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\* **BIOMED 2022 Online Program** (**Turkey time GMT+03:00**)

The 26<sup>th</sup> International Biomedical Science & Technology Symposium (Online)

[\* The organizers reserve the right to make changes in the program.]

**Friday: November 25, 2022**

<b>Friday: November 25, 2022</b>	
<b>09:00 - 10:45</b>	<b>SESSION 1 - OPENING SESSION</b> Chairperson: Y. Murat Elcin (Ankara University, Ankara, TR)
09:00 - 09:15	<b>Y. Murat Elcin</b> (BIOMED2022 Chair) Opening remarks, Introducing Dr. G.Camussi
09:15 – 10:00 (45') <b>IP-01</b>	<b>I-1: Giovanni Camussi, MD</b> Professor Emeritus, University of Torino, Torino, Italy <i>Opening Keynote. Angiogenic properties of serum-derived extracellular vesicles: potential therapeutic applications</i>
10:05 - 10:45 (35'+5') <b>IP-02</b>	<b>I-2: Vasif Hasirci, PhD</b> Professor, Acibadem University, Istanbul & METU BIOMATEN, Ankara, TR <b>Towards translation with polymeric implants</b>
10:45 - 11:00 (15')	Break

<b>11:00 - 13:00</b>	<b>SESSION 2 – CLINICAL TRANSLATION</b> Chairperson: Vasif Hasirci (Acibadem University, Istanbul, TR)
11:05 - 11:45 (35'+5') <b>IP-03</b>	<b>I-3: Stefano Ferrari, PhD</b> Head, Research Centre of the Veneto Eye Bank Foundation, Venice, Italy <b>Cell therapy-based approaches for the treatment of disorders of the cornea and the retina</b>
11:45 – 12:05 (15'+5') LOP-01	<b>Özgür Kaya, MD (Asst.Prof.,</b> Lokman Hekim University, Dept. Orthop. & Traumatol, Ankara, TR) <b>Does BMAC administration affect functional outcomes in knee osteoarthritis ?</b>
12:05 – 12:35 (25'+5') <b>IP-04</b>	<b>I-4: Reha Kisinisci, Dt PhD</b> Professor, Lokman Hekim University, Faculty of Dentistry, Ankara, TR <b>Cleft lip/palate and regenerative medicine</b>
12:35 – 13:00 (20'+5') LOP-02	<b>Selcuk Öztürk, MD</b> (Kirikkale Yuksek Ihtisas Hospital, Dept. Cardiol., Kirikkale, TR) <b>Advancement of vascular stent technology via regenerative medicine and biomaterial science</b>
13:00 – 13:30 (30')	Break

<b>13:30 - 15:55</b>	<b>SESSION 3 – TISSUE ENGINEERING (1) (ORTHOPAEDIC)</b> Chairperson: Nesrin Hasirci (METU, Ankara, TR)
13:30 - 14:10 (35'+5') <b>IP-05</b>	<b>I-5: Lorenzo Moroni, PhD</b> Professor, Maastricht University, MERLN, Maastricht, The Netherlands <b>4D printing or not 4D printing? Mechanically actuatable 3D instructive scaffolds to steer tissue regeneration</b>
14:10 – 14:24 (10'+4') OP-01	<b>Betül Aldemir Dikici, PhD</b> (Izmir Institute of Technology, Izmir, TR) <u>B. Aldemir Dikici</u> , S. Dikici, I. Karaca, S. Cullu, Ö. Özkendir, O.C. Erdogan, H.N. Yasar, F. Claeyssens. <b>“Mens et Manus”: pART of science and engineering. With a case study on the development of a novel bilayer membrane for guided bone regeneration</b>
14:25 – 14:39 (10'+4') OP-02	<b>Murat Taner Vurat, PhD</b> (Ankara University ElcinLab, Ankara, TR) <u>M.T. Vurat</u> , M. Parmaksiz, A.E. Elcin, Y.M. Elcin. <b>DBM-nHAp as a bone marrow mesenchymal stem cell encapsulation matrix adaptable to surgical shaping procedures: <i>in vitro</i> and <i>in vivo</i> evaluations</b>
14:40 – 14:54 (10'+4') OP-03	<b>Didem Aksu (PhD student; Yeditepe Univ., Dept. of Genetic Eng. Bioeng., Istanbul, TR)</b> <u>D. Aksu</u> , G. Meric, B.C. Aksu, C.L. Altan, G.T. Köse. <b>Preparation of new biocompatible bone cement by using dual active biofiller and enhancement of their features for bone development</b>
14:55 – 15:09 (10'+4') OP-04	<b>Ekin Aytekin (PhD student; Ankara University ElcinLab, Ankara, TR)</b> <u>E. Aytekin</u> , M.T. Vurat, A.E. Elcin, Y.M. Elcin. <b>Investigation of a proangiogenic biocomposite of decellularized bone matrix and bioactive glass</b>
15:10 – 15:24 (10'+4') OP-05	<b>Nisa Irem-Büyük (MSc; Yeditepe University, Dept. of Genetic Eng. &amp; Bioeng., Istanbul, TR)</b> <u>N.I. Büyük</u> , D. Aksu, G.T. Köse. <b>Effects of pore sizes of 3D printed scaffolds on bone regeneration</b>
15:25 – 15:39 (10'+4') OP-06	<b>Elit Ozelcaglayan (MSc student; Kastamonu Univ. Dept. Biomed Eng., Kastamonu, TR)</b> N. Emin, <u>E. Özelcaglayan</u> , A. Koc-Demir, K. Nural. <b>Fabrication and characterization of collagen-GAG based biomimetic scaffolds for bone tissue engineering</b>
15:40 – 15:43 (3'+0') PP-01	<b>Deniz Basoz (MSc student; Acibadem University, Istanbul, TR)</b> <u>D. Basoz</u> , V. Hasirci, D. Yucel. <b>Development of a multilayered tissue substitute by osteochondral tissue engineering</b>
15:45 – 15:48 (3'+0') PP-02	<b>Kubra Coskun Kiratli (MSc; Acibadem Univ. Dept. Biomaterials, Istanbul, TR)</b> <u>K.C. Kiratli</u> , H. Kenar, V. Hasirci, O. Gundogdu. <b>Construction of hydroxyapatite/poly(glycerol-sebacate)/poly(lactic acid) composite bone tissue scaffolds via three-dimensional printing</b>
15:50 – 15:53 (3'+0') PP-03	<b>Tansu Turan Gökçen (MSc student; Yeditepe Univ. Dept. Gen. Bioeng., Istanbul, TR)</b> <u>T.T. Gökçen</u> , G.T. Köse, F. Kocabas, O.C. Namli. <b>Effects of small molecules on cartilage tissue regeneration</b>
15:55 – 16:10 (15')	Break

