

# Özyeğin University

# 2021

## Annual Report

ÖZYEGİN  
UNIVERSITY



TECHNOLOGY  
TRANSFER  
OFFICE

# C CONTENTS

ABOUT ÖzÜ TTO	4
PREFACE	5
HIGHLIGHTS of 2021	6
SECTION I- GRANTS AND CONTRACTS	8
1.1 The Share of Grants and Contracts	9
1.2 Total Research Funds by Sponsors	10
1.3 12-Year History by Sponsors	10
1.4 Total Research Funds by Faculty and Schools	11
1.5 13-Year History by Faculty and Schools	11
SECTION II- SUCCESS STORIES FROM 2021	12
SECTION III INTELLECTUAL PROPERTY RIGHTS AND COMMERCIALIZATION	22
4.1 ÖzÜ Technologies	24
SECTION IV -ENTREPRENEURSHIP ACTIVITIES	25
SECTION V - EVENTS ORGANISED BY ÖzÜ IN 2021	33
SECTION VI - LIST OF SPONSORED RESEARCH PROJECTS IN 2021	35
SECTION VII - LIST OF PATENT APPLICATIONS AND GRANTS IN 2021	38
ÖzÜ TTO TEAM	44
News From ÖzÜ TTO	48

# TABLES

Table 1.	Research Funding by Sponsors (2010 - 2021) (TL)	10
Table 2.	Research Funding by Faculty and Schools (2009 - 2021) (TL)	11
Table 3.	Events Organized by ÖzÜ TTO in 2021	34
Table 4.	List of Projects Carried out in 2021	36
Table 5.	National and International Patent Applications of ÖzÜ in 2021	38
Table 6.	National and International Patent and Utility Models Registrations of ÖzÜ in 2021	41
Table 7.	List of Technologies Available for Licensing in 2021	43

# FIGURES

Figure 1.	Cumulative Research Funds (TL) (2009 - 2021)	9
Figure 2.	Grants and Industry Partnerships Distribution (TL) (2009-2021)	9
Figure 3.	Total Research Funds by Sponsors (2009 - 2021)	10
Figure 4.	Total Research Funds by Sponsors in 2021	10
Figure 5.	Total Research Funds by Faculty (2009 - 2021)	11
Figure 6.	Total Research Funds by Faculty in 2021	11
Figure 8.	Patent & Utility Model Portfolio Statistics of ÖzÜ (2013-2021)	23
Figure 9.	IPR Performance in 2021	23

# ABOUT

## ÖzÜ TTO

The main objective of Özyeğin University is one of Turkey's leading entrepreneurial research university. In addition to attaching great importance to academic research, university-industry cooperation, intellectual property rights, commercialization of technology, establishing technology-based and startups are the main functions of the university. In order to serve this purpose, Özyeğin University Technology Transfer Office (ÖzÜ TTO) was established in November 2012. ÖzÜ TTO became one of the top 10 universities to receive support from TÜBİTAK 1513 Technology Transfer Offices Support Program in 2013.

### Vision

Our vision; It aims to transform academic knowledge into social benefit by transforming every researcher into a project designer and every project developer into an entrepreneur.

### Mission OzU TTO:

- raises awareness on TTO activities, innovation and technology transfer through the training-events and publications it organizes.
- provides project preparation, application and monitoring services for national / international support programs.
- conducts joint activities with the private sector to increase university-industry cooperation.
- manages the intellectual and industrial property rights portfolio and carries out commercialization activities.
- supports incorporation and entrepreneurship activities and runs accelerator programs.

