



# APPLICATION AND RESEARCH CENTERS COORDINATION UNIT

## MONTHLY BULLETIN

February 2026 | Issue : 4



## Message from the Coordinator

Our Coordination Unit continues to strengthen the education, research, and societal contribution activities of the Application and Research Centers in line with our University's Strategic Plan. Through this bulletin, we aim to increase our national and international engagement by making the value-creating work of our Centers more visible. We extend our sincere thanks to all our Centers and stakeholders for their qualified contributions and collaborative support.



**“UYGARMER - K in ACTION”**



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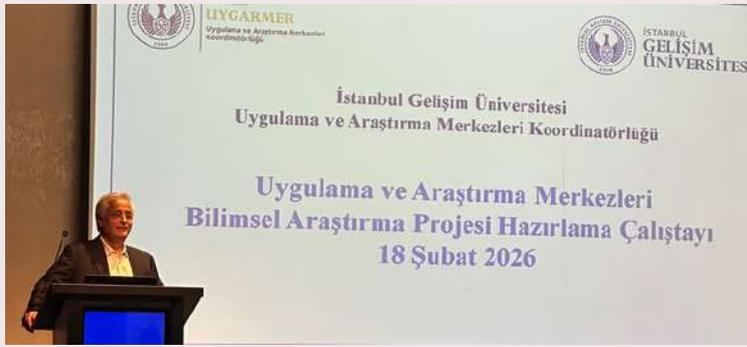
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## SCIENTIFIC RESEARCH PROJECT PREPARATION WORKSHOP

In collaboration with the Application and Research Centers Coordination Unit and the Coordination Office of Scientific Research Projects, the “Application and Research Centers Scientific Research Project Preparation Workshop” was organized. The program, held with the participation of Center Directors, Deputy Directors, board members, and researchers, aimed to enhance the project-based academic production capacity of the centers.

**Application and Research Centers  
Coordination Unit**



Within the scope of the workshop, project types, preparation and evaluation processes, and BAPSIS applications were discussed in detail; practice-oriented information was shared through successful project examples. During the sessions, project ideas developed by the centers were also evaluated, and opportunities for interdisciplinary collaboration were consulted. It is aimed that the program will make a significant contribution to strengthening sustainable collaborations among Application and Research Centers, increasing the number of qualified scientific research projects, and enhancing societal contribution through the academic outputs produced.



## SCIENTIFIC ACTIVITIES

### Life Sciences and Biomedical Engineering Application and Research Center

#### Article

The article entitled “Green synthesis of Zinc Oxide nanoflowers using *Camellia sinensis* extract and evaluation of their xenobiotic-like cellular, apoptotic, and inflammatory responses in fibroblast cells”, authored by Asst. Prof. Serap Yeşilkır Baydar, Director of the Life Sciences Application and Research Center, has been published.

#### RESEARCH ARTICLE

### Green synthesis of Zinc Oxide nanoflowers using *camellia sinensis* extract and evaluation of their xenobiotic-like cellular, apoptotic, and inflammatory responses in fibroblast cells

Serap Yeşilkır Baydar<sup>1\*</sup>

<sup>1</sup>Department of Biomedical Engineering, Istanbul Gelişim University, Istanbul, Türkiye; <sup>2</sup>Life Sciences and Biomedical Engineering Application and Research Centre, Istanbul Gelişim University, Istanbul, Türkiye

#### ABSTRACT

1. Zinc oxide (ZnO) nanomaterials, acting as engineered xenobiotic-like agents, can induce complex cellular stress and defense responses. This study reports a novel green synthesis of ZnO nanoflowers using *Camellia sinensis* leaf extract, resulting in a biocompatible nanostructure with a distinctive flower-like morphology.

2. The *C. sinensis*-mediated synthesis provides a sustainable and reproducible approach for producing stable ZnO nanoflowers. The nanoparticles were thoroughly characterised (hydrodynamic assembly size: 250.3 nm; zeta potential: -17.9 mV; spherical morphology; reduced dimensions).