<b>16:10 - 18:20</b>	<b>SESSION 4 – TISSUE ENGINEERING (2) (EYE &amp; VASCULAR)</b> Chairperson: Gamze Torun Köse (Yeditepe University, Istanbul, TR)
16:10 - 16:50 (35'+5') <b>IP-06</b>	<b>I-6: May Griffith, PhD</b> Professor, University of Montreal & CR-HMR, Montreal, Quebec, Canada <b>Current developments in corneal regeneration</b>
16:50 – 17:04 (10'+4') OP-07	<b>Kamal Asadipakdel (PhD student; Sabanci University, SUNUM, Istanbul. TR)</b> <u>K. Asadipakdel</u> , S.B. Sahin, E. Demir, H.E. Sutova, M.K. Bayazit, S. Cetinel. <b>Optical properties of poly(glycerol sebacate) as a scaffold for ocular tissue regeneration</b>
17:05 – 17:19 (10'+4') OP-08	<b>Seher Yaylaci, PhD (Asst. Prof.; Lokman Hekim U. Faculty of Med., Ankara, TR)</b> S. Yaylaci, E. Dinc, B. Aydin, A.B. Tekinay, M.O. Guler. <b>Peptide nanofibers as a delivery system for anti-vascular endothelial growth factor protein in the eye</b>
17:20 – 17:34 (10'+4') OP-09	<b>Gozde E. Kole (PhD student; Acibadem Univ. Dept. Biomaterials, Istanbul, TR)</b> <u>G.E. Kole</u> , V. Hasirci, D. Yucel. <b>Construction of a tri-layered vascular tissue equivalent</b>
17:35 – 17:49 (10'+4') OP-10	<b>Burcin Izbudak (PhD student; Istinye U. Dept. Stem Cell &amp; TE, Istanbul, TR)</b> <u>B. Izbudak</u> , M. Dönmez, M. Topal, A.B. Öztürk. <b>Local delivery of antithrombotic drug using gellan gum methacrylate tissue scaffolds for vascular graft applications</b>
17:50 – 18:04 (10'+4') OP-11	<b>Yasar Kemal Erdogan (PhD student; Middle East Technical U. Biomed Eng., Ankara, TR)</b> <u>Y.K. Erdogan</u> , B. Ercan. <b>Nanostructured 316L stainless steel to improve endothelization and decrease platelet adhesion</b>
18:05 – 18:08 (3'+0') PP-04	<b>Senem Büyüksungur, PhD (METU BIOMATEN, Ankara TR)</b> <u>S. Büyüksungur</u> , D. Yücel, N. Hasirci, V. Hasirci. <b>Corneal stroma engineering using 3D bioprinted GelMA hydrogels</b>
18:10 – 18:13 (3'+0') PP-05	<b>Ebru Demir (PhD candidate; Sabanci University, SUNUM, Istanbul. TR)</b> <u>E. Demir</u> , S.B. Sahin, S. Cetinel. <b>Self-assembling peptide nanofiber hydrogel for corneal stromal tissue engineering</b>
18:15 – 18:18 (3'+0') PP-06	<b>Sevilay Burcu Sahin (PhD candidate; Sabanci University, SUNUM, Istanbul. TR)</b> <u>S.B. Sahin</u> , E. Demir, K. Asadipakdel, E.T. Vural, S. Cetinel. <b>Mimicking the corneal epithelial layer by using PGS film and primary corneal epithelial cells</b>

