

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

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

06 September 2024		
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	

06 September 2024		
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	

06 September 2024		
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, Irem 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	

06 September 2024		
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 Boyacıođlu, 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 Boyacıođlu, 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	

07 September 2024		
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	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
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
11:20-11:40	EFFECT OF DE-BINDING TEMPERATURE ON POROSITY VARIATION IN METAL PRINTED PARTS USING FUSED FILAMENT FABRICATION METHOD	Musa Yılmaz
Coordinator	Tolga Palandız	

07 September 2024		
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	EXAMINATION OF 3D PRINTING PATTERN'S WEAR PERFORMANCE IN GLASS FIBER REINFORCED POLYAMIDE (GFRPA)	Hüseyin İpek, Kutay Çava, Altuğ Uşun
11:00-11:20	TEL-BESLEMELİ EKLEMELİ İMALATTA YENİ GELİŞMELER	Serap Celen
11:20-11:40	UNMANNED GROUND VEHICLE SELECTION WITH ARTIFICIAL NEURAL NETWORKS	Cüneyd Demir, Cengiz Eldem, Mustafa Bozdemir
Coordinator	Ayşenur Karataş	

07 September 2024		
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
11:20-11:40	MANUFACTURING AND CHARACTERIZATION OF FEW LAYERED GRAPHENE REINFORCED ABS THERMOPLASTIC COMPOSITES BY THE FDM	Hürşit Sefa Aydın, Ömer Yunus Gümüş, Deniz Uzunsoy
Coordinator	Sema Kırıcı	

07 September 2024		
14:10-15:30	Session Chairman: Assoc.Prof.Dr. Koray Ozsoy	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 Çoşkun, Muhammed Enes İlgazi, Hakan Yılmaz, Aslı Günay Bulursuz, Hasan Sadıkoğlu, 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 Öğütlü
15.10-15.30	EFFECTS OF SHAPE RECOVERY TEMPERATURE AND HOLDING TIME ON 4D PRINTING OF PLA/PCL BLEND	Meltem Eryıldız, Aleyna Karakuş, Mihrigül Ekşi 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, Isra Abdülaziz, Cem Bülent Üstündağ
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, Firuza 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	

08 September 2024		
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
10.20-10.40	REVOLUTIONIZING AIRFOILS: UTILIZING AUXETIC METAMATERIALS AND ADDITIVE MANUFACTURING FOR ENHANCED PERFORMANCE	Batuhan Sarı, Osman Buğra Ceylan, Ahmet Sefa Patir, Hamit Kenan, İlhan Şen
10.40-11.00	FABRICATION OF 3D SCAFFOLDS FOR TENDON REPAIR THROUGH BIOFUNCTIONAL INKS	Abdullah Faruk Uyanık, Kaan Danış, Cem Bülent Üstündağ
11.00-11.20	STRENGTH TESTING DEVICE TREADMILL INCLINE MOTOR GEAR DESIGN WITH 3D PRINTER	Mehmet Erhan Şahin, Ahmet Elbir
11.20-11.40	ADVANTAGES OF USING ADDITIVE MANUFACTURED COORDINATE MEASURING DEVICE FIXTURES IN PRODUCTION LINES	Burak Özdil
11.40-12.00	VARIOUS DP SERIES STEEL WELDABILITY WITH DIFFERENT WELDING PROCESS	Ufuk Alak, Sibel Sürener, Ecenur Çalış, İsmail Böğrekci, Pınar Demircioğlu
12.00-12.20	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	

08 September 2024		
10:00-13:00	Session Chairman: Prof. Dr. Cem Bülent Üstündağ	Salon2
10.00-10.20	FINAL FORMS: AN OVERVIEW OF METHODS AND TOOLS TO GENERATE FDM 4D PRINTED FORMS	Khyati Priya, Jayesh Pillai, Avinash Shende
10.20-10.40	EFFECT OF PASSIVE LAYERS ON FORM CHANGE IN FDM 4D PRINTING	Khyati Priya, Jayesh Pillai, Avinash Shende
10.40-11.00	DETECTION UAV WITH RADAR	Zaur Alakbarov, Lala Bekirova
11.00-11.20	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
11.20-11.40	INTEGRATION OF 3D MODELS INTO BIOLOGY EDUCATION: NEPHRON MODEL EXAMPLE	Ayşegül Aslan, Mustafa Aslan, Kutay Cava
11.40-12.00	THREE-DIMENSIONAL PRINTED BILAYER SCAFFOLDS FOR USE IN DEEP CARTILAGE INJURIES	Hilal Yılmaz, Sevda Gürsoy, Gülşah Torkay, Ayça Bal, Oğuzhan Gündüz, Cem Bülent Üstündağ
12.00-12.20	THE USE OF FUZZY LOGIC APPROACH IN UNIVERSITIES	Hüseyin Kayıran, Ulviye Demirbilek
12:20-12:40	PROSPECTS FOR THE DEVELOPMENT OF UAVS USING CFRP AND 3D PRINTING	Serhii Pohasli, Stanislav Milevskyi
Coordinator	Ayşenur Karataş	

08 September 2024		
10:00-13:00	Session Chairman: Prof.Dr. Lala Bekirova	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	Seyed 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
12:00-12:20	AERODYNAMIC ANALYSIS OF SIMPLIFIED WHEEL BODIES FOR INDUSTRIAL VEHICLES	Pınar Demircioğlu, İsmail Böğrekci, Mehmet Köse, Akın Denizman, Mehmet Umut Kaya
12:20-12:40	ENHANCING IMAGE-BASED SURFACE TEXTURE AND DEFECT DETECTION IN THE AUTOMOTIVE INDUSTRY USING UNET	Pınar Demircioğlu, Jan Torgersen
Coordinator	Sema Kırıcı	

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