#### ARTICLE HISTORY

Received 13 October 2025  
Revised 18 December 2025  
Accepted 20 December 2025

www.gelism.edu.tr

### Cyber Security Application and Research Center

#### “Safer Internet Day” Seminar

Istanbul Gelişim University Cyber Security Application and Research Center organized a seminar within the scope of Safer Internet Day. At the event held on February 4, 2026, the Director of SGUAM, Assoc. Prof. Serkan Gönen, together with the Vice Directors, Asst. Prof. Gökçe Karacayılmaz and Res. Asst. Mehmet Ali Barışkan, addressed the topics of digital security, cyberbullying, and digital literacy. Participants were informed in detail about digital risks, safe internet use, and conscious digital citizenship; the event aimed to enhance digital awareness.



## SCIENTIFIC ACTIVITIES

### Life Sciences and Biomedical Engineering Application and Research Center

#### Article

The article entitled “Immunohistochemical Investigation of GST-M, GST-P, and TP53 Gene Expression in Obesity Patients Under Laparoscopic Sleeve Gastrectomy”, co-authored by Asst. Prof. Onur Dirican, Deputy Director of the Life Sciences Application and Research Center, has been published. In the study, gene expression findings in patients with obesity were evaluated using immunohistochemical methods.

#### Immunohistochemical investigation of GST-M, GST-P, and TP53 gene expression in obesity patients under laparoscopic sleeve gastrectomy

Onur Dirican<sup>1</sup>, Pinar Kaygin<sup>2</sup>, Burcu Kaplan<sup>3</sup>, Sezen Yilmaz Sarialtin<sup>4</sup>, Gülçin Güler Şimşek<sup>5</sup>, Serpil Oğuztüzün<sup>2</sup>, Hakan Buluş<sup>6</sup>, Serap Yesilkır Baydar<sup>7</sup>, Abbas Ali Husseini<sup>8</sup>, Selim Ögüt<sup>9</sup>

### New Generation Entrepreneurship and Innovation Application and Research

#### Center Paper

The full paper entitled “A Comprehensive Review of Advanced and Conventional Manufacturing Techniques for Fiber-Reinforced Polymer Matrix Composites”, authored by Asst. Prof. Mert Yıldırım, Member of the Advisory Board of the Next-Generation Entrepreneurship and Innovation Application and Research Center, has been published in the Proceedings Book of the 5th International Materials Engineering and Advanced Manufacturing Technologies Congress (IMEAMTC’26).

#### A COMPREHENSIVE REVIEW OF ADVANCED AND CONVENTIONAL MANUFACTURING TECHNIQUES FOR FIBER-REINFORCED POLYMER MATRIX COMPOSITES

Mert YILDIRIM

Istanbul Gelisim University, Faculty of Engineering and Architecture, Department of Industrial Engineering, Istanbul / Türkiye

Istanbul Gelisim University, New Generation Entrepreneurship and Innovation Application and Research Center, Istanbul / Türkiye

### Art and Design Application and Research Center

#### Patent and Registration

Three patent applications have been granted under the umbrella of the Art and Design Application and Research Center operating within Istanbul Gelisim University. The patents include “Artificial Intelligence-Supported Print Preview System” and “Interactive Emotional Digital Canvas System,” owned by Asst. Prof. Mustafa Günay, as well as the “Smart Tremor Modulation Glove with Anatomical Microelectrodes”, owned by Asst. Prof. Ekrem Süzen.



İSTANBUL GELİŞİM ÜNİVERSİTESİ  
Sanat ve Tasarım Uygulama ve Araştırma Merkezi

# PATENT TESCİL BAŞARISI

Patent Buluş Başlığı:  
ETKİLEŞİMLİ DUYGUSAL DİJİTAL TUVAL  
SİSTEMİ

Patent Buluş Sahibi:  
Dr. Öğr. Üyesi: Mustafa GÜNAY

## SCIENTIFIC ACTIVITIES

### *New Generation Entrepreneurship and Innovation Application and Research Center*

#### Project Competition

Within the scope of the “Research and Innovative Award-Winning Project Competition” organized by Istanbul Gelisim University to encourage undergraduate students to engage in science and innovation, the students supervised by Asst. Prof. Mert Yıldırım, a member of the New Generation Entrepreneurship and Innovation Application and Research Center, were awarded first place in the category of “Artificial Intelligence, Hardware, Autonomous Systems and Robotics.”