## Saturday: November 26, 2022

09:00 - 10:30	SESSION 5 – NANOMATERIALS - NANOMEDICINE (1) Chairperson: Cem Bayram (Hacettepe University, Ankara, TR)
09:00 – 09:14 (10'+4') OP-12	<b>Bogac Kilicarslan</b> ( <i>PhD candidate</i> ; Hacettepe U. Dept. Nanotechnol., Ankara, TR) <u>B. Kilicarslan</u> , C. Bayram. <b>Fabrication and characterization of titania nanotube-based membrane systems for blood purification applications</b>
09:15 – 09:29 (10'+4') OP-13	<b>Burcu Okmen Altas</b> ( <i>PhD student</i> ; Hacettepe U. Dept. Chem. Eng. Ankara, TR) <u>B.O. Altas</u> , G.D. Kalaycioglu, N. Aydogan. <b>Anisotropic polymer/lipid micro/nano structures for simultaneous encapsulation and delivery of hydrophilic/hydrophobic drug-like molecules</b>
09:30 – 09:44 (10'+4') OP-14	<b>M. Zahid Dogan</b> ( <i>MSc student</i> ; Hacettepe U. Dept. Chem. Eng. Ankara, TR) <u>M.Z. Dogan</u> , D. Gökçen, C. Bayram. <b>Investigation of neural recording and stimulation capability of doped graphene-based nanomaterials</b>
09:45 – 09:59 (10'+4') OP-15	<b>Damla Kelle</b> ( <i>MSc student</i> ; Bogazici U. Dept. Biomed. Eng. Istanbul, TR) <u>D. Kelle</u> , K. Landfester, B. Iyisan. <b>Investigation of protein corona formation on biodegradable nanocarriers</b>
10:00 – 10:14 (10'+4') OP-16	<b>Asli Ekener</b> ( <i>MSc student</i> ; Yildiz Technical U. Dept. Bioeng., Istanbul, TR) A. Ekener, B. Gök, Y. Budama-Kilinc. <b>Production and characterization of therapeutic nanoparticles containing phenolic complex</b>
10:15 – 10:18 (3'+0') PP-07	<b>Melisa Kafali</b> ( <i>MSc student</i> ; METU Dept. Met. Mater. Eng, Ankara, TR) <u>M. Kafali</u> , E. Y. Erdem, B. Ercan. <b>Synthesis of chitosan – SPION composite nanoparticles using microreactor as an antibacterial agent</b>
10:20 – 10:23 (3'+0') PP-08	<b>Dilan Avsar</b> ( <i>PhD student</i> ; Bogazici U. Dept. Biomed. Eng., Istanbul, TR) <u>D. Avsar</u> , B. Iyisan. <b>Design of optimal biopolymer nanocarriers with lipid core</b>
10:25 – 10:28 (3'+0') PP-09	<b>Gizem Uysal</b> ( <i>MSc student</i> ; Bogazici U. Dept. Biomed. Eng., Istanbul, TR) <u>G. Uysal</u> , D. Appelhans, B. Voit, B. Iyisan. <b>Design and characterization of <math>\beta</math>-cyclodextrin-coated superparamagnetic iron oxide nanoparticles</b>
10:30-10:45 (15')	Break

