADVANCED ENGINEERED 3D CULTURE PLATFORM	Tuğba Topal
14.30-14.50	TRANSFORMATIVE POTENTIAL: HOW MES IS SHAPING THE FUTURE OF MANUFACTURING	Titu Aural Mihail, Nita Madalina, Popa Maria, Dragomir Mihai
14.50-15.10	PREDICTION OF TENSILE STRENGTH WITH FUZZY LOGIC APPROCAH FOR FUSED DEPOSITION MODELLING OF TPU MATERIALS	Koray Özsoy, Bekir Aksoy
15.10-15.30	EXPLORING THE POTENTIAL OF ARTIFICIAL INTELLIGENCE IN SUPPORTING PROBLEM-SOLVING AND PROBLEM POSING SKILLS: INSIGHTS FROM AN EXTENSIVE REVIEW	Ayça Akın, Selçuk Alkan, Hayriye Seda Sezgin
Coordinator	Hüsnü Berat Yıldırım	

07 September 2024		
14:00-15:50	Session Chairman: Prof.Dr. Mihai Dragomir	Salon2
14.00-14.30	Invited Speaker: 3d Printing Technology in Construction on Earth and on Space Bodies	Prof. Dr. Y. Cengiz Toklu
14.30-14.50	EFFECT OF PRODUCTION PARAMETERS ON ADDITIVELY MANUFACTURED HASTELLOY-X ALLOYS BY SELECTIVE LASER MELTING	Gizem ořkun, Muhammed Enes İlgazi, Hakan Yılmaz, Aslı Günay Bulursuz, Hasan Sadıkođlu, Özkan Gökçekaya, Takyoshi Nakano
14.50-15.10	PERFORMANCE ANALYSIS OF SPECIFIC ENERGY ESTIMATION WITH MACHINE LEARNING IN 3D MARBLE PRODUCTION	Gencay Sarıışık, Ahmet Sabri Öđütlü
15.10-15.30	EFFECTS OF SHAPE RECOVERY TEMPERATURE AND HOLDING TIME ON 4D PRINTING OF PLA/PCL BLEND	Meltem Eryıldız, Aleyna Karakuş, Mihriđül Ekři Altan
15.30-15.50	TECHNOLOGY IMPROVEMENT LIGHT SENSITIVITY PROJECT	Vladyslav Bents
Coordinator	Sema Kırıcı	

07 September 2024		
14:00-16:10	Session Chairman: Prof.Dr. Pinar Demircioglu	Salon3
14.00-14.20	INVESTIGATION OF STRESSES OCCURRING IN ROTATING CYLINDERS MADE OF CYLINDERS CARBON-EPOXY-GLASS MATERIALS	Hüseyin Kayıran
14.20-14.40	PRODUCTION OF BIOFUNCTIONAL CONDUCTIVE SCAFFOLD FOR NEURAL TISSUE ENGINEERING APPLICATIONS	Büşra Oktay, Ayşe Betül Bingöl, İsrá Abdülaziz, Cem Bülent Üstündađ
14.40-15.00	HARNESSING BOND GRAPHS FOR ELECTRICAL SUBSTATION ANALYSIS AND DIAGNOSIS	Manel Bayarassou, Nadia Kinza Mouss
15.00-15.20	EMPOWERING 3D PRINTED HEALTHCARE: BLOCKCHAIN AND AI FOR SECURITY AND SUSTAINABILITY	Lala Bekirova, Fırza Aghazada
15.20-15.40	MULTICLASS SKIN LESION CLASSIFICATION USING EFFICIENTNETV2-SMALL	Serra Aksoy
15.40-16.10	Invited Speaker: EXPLORING THE PHYSICAL PROPERTIES OF 3D PRINTED TITANIUM TI-6AL-4V (GRADE 23) ALLOYS OF VARIOUS SHAPES BEFORE AND AFTER HEAT TREATMENT PROCESSES	Prof. Dr. Ramazan Asmatülü
Coordinator	Ayşenur Karataş	