### **DİJİTAL DÜNYADA İNSAN FAKTÖRÜ: SİBER GÜVENLİK FARKINDALIĞI, SOSYAL MÜHENDİSLİK VE SİBER ZORBALIK**

10 Şubat 2026

09.50



Doç.Dr.Serkan Gönen  
Siber Güvenlik Uzmanı

### *Cyber Security Application and Research Center*

#### **“The Human Factor in the Digital World: Cybersecurity Awareness, Social Engineering, and Cyberbullying”**

Assoc. Prof. Serkan Gönen, Director of the Cyber Security Application and Research Center, delivered a seminar titled “The Human Factor in the Digital World: Cybersecurity Awareness, Social Engineering, and Cyberbullying” for students of Private Izmir SEV Secondary School as part of Safer Internet Day.

## SCIENTIFIC ACTIVITIES

### *New Generation Entrepreneurship and Innovation Application and Research Center*

#### **“From Idea to Value: Entrepreneurship and Innovation”**

The panel titled “From Idea to Value: Entrepreneurship and Innovation” was organized by the New Generation Entrepreneurship and Innovation Application and Research Center within the scope of World Innovation Day on February 16. During the panel, where Duygu Yücesoy Manyaslı, Director of KOSGEB İstanbul İkitelli, Dr. Elif Güngör Reis, representative of FoodHack İstanbul, and Hande Ceylan Dayan, Director of IGU TEKMER, participated as speakers, the importance of university–industry collaboration, entrepreneurial support mechanisms, and the transformation of innovation into tangible economic and social value through systematic structures were discussed.



### *Occupational Health and Safety Training Application and Research Center*

#### **Basic Occupational Health and Safety Training**

The mandatory Basic Occupational Health and Safety Training for internship students of the Faculty of Health Sciences (Turkish and English programs) and the Vocational School of Health Services for the 2025–2026 Spring Semester was conducted for the third time by Asst. Prof. Esra Yalçın, Director of the Occupational Health and Safety Training Application and Research Center. At the end of the training, 3,456 students who successfully passed the examination were awarded their certificates of participation.



## SCIENTIFIC ACTIVITIES

### *Economic Policies Application and Research Center*

#### Participation in Television Program

Assoc. Prof. Ebru Gül Yılmaz, Director of the Economic Policies Application and Research Center, evaluated the latest inflation data on the program “Ekonomi Hattı”, broadcast on AS TV on February 20, 2026. During the live broadcast, attention was drawn to service and food inflation, while the effects of changes in calculation methods and international cooperation in the energy sector on the economy were discussed.



### *Occupational Health and Safety Training Application and Research Center*

#### Project Application

An application has been submitted for the BAP Rapid Support Project titled “Analysis of Occupational Accidents in the Food and Beverage Sector from a Management and Organizational Perspective”, which will be conducted within the scope of ISGEUAM. The project is led by Asst. Prof. Filiz Sivaslıoğlu, with Asst. Prof. Esra Yalçın serving as the researcher. This is the second BAP project submitted through the Center and it is currently under peer review.

### *Occupational Health and Safety Training Application and Research Center*

#### Final Project

Within the scope of ISGEUAM, the final project titled “Fire Safety in Facilities Producing Baby Diapers and Adult Diapers”, conducted by non-final project’s student Ümran İncirkuş, was completed under the supervision of Asst. Prof. Esra Yalçın, Director of the Center.