10:45 - 13:10	<b>SESSION 6 – TISSUE ENGINEERING (3) (CELLULAR MICROENVIRONMENT, BIOLOGICAL MATRICES)</b> Chairpersons: Dilek Keskin (METU, Ankara, TR) & Aysen Tezcaner (METU, Ankara, TR)
10:45 - 11:25 (35'+5') IP-07	<b>I-7: Manuel Salmeron-Sanchez, PhD</b> Professor, University of Glasgow, Chair of Biomed. Eng. Scotland, United Kingdom <b>Protein-based hydrogels for stem cell engineering</b>
11:25 – 11:39 (10'+4') OP-17	<b>Mahmut Parmaksiz, PhD</b> (Ankara University ElcinLab, Ankara, TR) <u>M. Parmaksiz</u> . <b>Fabrication of tissue-derived hydrogels and their composites for interface tissue engineering application: preliminary studies</b>
11:40 – 11:54 (10'+4') OP-18	<b>Serkan Dikici, PhD</b> (Izmir Institute of Technology, Izmir, TR) <u>S. Dikici</u> , B. Aldemir, M. Cevik, F. Claeysens, S. MacNeil. <b>Cell-deposited extracellular matrix (ECM) enriched pro-angiogenic scaffolds for the management of challenging wounds</b>
11:55 – 12:09 (10'+4') OP-19	<b>Burcu Tüzün-Antepli, PhD</b> (Ankara University ElcinLab, Ankara, TR) <u>B. Tüzün-Antepli</u> , S. Seker, A.E. Elcin, Khang G, Y.M. Elcin. <b>Evaluation of a PCL-nHAp-rGO ternary blend, micro-grooved membrane scaffold for osteoblasts</b>
12:10 – 12:24 (10'+4') OP-20	<b>Gülnihal Bozdag (PhD student; Yeditepe U. &amp; Istanbul Okan U., Istanbul, TR)</b> <u>Ö.K. Acar, G. Bozdag, S.B. Kaptanoglu, A. Tuncer, G.D. Nozhatzadeh, E. Hacıhasanoglu, G.T. Köse, E. Aysan</u> . <b>Efficacy of the decellularized human thyroid tissues</b>
12:25 – 12:39 (10'+4') OP-21	<b>Pelin Ilhan (PhD student; Ege University Dept. Bioeng., Izmir, TR)</b> <u>P. Ilhan</u> , A. Sendemir, G. Sengul. <b>Characterization of the effects of decellularized matrix coated nanofibrous scaffolds on neural differentiation of bone marrow derived mesenchymal stem cells</b>
12:40 – 12:54 (10'+4') OP-22	<b>Gülcin Delal Nozhatzadeh (PhD student; Yeditepe U. &amp; Istanbul Okan U., Istanbul, TR)</b> <u>G.D. Nozhatzadeh, Ö.K. Acar, L.E. Aydoğan, A. Tuncer, E. Hacıhasanoglu, F. Sahin, G.T. Köse, E. Aysan</u> . <b>Calcium-alginate encapsulation for transplantation of parathyroid cells: serum, plasma, and blood effect</b>
12:55 – 12:58 (3'+0') PP-10	<b>Kardelen Tüfekci (PhD student; Yeditepe U. Gen. Eng. &amp; Bioeng., Istanbul, TR)</b> <u>K. Tüfekci</u> , N.I. Büyük, A. Cumbul, E. Aysan, G.T. Köse. <b>A novel method for providing scaffold: Decellularization of parathyroid capsule</b>
13:00 – 13:03 (3'+0') PP-11	<b>A. Alperen Tuncer (PhD candidate; Yeditepe U. Gen. Eng., Istanbul, TR)</b> <u>A.A. Tuncer, Ö.K. Acar, G. Bozdag, G.D. Nozhatzadeh, S.B. Kaptanoglu, M. Kegin, F. Sahin, G.T. Köse, M.E. Aysan</u> . <b>Static magnetic field effect on macroencapsulated parathyroid cells and lymphocyte orientation</b>
13:05 – 13:08 (3'+0') PP-12	<b>Saime Bengü Kaptanoglu (MSc student; Yeditepe U. Gen. Eng., Istanbul, TR)</b> <u>S.B. Kaptanoglu, Ö.K. Acar, A. Basoglu, A.A. Tuncer, G. Bozdag, G.D. Nozhatzadeh, F. Sahin, G.T. Köse, E. Aysan</u> . <b>Effects of electric field on the immunological properties of parathyroid cells</b>
13:10 – 13:40 (30')	Break

