

Monday, February 21

HALL A

Opening Ceremony

Scientific

Chairs: **Atilla Hıncal, Sema Çalış, Sevda Şenel**

08.30-09.00

Plenary Lecture
Mansoor A. Khan
Shaping pharmaceuticals research and training to enhance therapeutic outcomes: Some low hanging fruits

09.00-09.25

Gerrit Borchard
The future of nanomedicines is complex (to predict)

09.25-09.50

Saghir Aktar
Interplay of nano-delivery systems with cell signaling cascades in vitro and in vivo: A concern or therapeutic opportunity

09.50-10.15

Tetsuya Ozeki
Gold-based nanoparticles as a unique platform of nanomedicine

10.15- 10.30

Coffee Break

Chairs: **Yılmaz Çapan, Erem Bilensoy**

10.30-10.55

Elias Fattal
Novel approaches in the treatment of inflammatory diseases using nanotechnologies

10.55-11.20

Avi Schroeder
Barcoded Nanoparticles for Precision Cancer Medicine: The primary tumor and metastasis are sensitive to different medicines

11.20-11.45

Helder Almeida Santos
Dressing nanoparticles in cell's clothing: The new generation of nanomedicines for biomedical applications

11.45-12.10

Bruno Sarmento
Functionalized nanomedicines for the oral delivery of anti-diabetic peptides

12.10-13.30

Lunch

Pharmaceutical Development and Manufacturing Solutions” “Data Science and Cyber Tools in Pharmaceutical Development and Manufacturing Sciences

Chairs: **Sema Çalış, Levent Öner**

13.30-13.50

Nils Rottmann
Innovative formulation development using the digital tool ZoomLab

13.50-14.10

Timur Kabadayı
Data integrity in cloud and big data applications

14.10-14.30

Barbaros Yet
Smart and accelerated formulation design using bayesian optimization

14.30-14.50

Reza Vatankhah
From Industry 4.0 to Pharma 4.0

14.50-15.10

Derya Cebeci
Raman and NIR spectroscopy applications as a PAT tool for pharmaceutical manufacturing

15.10-15.30

Discussion

15.30-15.50

Coffee Break

15.50-16.10

Hans Leuenberger
Impact of the Digital Revolution on the Future of Pharmaceutical Science

16.10-16.30

Nadin Ekmekçiyan
Excipient engineering and design to enable continuous manufacturing

16.30-16.50

Felix Hofmann
Tailored gastro intestinal targeting-advanced coating approaches to meet industrial needs

16.50-17.10

Gernot Warnke
From Fibres to High-Functionality Excipients. The Evolution of Cellulose in Tableting Technology