<b>08 September 2024</b>		
09:30-10:00	Registration	
10:00-13:00	Session Chairman: Assoc.Prof.Dr. Mustafa Aslan	Salon1
10:00-10:20	RE-ENTRANT CHIRAL AUXETIC: AN OPTIMAL LIGHTWEIGHT DESIGN AND ENHANCED PERFORMANCE FOR AEROSPACE STRUCTURAL PARTS	Ahmet Sefa Patir, Osman Buğra Ceylan, Batuhan Sarı, Hamit Kenan, İlhan Şen
10:00-10:20	REVOLUTIONIZING AIRFOILS: UTILIZING AUXETIC METAMATERIALS AND ADDITIVE MANUFACTURING FOR ENHANCED PERFORMANCE	Batuhan Sarı, Osman Buğra Ceylan, Ahmet Sefa Patir, Hamit Kenan, İlhan Şen
10:20-10:40	FABRICATION OF 3D SCAFFOLDS FOR TENDON REPAIR THROUGH BIOFUNCTIONAL INKS	Abdullah Faruk Uyanık, Kaan Danış, Cem Bülent Üstündağ
10:40-11:00	STRENGTH TESTING DEVICE TREADMILL INCLINE MOTOR GEAR DESIGN WITH 3D PRINTER	Mehmet Erhan Şahin, Ahmet Elbir
11:00-11:20	ADVANTAGES OF USING ADDITIVE MANUFACTURED COORDINATE MEASURING DEVICE FIXTURES IN PRODUCTION LINES	Burak Özdil
11:20-11:40	VARIOUS DP SERIES STEEL WELDABILITY WITH DIFFERENT WELDING PROCESS	Ufuk Alak, Sibel Sürener, Ecenur Çalış, İsmail Böğrekci, Pınar Demircioğlu
11:40-12:00	THD VALUE AND POWER FACTOR EFFECTS ON TURBO BLOWER EFFICIENCY	İsmail Böğrekci, Pınar Demircioğlu, Berkay Sert, Eda Appak, Berceste Turkuz, Cemal Karataş
12:20-12:40	A COMPREHENSIVE INSIGHT INTO TOPOLOGY OPTIMIZATION THROUGH BENCHMARKING THE INFLUENCING FACTORS ON A DEMONSTRATOR AIRCRAFT BRACKET DESIGN	Baturalp Oğuz, Özgür Poyraz, Oğuz Çolak
Coordinator	Tolga Palandız	

<b>08 September 2024</b>		
10:00-13:00	Session Chairman: Prof.Dr. Lala Bekirova	Salon2
10:00-10:20	EVALUATION OF THE INTERFACE BETWEEN POROUS AND SOLID-STATE SECTIONS OF HYBRID PARTS CREATED USING DIRECT METAL PRINTING	Seyed Halati
10:20-10:40	FINAL FORMS: AN OVERVIEW OF METHODS AND TOOLS TO GENERATE FDM 4D PRINTED FORMS	Khyati Priya, Jayesh Pillai, Avinash Shende
10:40-11:00	EFFECT OF PASSIVE LAYERS ON FORM CHANGE IN FDM 4D PRINTING	Khyati Priya, Jayesh Pillai, Avinash Shende
11:00-11:20	DETECTION UAV WITH RADAR	Zaur Alakbarov, Lala Bekirova
11:20-11:40	DEVELOPMENT OF STRESS CONCENTRATION FACTOR (KTG) CHART FOR FINITE LENGTH OF BAR WITH LONGITUDINAL VARYING CIRCULAR HOLE POSITION IN UNIAXIAL TENSION	Emeka Amalu, Balji Mahesh Babu
11:40-12:00	INTEGRATION OF 3D MODELS INTO BIOLOGY EDUCATION: NEPHRON MODEL EXAMPLE	Ayşegül Aslan, Mustafa Aslan, Kutay Cava
12:00-12:20	THREE-DIMENSIONAL PRINTED BILAYER SCAFFOLDS FOR USE IN DEEP CARTILAGE INJURIES	Hilal Yılmaz, Sevda Gürsoy, Gülşah Torkay, Ayça Bal, Oğuzhan Gündüz, Cem Bülent Üstündağ
12:20-12:40	THE USE OF FUZZY LOGIC APPROACH IN UNIVERSITIES	Hüseyin Kayıran, Ulviye Demirbilek
12:40-13:00	PROSPECTS FOR THE DEVELOPMENT OF UAVS USING CFRP AND 3D PRINTING	Serhii Pohasli, Stanislav Milevskiy
Coordinator	Ayşenur Karataş	