T. C.  
İSTANBUL GELİŞİM ÜNİVERSİTESİ  
LİSANSÜSTÜ EĞİTİM ENSTİTÜSÜ

İş Sağlığı ve Güvenliği Anabilim Dalı

BEBEK BEZİ VE HASTA BEZİ ÜRETEN TESİSLERDE  
YANGIN GÜVENLİĞİ

Yüksek Lisans Dönem Projesi

Ümran İNCİRKUŞ ÜNAL

Danışman  
Dr.Öğr.Üyesi ESRA YALÇIN

İstanbul – 2026

## SCIENTIFIC ACTIVITIES



### *Life Sciences and Biomedical Engineering Application and Research Center*

#### **Project**

The scientific research project carried out within the scope of the Istanbul Gelisim University Life Sciences Application and Research Center has been evaluated by the IGU BAP-K Commission and deemed eligible for support. The project titled “Characterization and Bioactivity Evaluation of Nanoparticle Biosynthesis Mediated by Microalgal Extracellular Substrate” is led by Asst. Prof. Serap Yeşilkır Baydar, Director of the Life Sciences Application and Research Center. The research team also includes Asst. Prof. Abbas Ali Husseini and Asst. Prof. Mesut Barış.

### *Cyber Security Application and Research Center*

#### **TÜBİTAK Science Talks**

Within the scope of TÜBİTAK Science Talks and Safer Internet Day, the event titled “Ways to Stay Safe in the Cyber World”, organized in collaboration with the IGU Cyber Security Application and Research Center and Bilim Zeytinburnu, was held with strong participation at the Zeytinburnu Culture and Arts Center. During the presentation delivered by Assoc. Prof. Serkan Gönen, topics such as cyber threats, strong passwords and two-factor authentication methods, phishing attacks, personal data security, and artificial intelligence-based risks were discussed through practical examples. Participants’ questions were also addressed in an interactive manner.



## COMMUNITY CONTRIBUTION ACTIVITIES



### **Gender Studies Application and Research Center**

#### **“What’s the Name of the Film?”: A Documentary on Women Directors of the ‘68 Generation**

As part of the screening of the documentary titled “What’s the Name of the Film?”, the work of director Pinar Fontini, focusing on women directors of the 68 generation, was presented. Following the screening, a panel discussion was held in which the production processes, struggles for representation, and archiving challenges of women filmmakers were addressed, and the relationship between cinema and gender was evaluated within a historical context.

### **Social Responsibility Application and Research Center**

#### **“Addiction” Seminar**

Asst. Prof. Raheb Mohammadi Ghanbarlou, Vice Director of the Social Responsibility Application and Research Center, participated as a speaker in the Addiction Seminar organized by the TERRA Children’s Education and Counseling Association at Beylikdüzü Koç Secondary School. The event, which also featured Prof. Nilüfer Narlı, Prof. Pinar Vural, and Prof. Ayşe Kılıç, provided students with information aimed at raising awareness about digital addiction.



## COMMUNITY CONTRIBUTION ACTIVITIES

### Technovation Girls Launch Event – Sustainability Talks

Assoc. Prof. Başak Özarlan, Director of SCTUAM, participated as a speaker at the Technovation Girls Launch Event, hosted by SabancıDx. In her presentation, she addressed global risks within the framework of sustainability, energy transition, and planetary boundaries, emphasizing that achieving sustainability requires structural transformation.

### Sustainable Environment and Community Studies Application and Research Center

### Visit to the SNG & HydTec Laboratory

Assoc. Prof. Başak Özarlan, Director of SCTUAM, and Asst. Prof. Tuğba Kantarcı, Vice Director, conducted an institutional visit to the SNG & HydTec Laboratory at Boğaziçi University with the aim of enhancing academic collaboration in the field of sustainability.



### Sustainability Talks – IV: “Is a Nuclear-Free Sustainability Possible?”

Within the scope of “Sustainability Talks – IV”, organized by the Sustainable Environment and Society Application and Research Center, an online event titled “Is a Nuclear-Free Sustainability Possible?” was held on February 17, 2026. The role of nuclear energy in achieving sustainability goals was discussed, with the session featuring Okan Yıldız and moderated by Assoc. Prof. Başak Özarlan Doğan.