Collaboration Grant Project  
Project Development Training  
Academic Industry Design  
Funding Innovation Research Technology R&D  
Consultancy Investor Patent  
Entrepreneurship Incorporation  
International BiGG Incubation  
Intellectual Property Mentoring  
Commercialization



**Dr. İsmail Arı**  
Director of Knowledge, Technology Transfer  
and Entrepreneurship

OzU is a young, entrepreneurial, high-impact University with a bright future. 2021 marked some of the important project milestones including close to the 700th contracted project and the 150 Millionth (TL) granted budget. We again ranked among the leaders of the IP ecosystem in terms of the number of patents applied for and granted in Turkey. The technology business that we catalyze reaches a large community of multi-national corporations, SMEs, startups, academicians, students, government offices, national research centers, etc. It takes literally hundreds of sessions each year to trigger new projects, start interactions, join/ create consortiums to transfer the know-how back & forth among well-established players. While we act as a conduit for this high-energy flow, it also takes a lot of work & stamina, patience & perseverance, and extra budgeting from our side to close the remaining gaps. Therefore, I'd like to dedicate the achievements of 2021 to the technical team of Knowledge, Technology Transfer and Entrepreneurship (KTTE) Directorate as well as the Rectorate of Özyegin University.

*"Life's roughest storms prove the strength of our anchors." - Anonymous*



# HIGHLIGHTS OF 2021

CUMULATIVE  
RESEARCH VOLUME (TL)

**147.7 Million TL**



NUMBER OF TOTAL  
RESEARCH PROJECTS

**671**



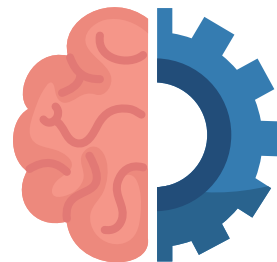
2021  
RESEARCH VOLUME (TL)

**14.4 Million TL**



NUMBER OF PROJECTS WITH  
INDUSTRY COLLABORATION

**42**



NUMBER OF GRANT  
PROJECTS STARTED IN 2021

**44**



NUMBER OF COOPERATION  
MEETINGS HELD

**250+**



PATENT AND UTILITY  
MODEL APPLICATIONS

36



GRANTED PATENTS  
AND UTILITY MODELS

26



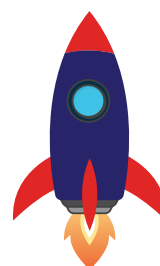
ACCELERATOR  
PROGRAM PARTICIPANTS

80



STARTUPS ESTABLISHED

8



NUMBER OF INFO DAYS  
AND TRAININGS ORGANIZED

25



NUMBER OF PROJECT  
ANNOUNCEMENTS

250+



# SECTION I

## GRANTS AND CONTRACTS

This section focuses on sponsored research portfolio overview for the years 2009- 2021 and zooms into fiscal year 2021.



[grants@ozyegin.edu.tr](mailto:grants@ozyegin.edu.tr)



# 1. Grants and Contracts

In 2021, Özyeğin University's sponsored research volume reached 147.7 million TL with 79 new projects. Thus, ÖzÜ's research performance has seen a 2.1-fold increase both in the total research budget and in the total number of research projects in the last 3 years. Since 2009, ÖzÜ has carried out 671 research projects, which were sponsored by the external funds and industry. Figure 1 details the cumulative research funds of ÖzÜ between 2009 and 2021.