<b>08 September 2024</b>		
10:00-12:00	Session Chairman: Prof. Dr. Cem Bülent Üstündağ	Salon3
10.00-10.20	DEVELOPMENT OF AN AUTHENTICATION METHOD BASED ON LIGHT-WEIGHT CIPHERS	Roman Korolov, Serhii Yevselev, Vadym Stetsenko, Serhi Dunayev
10.20-10.40	DEVELOPMENT OF A METHOD FOR COMPREHENSIVE EVALUATION OF THE SERVICE PROVISION QUALITY	Serhi Yevselev, Stanislav Mileskyi, Olha Korol, Natalia Voropay
10.40-11.00	DEVELOPMENT OF A METHOD FOR EVALUATING DATA TRANSMISSION IN CYBER-PHYSICAL SYSTEMS	Stanislav Mileskyi, Dmytro Yevselev, Iryna Aksonova, Tetlana Milevska
11.00-11.20	INVESTIGATING OF THE EFFECT OF PROFILE SHIFTING ON UNDERCUTTING IN PLANETARY GEARS	Mustafa Timur, Pınar Demircioğlu, İsmail Böğrekci
11.20-11.40	EVALUATION OF TWO METHODS TO IMPROVE THE BONDING OF THE INTERFACE BETWEEN SOLID AND POROUS HYBRID PARTS MANUFACTURED USING POWDER BED FUSION ADDITIVE MANUFACTURING TECHNOLOGY	Seyyed Halati
11.40-12.00	PRODUCTION OF A PERSONALIZED ORBITAL RECONSTRUCTION PROSTHESIS FROM CT IMAGES USING THE POWDER BED FUSION PROCESS METHOD	Altuğ Uşun, Hüseyin Can Aksa, Kutay Çava, Temel Varol, Mustafa Aslan
Coordinator	Sema Kırıcı	

<b>06 - 08 September 2024</b>	
Links	
Salon 1	<a href="https://teams.microsoft.com/l/team/19%3AZKwhMQfQ6-NZbwYXJrF83NP-svTzZP19Ctae85gC0Lc1%40thread.tacv2/conversations?groupId=3a7ca671-ff19-4ee0-8690-e74ddc25109e&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1">https://teams.microsoft.com/l/team/19%3AZKwhMQfQ6-NZbwYXJrF83NP-svTzZP19Ctae85gC0Lc1%40thread.tacv2/conversations?groupId=3a7ca671-ff19-4ee0-8690-e74ddc25109e&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1</a>
Salon 2	<a href="https://teams.microsoft.com/l/team/19%3AeX0wbRo1wHG_u-93wa21JYqBBpLN_Mg_5cWv59iJITU1%40thread.tacv2/conversations?groupId=ea5656e8-57c3-402e-84d9-26e9c1e5e7fd&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1">https://teams.microsoft.com/l/team/19%3AeX0wbRo1wHG_u-93wa21JYqBBpLN_Mg_5cWv59iJITU1%40thread.tacv2/conversations?groupId=ea5656e8-57c3-402e-84d9-26e9c1e5e7fd&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1</a>
Salon 3	<a href="https://teams.microsoft.com/l/team/19%3ALu4bh0J9p3YZXaht0do1WaGoTSjkExvXSd7VTkvOXAE1%40thead.tacv2/conversations?groupId=6122b762-cc29-46c9-b845-1a63863ccb8b&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1">https://teams.microsoft.com/l/team/19%3ALu4bh0J9p3YZXaht0do1WaGoTSjkExvXSd7VTkvOXAE1%40thead.tacv2/conversations?groupId=6122b762-cc29-46c9-b845-1a63863ccb8b&amp;tenantId=bc1a81d6-ff04-4395-a163-c847a6f4ddc1</a>