17.10-17.30

Discussion

17.30-18.30

Poster Session

Chairs: **Tuğba Gülsün İnal, Yağmur Akdağ Çaylı, Tuğba Çopur**

Monday, February 21

HALL B

Oral Presentations

Chairs: **Kıvılcım Öztürk, Nazlı Erdoğan, Selin Seda Timur**

11.00-11.05	OP1, Özge Eşim <i>Cytotoxicity Evaluation of Methotrexate-Encapsulating Chitosan-Coated Nanoparticles</i>
11.05-11.10	OP2, Fatma Betül Arslan <i>Targeting PLGA-PEG Nanoparticles to Small Cell Lung Cancer (Sclc) Using Antibodies and Antibody Fragments</i>
11.10-11.15	OP3, Şeyma Adatepe <i>Effect Of Ezetimibe-Loaded PLGA Nanoparticles Functionalized with Red Blood Cell Membranes as A Biomimetic Delivery System in Obese Rat Fed A High-Fat Diet</i>
11.15-11.20	OP4, Meryem Kaplan <i>Effects of Nanoparticle Shape on Cellular Uptake and Accumulation to Tumor Cells</i>
11.20-11.25	OP5, Zehra Dik <i>A New Look for An Old Drug: Neuroprotective Effects of Obidoxime-Loaded Nanoparticles for The Treatment of Organophosphate Poisoning In Central Nervous System</i>
11.25-11.30	OP6, Zeliha Duygu Özdal <i>Evaluation of the In Vitro Cytotoxicity and Characterization of Ondansetron Hydrochloride Loaded Nanoparticles</i>
11.30-11.40	Questions & Answers
11.40-11.45	OP7, Tilbe Çevikelli <i>Col1a1 Gene Stimulation by Ketorolac Tromethamine Loaded Nano-Spray Dried Nanoparticles</i>
11.45-11.50	OP8, Kıvılcım Öztürk <i>Development of Polymeric Micelle Formulation for Oral Megestrol Acetate Delivery</i>
11.50-11.55	OP9, Naile Öztürk <i>In Vitro Evaluation of Doxorubicin and Telmisartan Loaded Lipid-PLGA Hybrid Nanoparticles on Breast Cancer Cells</i>
11.55-12.00	OP10, Hümeysra Şahin Bektay <i>Bisabolol and Isoconazole Co-Loaded Liposomes for Antifungal Drug Delivery</i>
12.00-12.05	OP11, Sema Arısoy <i>Preparation of Ace2 Loaded Decoy Liposomes by Extrusion Method for The Treatment of Covid-19</i>
12.05-12.10	OP12, Meryem Aydın <i>Preparation and Characterization of Metoclopramide Nanostructured Lipid Carrier Loaded in Situ Gel</i>
12.10-12.15	OP13, Gizem Rüya Topal <i>Development Of Different Lipid Nanoparticles and Evaluation of Bacteria-Nanoparticles Interactions</i>
12.15-12.25	Questions & Answers
12.25-12.30	OP14, Ulya Badıllı <i>In Vivo Evaluation on Fluticasone Propionate Loaded Semi-Solid Lipid Nanoparticle Dispersions</i>
12.30-12.35	OP15, Büşra Arpaç <i>Oral Delivery of Peptides: Development of Solid Lipid Nanoparticles by Microfluidic Technique</i>
12.35-12.40	OP16, Burcu Üner <i>Physicochemical Characterization Studies of Niosome Formulations for Ocular Applications</i>
12.40-12.45	OP17, Safiye Akkın <i>Safety And Efficacy of Cyclodextrin Polymer-Based Nanoplexes Carrying 5-Fu and Il-2 In Colon Cancer-Induced Mouse Model</i>
12.45-12.50	OP18, Esra Pezik <i>Investigation of the Effect of Freeze Drying with Different Cryoprotectants on In-Vitro Cytotoxicity of M3 Nanocrystals</i>
12.50-12.55	OP19, Sıla Gülbağ Pınar <i>Evaluation of Biochemical and Immunological Parameters of New Developed Cyclosporine A Nanosuspension</i>
12.55-13.00	OP20, Ayça Güngör Ak <i>In Vitro Characterization of Berberine Phytosome and Berberine Phytosome Loaded Chitosan Microparticles</i>
13.00-13.10	Questions & Answers

Tuesday, February 22

HALL A

Interchangeability of Pharmaceuticals: Current Status and Future Outlook

Chairs: **Selma Şahin, İmran Vural**

09.00–09.20
Handan Öztunca, TİTCK
To be announced

09.20–09.40
Zeynep Şafak Teksin
Bioequivalence and interchangeability issues in Modified Release Dosage Forms

09.40–10.00
Erem Bilensoy
Bioequivalence and interchangeability issues in inhalation products

10.00–10.20
Discussion

10.20– 10.35
Coffee Break

10.35–10.55
Stefan Mühlebach
Regulatory Challenges of synthetic nano medicines and their follow-on versions: A generic or similar approach?

10.55–11.15
Leah Christl
Interchangeability of Pharmaceuticals: Current Status and Future

11.15–11.35
Emrullah Binay
Biotechnology and Biopharmaceutical Drug Analysis in Pharmaceutical Formulations and Productions

11.35–11.55
Berrak Güney
Prospective approach to bioanalytical methods

11.55–12.15
Discussion

12.15–13.30
LUNCH

Scientific

Chairs: **Süeda Hekimoğlu, Sibel Pehlivan**

13.30–14.00
Plenary Lecture
Bakhos Tannous
Shaping the Future for Drug Discovery: a Harvard Perspective

14.00–14.25
Yvonne Perrie
Delivery options for SaRNA vaccines

14.25–14.50
Claus Michael Lehr
Drug Delivery across Biological Barriers for combatting and preventing Infectious Diseases

14.50–15.15
Seyed Moein Moghimi
Self-assembled phage mimetics for crossing the blood-brain-barrier: safe and efficient siRNA delivery to neurons and microglial cells

15.15–15.40
Niklas Sandler
Performance of nanoparticles manufactured by supercritical CO₂ processing