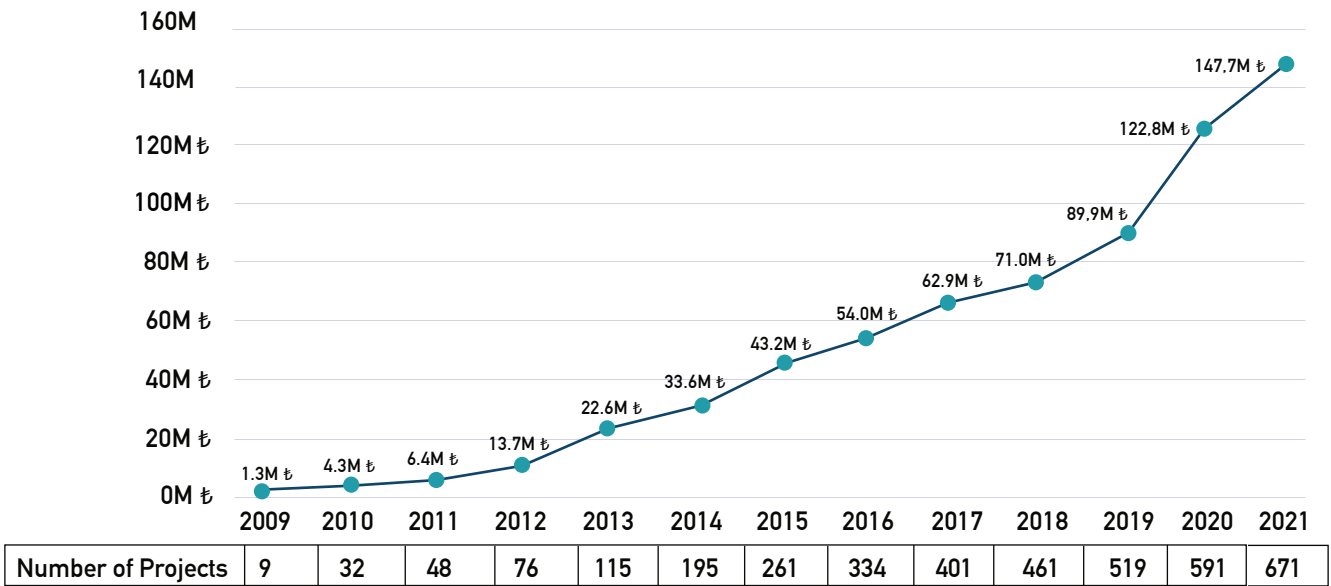


Figure 1. Cumulative Research Funds (TL) (2009 - 2021)

## 1.1 The Share of Grants and Contracts

Grants constitute the big portion of ÖzÜ's sponsored research volume. Approximately one-third of the grant volume (29%) involves industry collaboration, and the rest has been performed by researchers within university. The contracts (university industry partnership projects) have also an substantial share in the ÖzÜ's cumulative research volume. The distribution of grants and contracts among years is shown in Figure 2.