**Sürdürülebilirlik Söyleşileri - IV**  
**Nükleersiz Sürdürülebilirlik Mümkün Mü?**  
17.02.2026 11.00-12.00

Konuşmacı  
**Okan Yıldız**  
Nükleer Enerji Uzmanı

Moderatör  
**Doç. Dr. Başak Özarlan**  
SCTUAM Müdürü

## COMMUNITY CONTRIBUTION ACTIVITIES

### *Sustainable Environment and Community Studies Application and Research Center*



An institutional visit was conducted to the Climate Change Presidency to evaluate potential collaborations within the scope of COP31. The visit was attended by Prof. Arda Öztürkcan, Vice Rector of Istanbul Gelisim University; Assoc. Prof. Başak Özarlan, Director of SCTUAM; and Asst. Prof. Özlem Tuğçe Keleş, Vice Dean of the Faculty of Economics and Administrative Sciences. During the meeting, topics discussed included climate change mitigation, sustainability policies, and opportunities for university–public sector collaboration.

### **Joint Workshop Meeting with Istanbul Bilgi University within the Scope of COP31**

Assoc. Prof. Başak Özarlan, Director of the Sustainable Environment and Society Application and Research Center at Istanbul Gelisim University, held a workshop meeting with the Energy and Sustainability Center of Istanbul Bilgi University as part of the COP31 process. During the meeting, topics such as energy transition, climate finance, sustainable development goals, and mechanisms for academic contribution were discussed. The institutions reached an agreement on inter-institutional collaboration, the preparation of a formal protocol, and planning joint events.



## COMMUNITY CONTRIBUTION ACTIVITIES

### *Sustainable Environment and Community Studies Application and Research Center*

#### **Joint Workshop Meeting with Medipol University within the Scope of COP31**

Assoc. Prof. Başak Özarlan, Director of SCTUAM, participated in a joint workshop meeting with Medipol University to develop collaboration within the scope of COP31. During the meeting with Prof. Rana Atabay Kuşçu, COP31 agenda items, sustainability policies, and opportunities for inter-institutional cooperation were evaluated.



Maslak Rotary Kulübü Tarım Rotary Kulübü Büyükçekmece Rotary Kulübü

**KRİTİK HAMMADDELER VE TİCARET**



**Doç.Dr. Başak Özarlan**  
İstanbul Gelişim Üniversitesi  
Sürdürülebilir Çevre ve Toplum  
U.A.M. Müdürü

**Seminer Tarihi**  
**11 Şubat 2026**  
Çarşamba  
12:00-13:30

Online ID: 820 1643 1914  
Şifre: 771135

İYİLİK İÇİN RİPLEŞİN

MASLAK ROTARY KLÜBÜ KARBON AYAK İZİNİ ULAŞIM KAYNAĞI NOTBİLEEN BİR KUDÜLÜSTÜB.

#### **“Critical Raw Materials and Trade” Seminar**

Assoc. Prof. Başak Özarlan, Director of SCTUAM, conducted an online seminar titled “Critical Raw Materials and Trade” in collaboration with the Maslak, Tarım, and Büyükçekmece Rotary Clubs under Rotary International. The seminar addressed the sustainable management of critical minerals, supply security, and geoeconomic dynamics.

## ARTISTIC ACTIVITIES

### Art and Design Application and Research Center



### Digital Game Design Exhibition by Volkan Davut MENĐİ

As part of a talk organized by the Art and Design Application and Research Center (SATMER), animation artist and Asst. Prof. Volkan Davut MENĐİ from Mimar Sinan Fine Arts University met with students. The event took place on February 12, 2026, at the Aziz Sancar Conference Hall, attracting strong participation from students of the Computer-Aided Design and Animation and Graphic Design programs. The session was moderated by SATMER Vice Director Lecturer Ömer Faruk Söyler.

On the same day, Volkan Davut MENĐİ's Digital Game Design Exhibition opened at the Istanbul Gelisim University Art Gallery. The exhibition explored digital game design as a narrative, aesthetic, and interaction-based art practice, showcasing original character designs and user experience-focused projects to visitors.