15.40–16.00
Coffee Break

Chairs: **Yekta Özer, Kıvılcım Öztürk**

16.00–16.25
Sibel Bozdağ Pehlivan
Non Invasive and Targeted Nanoparticle Strategies for the Treatment of Brain Tumors

16.25–16.50
Maria Blanco Prieto
GDNF loaded microparticles for brain repair in Parkinson's disease

16.50–17.15
Volkmar Weissig
Organelle-Specific Pharmaceutical Nanotechnology

17.15–17.40
Peter Swaan
The future of pharmaceuticals: lessons learned as editor-in-chief of Pharmaceutical Research

Tuesday, February 22

HALL B

Oral Presentations

	<i>Chairs: Kıvılcım Öztürk, Nazlı Erdoğan, Selin Seda Timur</i>
13.30-13.35	OP21, Birnur Cömez <i>Sodium Alginate-Chitosan Hydrogels for Gene Delivery</i>
13.35-13.40	OP22, Gülşah Erel-Akbaba <i>Virus-Inspired Gene Delivery System to Target Alzheimer's Disease</i>
13.40-13.45	OP23, Fatma Ilgaz <i>The Effect of Xanthan Gum and Modified Corn Starch Used in Dysphagia Diets on Pharmacokinetic Parameters of A Model Drug</i>
13.45-13.50	OP24, Esra Merve Zambak Çotaoğlu <i>Development of Piroxicam Nanosuspensions and Investigation of The Bioavailability and Efficacy of Different Applications In Rabbits</i>
13.50-13.55	OP25, Emre Tunçel <i>Development of Hydrogel-Forming Microneedles Containing Diclofenac Sodium Using Microneedle Molds Obtained by SLA 3D Printing Technology</i>
13.55-14.00	OP26, Ayşegül Yıldız <i>Development of Mesalazine Loaded Hydrogel Formulations by 3D Printing Technology</i>
14.00-14.10	<i>Questions & Answers</i>
14.10-14.15	OP27, Cennet Duran <i>Development of Eudragit S100 -Based 3D Tablet Formulations for Colon-Specific Delivery of Highly Soluble Drugs</i>
14.15-14.20	OP28, Cem Varan <i>Paclitaxel-Carboplatin Loaded PCL-Based Filament Design and Characterization for FDM Printed Anticancer Intrauterine Implants</i>
14.20-14.25	OP29, Juste Baranauskaite-Ortasoz <i>Preparation and Characterization of Nanofibers Containing Fosfomycin Produced by Electrospinning Method</i>
14.25-14.30	OP30, İrem Çolak <i>Solubility Improvement of Loperamide with Electrospun Polyethylene Oxide Nanofibers</i>
14.30-14.35	OP31, Emine Dilek Özyılmaz <i>Assessment of the Preparation and Characterization of Orally Disintegrating Mini Tablet Formulations Containing Atomoxetine Hydrochloride by Quality by Design (QbD) Approach In Attention Deficit And Hyperactivity Disorder Therapy</i>
14.35-14.40	OP32, Naila Jiwa <i>Evaluation Of Different Magnesium Stearate Types on Compaction Properties</i>
14.40-14.50	<i>Questions & Answers</i>
14.50-14.55	OP33, Yağmur Akdağ <i>Effects of Spray Drying and Lyophilization Methods on Aerodynamic Parameters in Dry Powder Inhalers</i>
14.55-15.00	OP34, Muhammet Davut Arpa <i>Investigation of Rheological, Swelling and Bioadhesive Properties of Chitosan Based Gel Prepared with Different Acids</i>
15.00-15.05	OP35, Eda Turan <i>Development and Characterization of the Mucoadhesive-Thermosensitive Timolol Maleate in situ Ophthalmic Gel System</i>
15.05-15.10	OP36, Meliha Güneş <i>Rasagiline Mesylate Microspheres Loaded Buccal Gel for Parkinson Treatment</i>
15.10-15.15	OP37, Nazlı Erdoğan <i>Development of a Topical Gel Containing Metformin Loaded Polycaprolactone Nanoparticles for Melanoma Treatment</i>
15.15-15.20	OP38, Serol Korkmaz <i>Virucidal Activity of Xanthan Gum and Carboxymethyl Cellulose as Thickener and Emulsifier Additives in Production Technology</i>
15.20-15.30	<i>Questions & Answers</i>
15.30-15.35	OP39, İsmail Aslan <i>Encapsulated Sunscreen Formulation Efficacy Studies in-vitro</i>
15.35-15.40	OP40, Ayşe Nur Oktay <i>Dermal Application of Cyclodextrin Based Nanogel: Experimental Design and Skin Permeation Studies</i>
15.40-15.45	OP42, Umut Can Öz <i>Formulation Design of Capsaicin Nanoparticles for Both Anticancer and Bioimaging Applications</i>
15.45-15.50	OP43, Emre Özgenç <i>Molecular Docking Studies between Trastuzumab and Chelating Agents to be Used in Breast Cancer as Theranostics</i>
15.50-15.55	OP44, Meliha Ekinci <i>Cell Binding Studies of Radiolabeled Nab-Paclitaxel as Breast Cancer Imaging Agent</i>
15.55-16.05	<i>Questions & Answers</i>
16.05-16.10	OP45, Gülşen Aybar Tural <i>Developing Theragnostic Microrobots for Active Drug Targeting and Hyperthermia Applications</i>
16.10-16.15	OP46, Fidan Gülçin Onaral <i>Development of IR 780 Encapsulated Radiolabeled Liposomes for Imaging and Photodynamic Therapy of Glioblastoma</i>
16.15-16.20	OP47, Merve Karpuz <i>Formulation, Characterization and Radiolabeling of Liposomes Containing Imatinib with 68ga As New Theranostic Agent</i>
16.20-16.25	OP48, Aslıhan Arslan <i>Design and in vitro/in vivo Evaluation of an Innovative Caffeine Formulation for Sleep Inertia Symptoms</i>
16.25-16.30	OP49, Ahmet Ozan Özgen <i>In Silico Stability of Matrixyl Peptide Solution in Thermal Stress</i>
16.30-16.35	OP50, Sakine Tuncay Tanriverdi <i>In-vitro Evaluation Ursolic Acid Film Formulations: Cell Culture Study and Antioxidant Activity</i>
16.35-16.40	OP51, Aslıhan Arslan <i>Design and Optimization of Celecoxib Formulation using Response Surface Methodology and Bayesian Optimization</i>
16.40-16.50	<i>Questions & Answers</i>