<b>13:40 – 14:20</b>	<b>Plenary Session</b> Chairperson: Ayse Karakecili (Ankara University, Ankara, TR)
13:40 - 14:20 (35'+5') <b>IP-08</b>	<b>I-8: Antoniac Iulian, PhD</b> Professor, Politechnical University of Bucharest, Faculty of Materials Science and Eng., Bucharest, Romania & President, Romanian Society for Biomaterials <b>Advances in bioceramics and biocomposites</b>
<b>14:20 - 16:10</b>	<b>SESSION 7 – SKIN AND SOFT TISSUE RECONSTRUCTION</b> Chairperson: Ayse Karakecili (Ankara University, Ankara, TR)
14:20 – 14:39 (15'+4') LOP-03	<b>Anna Restelli, MSc</b> (Oxartis Ltd., Oxford, United Kingdom) N. Vaporidou, F. Peroni, <u>A. Restelli</u> , M.N. Jalil, J.F. Dye. <b>Global landscape of artificial skin solutions; positioning a strategy for product development</b>
14:40 – 14:54 (10'+4') OP-23	<b>Bahar Gök</b> (PhD student; Yildiz Technical U. Dept. Bioeng., Istanbul, TR) <u>B. Gök</u> , Y. Budama-Kilinc, S. Kecel-Gündüz. <b>Development of peptide containing cosmeceutical formulations and evaluation of efficacy</b>
14:55 – 15:09 (10'+4') OP-24	<b>Gürkan Yesiloz, PhD</b> (Bilkent University UNAM, Ankara, TR) <u>G. Yesiloz</u> . <b>Droplet microfluidics enabled hyaluronic acid-gelatin methacryloyl hybrid microgels formation and investigation of their physical properties</b>
15:10 – 15:24 (10'+4') OP-25	<b>Alican Cömertpay</b> (MSc student; A.A. Türkes U. Sci. & Technol. Dept. Bioeng., Adana, TR) S. Aydogan, <u>A. Cömertpay</u> , Z. Iyigündođdu, S. Ceylan, M.C. Yurtsever. <b>Avocado oil incorporated polycaprolactone membranes with antimicrobial and cytocompatible properties</b>
15:25 – 15:39 (10'+4') OP-26	<b>M. Sari Njjar</b> (MSc student; Pamukkale U. Dept. Biomed. Eng., Denizli, TR) M. Köse, F. Altintas, A.S. Ozturk, E. Kolcu, <u>M.S. Njjar</u> , A. Koluman. <b>Hemostatic smart tourniquet</b>
15:40 – 15:54 (10'+4') OP-27	<b>Isabella Nacu</b> (PhD student; Grigore T. Popa University of Medicine & Pharmacy, Iasi, Romania) <u>I. Nacu</u> , L. Nedelcu, L.E. Nita, L. Verestiuc. <b>3D Bioprinted hybrid hydrogels based on Gelma and functionalised biopolymers for tissue engineering</b>
15:55 – 15:58 (3'+0') PP-13	<b>Sabiha Demirci</b> (PhD student; Mugla Sitki Kocman U. Dept. Chem., Mugla, TR) <u>S. Demirci</u> , F. Ayhan. <b>Gelma hydrogels synthesis for wound healing applications</b>
16:00 – 16:03 (3'+0') PP-14	<b>Nergis Zeynep Renkler</b> (PhD student; CNR-IPCB, Pozzuoli, Italy) <u>N.Z. Renkler</u> , I. Cruz-Maya, V. Guarino. <b>PVA based scaffolds via green electrospinning for biomedical applications</b>
16:05 – 16:08 (3'+0') PP-15	<b>Arif Enes Karaca</b> (MSc student; Ege University Dept. Bioengineering, Izmir, TR) <u>A.E. Karaca</u> , C. Özel, A. Özarslan, S. Yücel. <b>45S5 Bioactive glass reinforced microcrystalline cellulose-polyvinyl alcohol based composite membrane wound dressing</b>
16:10 – 16:25 (15')	Break

16:25 - 18:25	<b>SESSION 8 – NANOMATERIALS - NANOMEDICINE (2)</b> Chairperson: Volga Bulmus (IZTECH, Izmir, TR)
16:25 - 17:05 (35'+5') IP-09	<b>I-9: Zeynep Altintas, PhD</b> Professor, Technical University Berlin & Kiel University, Berlin, Germany <b>Biomedical applications of <i>in silico</i> designed functional materials</b>
17:05 – 17:19 (10'+4') OP-28	<b>Esra Oktay (PhD candidate)</b> (George Mason U. Dept. Bioeng., St.Fairfax, VA, USA) <u>E. Oktay</u> , F. Alem, K. Fernandez, A. Narayanan, R. Veneziano. <b>Tailored design DNA origami nanoparticles with trimeric RBD and CpG elicit protective immunity against SARS-CoV-2</b>
17:20 – 17:34 (10'+4') OP-29	<b>Sedef Salel (PhD student; Bogazici University Dept. Biomed. Eng., Istanbul, TR)</b> <u>S. Salel</u> , B. Iyisan. <b>Polymer-lipid hybrid nanocarriers for anticancer drug delivery</b>
17:35 – 17:49 (10'+4') OP-30	<b>Özlem Yıldız (MSc student; Izmir Katip Celebi University Dept. Biomed. Eng., Izmir, TR)</b> <u>Ö. Yıldız</u> , A. Pamukcu, E. Bakay, E. Varol, D.S. Karaman, N. Tapologlu, A. Nalbantsoy, B. Yücel. <b>Investigation of photosensitive mesoporous silica nanoparticles combined with apitherapy on breast cancer treatment</b>
17:50 – 18:04 (10'+4') OP-31	<b>Muhammet Burak Batir, PhD</b> (Manisa Celal Bayar University Dept. Biology, Manisa, TR) <u>M.B. Batir</u> , S. Batir, F.Ö. Kurt. <b>Determination of changes in breast cancer cells with over-expressed E-cadherin and ICAM-1 gene by CRISPRa/dCas9 system</b>
18:05 – 18:19 (10'+4') OP-32	<b>Burcu Bayramli-Öner (PhD candidate; Ankara University ElcinLab, Ankara, TR)</b> <u>B. Bayramli-Öner</u> , Ö. Lalegül-Ülker, A.E. Elcin, Y.M. Elcin. <b>Investigation of the synergistic effect of electromagnetic field and coated magnetic nanoparticles on adipose stem cells</b>
18:20 – 18:23 (3'+0') PP-16	<b>Muhammed Yusuf Kandur (PhD candidate)</b> (Marmara U. Dept. Bioeng., Istanbul, TR) <u>M.Y. Kandur</u> , F. Bahadori, E.T. Öner. <b>Levan injectable hydrogel trials using BDDE as a cross-linker to be used as a drug carrier to uterine fibroids</b>