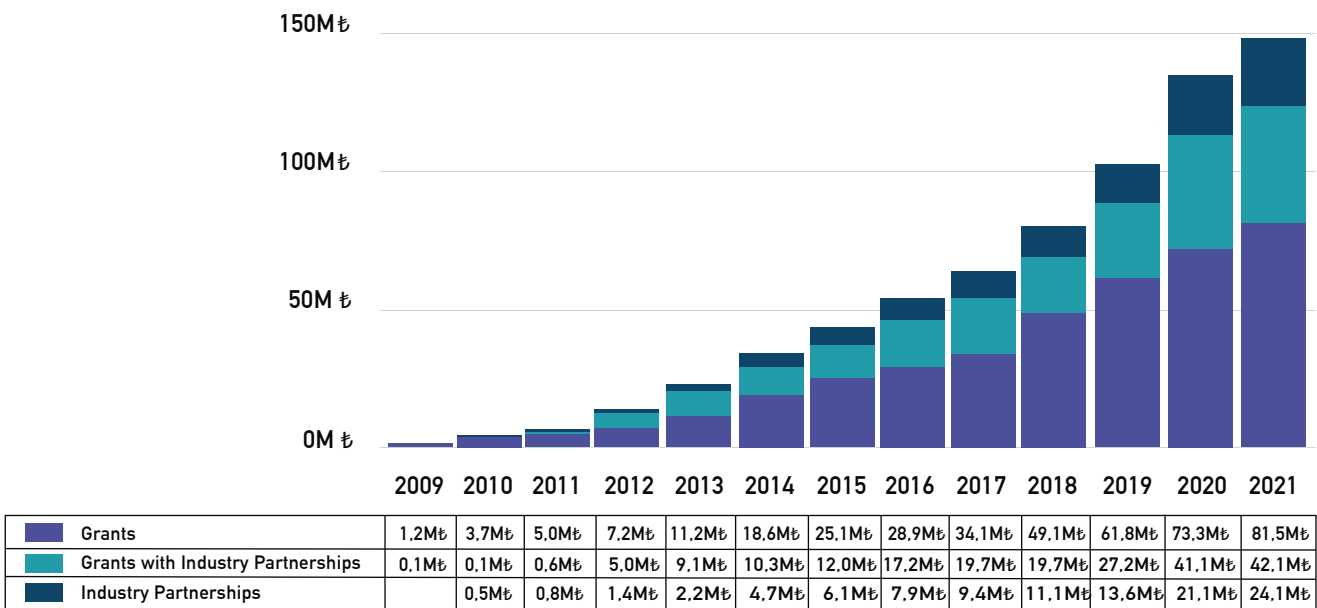


Figure 2. Grants and Industry Partnerships Distribution (TL) (2009 - 2021)

## 1.2 Total Research Funds by Sponsors

A remarkable volume of the ÖZÜ's research funds comes from national funding agencies (75.4%). The rest comes from international funding institutions, which are essential for funding endeavors, providing the perfect complement to the national research funds. National funds come from TÜBİTAK ( 52.27%), university industry collaboration (15.83%), development agency funds (5.76%) and other national agencies whereas international funds are mostly EU grants (19.77%) and other international funds (4.74%) such as ISDB, QNRF etc.

In 2021, TÜBİTAK projects, which constitute 54.95% of the research volume, are followed by the university industry partnerships at 20.96 %, EU funds at 21.92%, and other projects sponsored by other institutions.

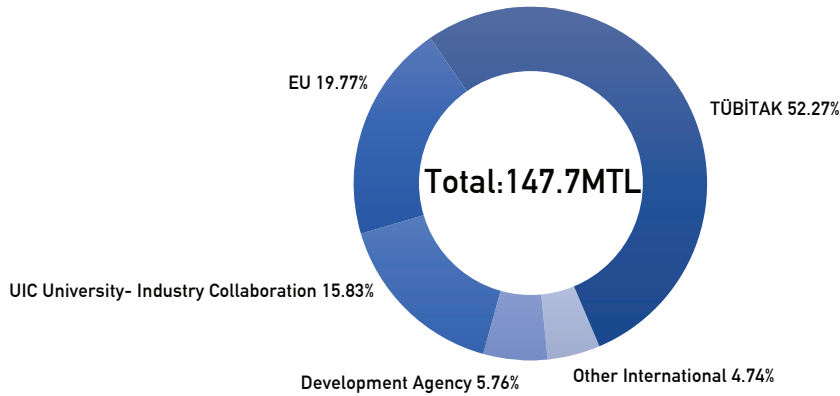


Figure 3. Total Research Funds by Sponsors (2009-2021)

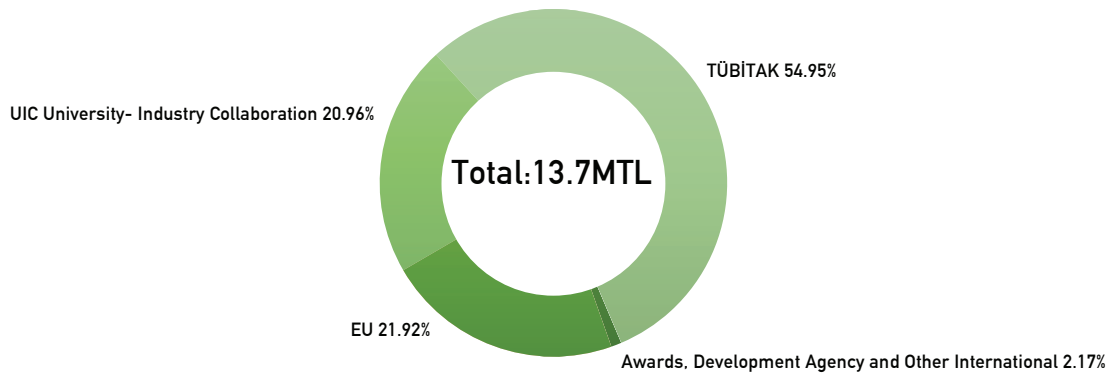


Figure 4. Total Research Funds by Sponsors in 2021

## 1.3 12-Year Research Fund History by Sponsors

ÖZÜ's year-on-year cumulative research volume is presented in Table 1.