Wednesday, February 23

HALL A

Scientific

Chairs: **Betül Arıca Yegin, Tuğba Gülsün İnal**

09.00-09.25

Filiz Kuralay

Nanomaterials: Nanobiosensor and Nanomotor Applications

09.25-09.50

Evren Homan Gökçe

Lipid-Based Nanoparticles: Different routes of drug administration and recent advances

09.50-10.15

Karsten Mäder

Parenteral controlled release: Concepts reality and future directions

10.15- 10.30

Coffee Break

Chairs: **Hakan Eroğlu, Cem Varan**

10.30-10.55

Emirhan Nemutlu

Metabolomics in Pharmaceutical Research

10.55-11.20

Erem Bilensoy

Effect of cholesterol targeted nanoparticles on tumor cells at the proteomic and metabolomic level: case studies of breast hepatocellular and lung cancers

11.20-11.45

Yang Su

Scalable Microfluidizer® Technology for Pharmaceutical Drug Delivering Nanoparticle Manufacturing

11.45-12.10

Pınar Kızılırmak

Biotechnology Age and Digital Transformation in Patient Journey

12.10-13.30

LUNCH

Rare Diseases and Orphan Drugs

Chairs: **Mehmet Alikashiöğlu, R. Neslihan Gürsoy, Betül Arıca Yegin**

13.30-13.50

Vildan Gökür Haliloğlu

Rare Diseases-Individualized Treatments: A Clinician's Perspective

13.50-14.10

Tuncay Alkan, SGK

To be announced

14.10-14.30

A. Filiz Öner

Nucleic acid medicines for rare diseases

14.30-14.50

Sertaç İmişçi

Short overview on Lysosomal Storage Diseases and Enzyme Replacement Therapy

14.50-15.10

Coffee Break

15.10- 15.30

Mantej (Nimi) Chinna

R&D and Regulatory Considerations for Gene Therapy Development

15.30-15.50

Ümit Dereli

Rare Diseases and Orphan Drugs – AIFD's Perspective

15.50-16.10

Fabio Rocha Formiga

Improving drug delivery strategies for neglected tropical diseases

Closing Remarks

Award Ceremony