## Sunday: November 27, 2022

<b>09:00 - 10:40</b>	<b>SESSION 9 – IN VITRO MODELS, BIOMIMETIC MATERIALS</b> Chairperson: Halime Kenar (Acibadem University, Istanbul, TR)
09:00 – 09:19 (15'+4') LOP-04	<b>Sevde Altuntas, PhD (Asst.Prof., U. Health Sci. / Exp. Med. R&amp;A Center, Istanbul, TR)</b> <b><u>S. Altuntas</u>. Generation of alveolar organoids as an antiviral drug screening platform</b>
09:20 – 09:34 (10'+4') OP-33	<b>Zehra Gül Morcimen (PhD candidate; Ege University, Dept. Bioeng., Izmir, TR)</b> <b><u>Z.G. Morcimen</u>, S. Tasdemir, S.E.T. Özoglu, A. Sendemir. Graphene doped composite self-assembled peptide gels show regenerative effects on <i>in vitro</i> three dimensional Parkinson's disease model</b>
09:35 – 09:49 (10'+4') OP-34	<b>Alp Yigit Özdemir (PhD candidate; Charles University, Prague, Czechia)</b> <b><u>A.Y. Özdemir</u>, S. Erfen, H.E. Babayigit, E.A. Cetin. Investigation of the effect of UV-induced adipose tissue derived mesenchymal stem cells on healing in scratch assay model</b>
09:50 – 10:04 (10'+4') OP-35	<b>Sebnem Seherler (PhD student; Istanbul Technical University Dept. Mol. Bio. &amp; Genetics, Istanbul, TR)</b> <b><u>S. Seherler</u>, FN. Kök, A. Kilic. Evaluation of the interaction of a biomimetic lipid membrane model with gramicidin-D peptide</b>
10:05 – 10:19 (10'+4') OP-36	<b>Dilayda Kanmaz (PhD student; Bursa Uludag U. Dept. Textile Eng., Bursa, TR)</b> <b><u>D. Kanmaz</u>, B. Osman, E. Karaca. The effect of hydrophobicity and hydrophilicity of nanofibers on cryogel/nanofiber hybrid biomaterial production</b>
10:20 – 10:23 (3'+0') PP-17	<b>Damla Arslantunali-Sahin, PhD (METU BIOMATEN, Ankara, TR)</b> <b><u>D. Arslantunali-Sahin</u>, S. Isik, D.G. Tamay, G.E. Köle, D. Yucel, N. Hasirci, V. Hasirci. Development of a nerve tissue model on a micropatterned surface for axon guidance and neural regeneration investigations</b>
10:25 – 10:28 (3'+0') PP-18	<b>Begüm Gökce (PhD candidate; Ege University, Dept. Bioeng., Izmir, TR)</b> <b><u>B. Gökce</u>, A. Sendemir, J. Rogal, A. Herland. Generation of human iPSC-derived astrocytes</b>
10:30 – 10:33 (3'+0') PP-19	<b>Neval Sevinc Özdemir (PhD candidate; Acibadem Univ. Dept. Biomaterials, Istanbul, TR)</b> <b><u>N.S. Özdemir</u>, H. Kenar, V. Hasirci. Generation of a tissue engineered blood-air barrier model to study respiratory viral infections <i>in vitro</i></b>
10:35 – 10:38 (3'+0') PP-20	<b>Joumana Ali Al Akhdar (PhD student; Koc University KUTTAM, Istanbul, TR)</b> <b><u>J.A. Al Akhdar</u>, F.M. Kurtoglu, M.N. Yangin, K. Baysal. The effect of endothelial derived exosomes on the phenotypic changes of vascular smooth muscle cells in an <i>in vitro</i> co-culture model of atherosclerosis</b>
10:40 – 10:55 (15')	Break