Sponsor	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Other National							210.000		115.920				325.920
Awards		60.286	110.954	53.793	20.000	41.468	40.000		50.000			160.000	567.145
Ministry of Science, Industry and Technology			223.930	648.122	270.693	274.939				0			1.518.140
Other International		2.835	399.704	468.623	452.459	400.711	1.088.301	517.544	598.250	1.863.865	1.081.282	134.848	7.008.422
Development Agency				2.514.000	980.000	2.792.474		0	1.936.640		286.156	0	8.509.270
UIC University-Industry Collaboration	472.595	246.484	540.620	736.103	2.438.703	1.412.641	1.596.509	1.538.339	1.641.303	2.500.963	7.395.306	2.862.593	23.382.159
EU	1.179.718	765.223	5.266.254	2.845.505	2.267.108	1.054.144	972.130	3.145.104		3.675.767	4.436.120	2.995.519	29.206.324
TÜBİTAK	351.205	1.052.184	726.225	1.698.496	4.549.434	3.637.488	6.956.361	3.969.407	12.337.452	14.758.589	18.115.090	7.504.092	77.207.718
<b>TOTAL</b>	<b>1003.518</b>	<b>2.127.012</b>	<b>7.267.687</b>	<b>8.964.642</b>	<b>10.978.397</b>	<b>9.613.865</b>	<b>10.863.301</b>	<b>9.170.394</b>	<b>16.679.565</b>	<b>22.799.184</b>	<b>31.313.954</b>	<b>13.657.052</b>	<b>147.725.098</b>

Table 1. Research Funding by Sponsors\* (2010-2021) (TL)

## 1.4 Total Research Funds by Faculty and Schools

The Faculty of Engineering at ÖZÜ is the leading academic unit in terms of the total sponsored research funds received between 2009 and 2021 with the share of 68.60%. In the overall distribution, the Faculty of Engineering was followed by the Center for Energy, Environment, and Economy (CEEE), the Faculty of Social Sciences, and the Center for Computational Finance with 5.48%, 5.31%, and 2.89%, respectively. The distribution among faculties and schools at ÖZÜ for the period of 2009-2021 is demonstrated in Figure 5. Similarly, the Faculty of Engineering has the biggest share (66.55%) in 2021 followed by the Faculty of Social Sciences (18.29%) as shown in Figure 6.

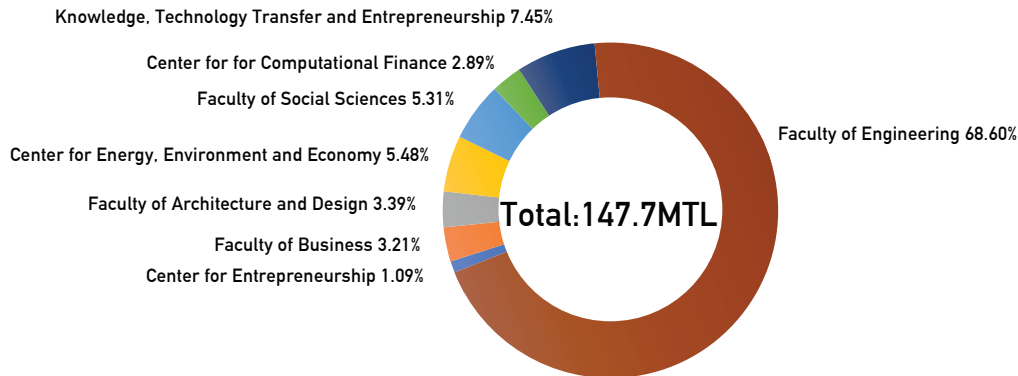


Figure 5. Total Research Funds by Faculty (2009-2021)