## ARTISTIC ACTIVITIES

### Art and Design Application and Research Center



### “In the Footsteps of Paws” Exhibition

The “In the Footsteps of Paws” photography exhibition, organized by the Istanbul Gelisim University Art and Design Application and Research Center (SATMER), features 45 works by Asst. Prof. Ali Kemal Çipe. The exhibition aims to reflect the lives of street animals from an aesthetic and ethical perspective, promoting love for animals and raising awareness. The opening was attended by Prof. Şükran Güzin Ilıcak Aydınalp, Dean of the Faculty of Fine Arts, Asst. Prof. Ali Kemal Çipe, SATMER Director Asst. Prof. Mustafa Günay, and the Center’s management, highlighting that each photograph tells a unique life story. The exhibition will be on display at the Istanbul Gelisim Art Gallery until March 13, 2026.



## TRAININGS FROM CONTINUING EDUCATION

### “Basic Expert Witness Training”

The 13th and 14th Basic Expert Witness Training programs were conducted by Asst. Prof. Onur Kuru and Attorney Elif Özdemir. Within the 24-hour program, the first group included 15 participants and the second group 24 participants, with the majority of attendees coming from outside the University. The trainings covered the fundamental legislation on expert witnessing and practical processes for its application.

### Continuing Education Application and Research Center



### “Diabetic Foot Care Training”

The Diabetic Foot Care Training, organized by the Istanbul Gelisim University Continuous Education Application and Research Center (İGÜSEM), was conducted online and attended by 20 participants. Led by Lecturer Almina Durmuş Koç, the program focused on the early recognition, prevention, and appropriate care of diabetic foot complications, aiming to enhance participants' theoretical and clinical knowledge in this field.



You can refer to the **SEM Bulletin** to view the completed, ongoing, and upcoming trainings of the Continuing Education Application and Research Center.

## VISITS AND MEETINGS

### ***Coordination Meeting with the Quality Coordinatorship***

On February 26, 2026, a coordination meeting was held with the Quality Coordination Office. During the meeting, the report formats to be submitted for quality approval by the Application and Research Centers Coordination Unit were evaluated, and information regarding the preparation processes was shared.

### ***Meeting with a Member of the UYGARMER Coordination Board***

An orientation meeting was held on February 2, 2026, for Asst. Prof. Funda Pehlevan Karabiyik, the newly appointed member of the Application and Research Centers Coordination Board. During the meeting, the Coordination Board Evaluation Reports were introduced, and information was provided regarding the activities of the centers as well as their monitoring and evaluation processes.

### ***Collaboration Meeting between SCTUAM and AACCSA Green Growth Center (Ethiopia)***

On February 10, 2026, a meeting was held between the staff of the Sustainable Environment and Society Application and Research Center (SCTUAM) and the AACCSA Green Growth Center (Ethiopia) to explore opportunities for international collaboration.

During the meeting, potential joint initiatives were discussed within the framework of green growth, sustainable development, and capacity building, aiming to bridge academia, policy, and practice. The discussions were evaluated as laying the groundwork for future collaborative projects between the two institutions.



## VISITS AND MEETINGS

### *Coordination Meeting with PSİKOMER*

On February 11, 2026, the second coordination meeting was held with Asst. Prof. Berk Efe Altınal, who was recently appointed as Director of the Psychology Application and Research Center. During the meeting, management teams, the draft Standard Regulation, and institutional requests were discussed. At the Center Coordination Meeting on February 17, 2026, the draft was finalized, followed by a visit to the PSİKOMER Laboratory.



### *Coordination Meeting with BTRAM*

On February 19, 2026, an evaluation meeting was held for the 2026 activity planning of the Computer Technologies and Robotics Application and Research Center (BTRAM). The meeting, attended by Assoc. Prof. Ahmet Sapmaz, Coordinator of UYGARMER, and Prof. Tufan Adıgüzel, Director of BTRAM, focused on the 2026 objectives, work program, and institutional coordination processes.



### *SATMER Advisory Board Meeting*

On February 19, 2026, the SATMER Advisory Board Meeting was held to plan the International Painting Workshop, which will be organized in collaboration with the Faculty of Fine Arts (GSF). The meeting focused on preparing the necessary arrangements and coordinating the activities for the workshop.





# APPLICATION AND RESEARCH CENTERS COORDINATION UNIT

## MONTHLY BULLETIN

February 2026 | Issue: 4



## MASTHEAD

### Coordinator

Assoc. Prof. Ahmet SAPMAZ

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