10:55 - 13:25	<b>SESSION 10 – DIGITAL TOOLS FOR REGENERATIVE MEDICINE &amp; THERAPY</b> Chairperson: Arda Büyüksungur (Ankara University, Ankara, TR)
10:55 - 11:35 (35'+5') IP-10	<b>I-10: Ralph Sinkus, PhD</b> Research Director at CNRS, LVTS, Paris, France; Professor & Chair in Biomed. Eng. King's College London, UK <b>Tissue biomechanics for the quantification of fibrosis, inflammation, and response to therapy</b>
11:40 - 12:20 (35'+5') IP-11	<b>I-11: Liesbet Geris, PhD</b> Professor, University of Liège and KU Leuven, Belgium <b>Digital tools for designing living implants: examples from skeletal tissue engineering</b>
12:20 – 12:39 (15'+4') LOP-05	<b>Nauman Jalil, PhD (Oxartis Ltd., Oxford, United Kingdom)</b> <u>N. Jalil</u> , A. Twesigye, J. Dye. <b>Modulation of wound contracture through scaffold stiffness: A finite element model</b>
12:40 – 12:54 (10'+4') OP-37	<b>Deniz Karatas, PhD (Asst.Prof., Manisa Celal Bayar U. Bioeng., Manisa, TR)</b> <u>D. Karatas</u> , A. Gönel. <b>Interaction of povidone iodine with estrogen and progesterone receptors by molecular docking</b>
12:55 – 13:09 (10'+4') OP-38	<b>Ihsan Coskun (MSc student; Izmir Katip Celebi Univ. Dept. Biomed. Eng., Izmir, TR)</b> <u>I. Coskun</u> , M.B. Karakaplan, A. Pamukcu, D.S. Karaman. <b>The antibacterial activity of LL-37 template peptide on flexible biomaterial</b>
13:10 – 13:13 (3'+0') PP-21	<b>Bugrahan Regaip Kilinc (Bioeng., HBB Biologics Inc., Ankara, TR)</b> B.R. Kilinc, M.S. Karabulut, F. Balci, C.O. Karabulut. <b>Focusing on miRNAs for bone tissue engineering: Bioinformatics analysis of miRNAs involved in osteogenic differentiation of human dental pulp stem cells</b>
13:15 – 13:18 (3'+0') PP-22	<b>Ilayda Karaca (Undergrad. student, Izmir Institute of Technol. Dept. Bioeng., Izmir, TR)</b> <u>I. Karaca</u> , B.A. Dikici. <b>Quantitative evaluation of morphological features of tissue engineering scaffolds using deep learning (YOLOv5x6 object detection) on scanning electron microscope images</b>
13:20 – 13:23 (3'+0') PP-23	<b>Grzegorz Orlicki (PhD candidate; Gdańsk U. Technol. Dept. Optoelectronics, Gdańsk, Poland)</b> <u>G. Orlicki</u> , M. Barczak, B. Jankowski, J. Gierowski, M. Szczerska. <b>Analysis of the possibility of using optical methods for research quality of 3D prints</b>
13:25 – 13:40 (15')	Break

<b>13:40 - 15:35</b>	<b>SESSION 11 – BIOSENSORS FOR DIAGNOSIS AND MONITORING</b> Chairperson: Mahmut Parmaksiz (Ankara U., Ankara, TR)
13:40 – 13:59 (15'+4') LOP-06	<b>Małgorzata Szczerska</b> , <i>PhD (Professor, Gdańsk U. Technol. Dept. Optoelectronics, Gdańsk, Poland)</i> <u>M. Szczerska</u> , M. Kosowska, R. Viter, P. Wityk. <b>Fiber optic sensor of CRP level</b>
14:00 – 14:14 (10'+4') OP-39	<b>Simge Er Zeybekler</b> , <i>PhD (Ege University Dept. Biochemistry, Izmir, TR)</i> <u>S.E. Zeybekler</u> , D. Odaci. <b>Comparison of electrochemical immunosensors on carbon-based electrospun nanofibers</b>
14:15 – 14:29 (10'+4') OP-40	<b>Nimet Yildirim Tirgil</b> , <i>PhD (Asst.Prof., Ank. Yildirim Beyazit U. Dept. Biomed. Eng., Ankara, TR)</i> <u>N.Y. Tirgil</u> . <b>Specific, selective, and naked eye detection of Salmonella DNA with triple marker designed colorimetric biosensor system</b>
14:30 – 14:44 (10'+4') OP-41	<b>Sultan Sacide Gelen</b> ( <i>MSc; Ege University Dept. Chemistry &amp; Biochemistry, Izmir, TR</i> ) M.C. Miconunoglu, <u>S.S. Gelen</u> , S. Gumustas, I. Yazgan, D. Odaci, E.E. Yalcinkaya. <b>Design of a novel polymer-clay nanocomposite based electrochemical biosensor for the determination of H<sub>2</sub>O<sub>2</sub></b>
14:45 – 14:59 (10'+4') OP-42	<b>Ahmed Harb</b> ( <i>MSc student; Cukurova Univ. Dept. Biomed. Eng., Adana, TR</i> ) M. Istanbulu, <u>A. Harb</u> . <b>Design and simulation of a graphene based dual-gate ISFET microsensor</b>
15:00 – 15:14 (10'+4') OP-43	<b>Fatma Oztürk Kırbay</b> , <i>PhD (Ege University Dept. Biochemistry, Izmir, TR)</i> I. Kirgiz, I. Ozköse, <u>F.O. Kırbay</u> , D. Odaci. <b>Bi-enzymatic system on electrospun nanofiber matrix for the detection of uric acid</b>
15:15 – 15:18 (3'+0') PP-24	<b>Patryk Sokołowski</b> ( <i>MSc; Gdańsk U. Technol. Dept. Metrol. &amp; Optoelectr., Gdańsk, Poland</i> ) <u>P. Sokołowski</u> , P. Wityk. <b>Optical method of urinary tract infections discrimination</b>
15:20 – 15:23 (3'+0') PP-25	<b>Sebnem Kilic</b> ( <i>MSc student; Izmir Institute of Technol. Dept. Bioeng., Izmir, TR</i> ) <u>S. Kilic</u> , A. Alekberov, N.H. Altun, V. Bulmus. <b>Effect of gold nanorod properties on LSPR-based sensor response</b>
15:25 – 15:28 (3'+0') PP-26	<b>Marina Serin</b> ( <i>PhD candidate; Ege University. Dept. Analytical Chemistry., Izmir, TR</i> ) <u>M. Serin</u> , P. Kara. <b>Aptamer-based electrochemical nanobiosensor for multiple sclerosis diagnosis and monitoring</b>
15:30 – 15:33 (3'+0') PP-27	<b>Jakub Gierowski</b> ( <i>PhD candidate; Gdańsk U. Technol. Dept. Optoelectronics, Gdańsk, Poland</i> ) <u>J. Gierowski</u> , S. Pawłowska, B. Stonio, M. Juchniewicz, M. Ficek, M. Szczerska. <b>Implementation of silicon with SiN thin film as mirror in Fabry-Perot fiber-optic sensor</b>
15:35 – 15:50 (15')	Break

<b>15:50 - 17:25</b>	<b>SESSION 12 – DRUG DELIVERY</b> Chairperson: Kezban Ulubayram (Hacettepe U., Ankara, TR)
15:50 – 16:04 (10'+4') OP-44	<b>Muhammet Emin Cam</b> , <i>PhD (Assoc.Prof., Marmara U. Dept. Pharmacology, Istanbul, TR)</i> <u>M.E. Cam</u> . <b>Oral empagliflozin-loaded tri-layer polymeric fibers enhanced antidiabetic activity</b>
16:05 – 16:19 (10'+4') OP-45	<b>Minela Aslan</b> , <i>PhD (Hacettepe U. Dept. Bioengineering., Ankara, TR)</i> <u>M. Aslan</u> , I. Eroglu, S. Öztürk, Ö. Bozdemir, N.D. Zeybek, I. Vargel, K. Ulubayram. <b>Targeting of JAK1 with siRNA formulated liposome nanocomplexes for treatment of NMSC</b>
16:20 – 16:34 (10'+4') OP-46	<b>Özge Toprak</b> ( <i>PhD student; Ankara University Dept. Chem Eng., Ankara, TR</i> ) <u>Ö. Toprak</u> , M. Erdek, A. Karakecili. <b>Preparation of chitosan scaffolds for pH-controlled release of vancomycin</b>
16:35 – 16:49 (10'+4') OP-47	<b>Saliha Aydin</b> ( <i>PhD student; Marmara University Dept. Pharmacology, Istanbul, TR</i> ) <u>S. Aydin</u> , M. Dogan, T. Taskin, M.E. Cam. <b>In vitro evaluation of endemic plants-loaded polysorbate 80-coated PLGA/PEG nanoparticles for the treatment of Alzheimer's disease</b>
16:50 – 17:04 (10'+4') OP-48	<b>Tuba Seker</b> ( <i>MSc student; Hitit University, Faculty of Science, Corum, TR</i> ) <u>T. Seker</u> , I. Tosun-Satir, C. Dönmez-Güngünes. <b>Phytosynthesis of magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles using Capparis spinosa for chemotherapeutic drug delivery applications</b>
17:05 – 17:08 (3'+0') PP-28	<b>Elif Özlem Topal</b> ( <i>MSc student; Bogazici U. Dept. Biomed. Eng., Istanbul, TR</i> ) <u>E.Ö. Topal</u> , B. Iyisan. <b>Synthesis and characterization of bovine serum albumin based nanocontainers for drug delivery applications</b>
17:10 – 17:13 (3'+0') PP-29	<b>Nergis Zeynep Renkler</b> ( <i>PhD student; CNR-IPCB, Pozzuoli, Italy</i> ) I.C. Maya, C. Schiavone, <u>N.Z. Renkler</u> , S. Caserta, V. Guarino. <b>Core shell alginate particles: design and modeling for drug delivery systems</b>
17:15 – 17:25	<b>Closing remarks</b> Y. Murat Elcin (BIOMED2022 Chair)