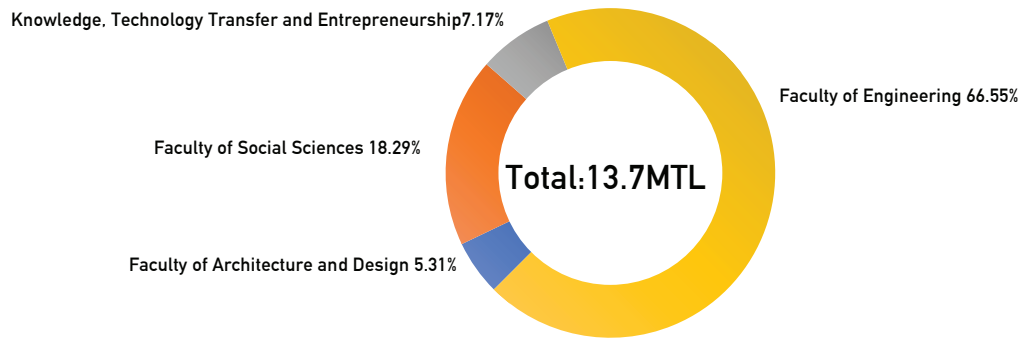


Figure 6. Total Research Funds by Faculty in 2021

## 1.5 13-Year Research Fund History by Faculty and Schools

The year-on-year distribution of ÖZÜ's sponsored research volume by faculties and schools is presented in Table 2.

Faculty/Center	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Graduate School of Engineering and Science													0	0
Dean of Students											3.198			3.198
Faculty of Law						265.045								265.045
Rectorate												396.435		396.435
Faculty of Aviation and Aeronautical Science				0		0	19.116	70.000	44.000	54.400	51.920	147.920	58.410	445.766
School of Applied Sciences					212.794		0	0		140.000	22.668	411.619	242.300	1.029.381
Center for Entrepreneurship				302.286		70.000	711.387			527.261				1.610.934
Technology Transfer Office							40.000	3.000	94.400	1.179.750	132.160	286.156		1.735.466
Center for Computational Finance	15.322				739.000	2.184.400		378.200	20.850		63.720	871.734	6.265	4.279.491
Faculty of Business	221.421	227.375	67.237	233.709	78.990	626.225	585.613	584.947	224.634	1.089.294	260.620	477.175	60.000	4.737.240
Faculty of Architecture and Design						234.808	542.552	416.697	80.515	133.425	2.950	2.881.734	724.982	5.017.663
Faculty of Social Sciences		132.070			210.040	1.219.438	683.293	802.048	690.524	25.000	1.513.265	72.160	2.497.520	7.845.358
Center for Energy, Environment and Economy		5.315	551.304	3.949.823	1.509.755		781.248		231.229		871.203	196.165		8.096.043
Knowledge, Technology Transfer and Entrepreneurship									11.800	8.603.026	19.470	1.390.426	978.691	11.003.413
Faculty of Engineering	1.049.784	2.638.758	1.508.471	2.781.869	6.214.062	6.378.481	6.250.656	8.608.409	7.772.442	4.927.409	19.855.375	24.180.752	9.086.914	101.253.382
<b>TOTAL</b>	<b>1.286.527</b>	<b>3.003.518</b>	<b>2.127.012</b>	<b>7.267.687</b>	<b>8.964.642</b>	<b>10.978.397</b>	<b>9.613.865</b>	<b>10.863.301</b>	<b>9.170.394</b>	<b>16.679.565</b>	<b>22.796.549</b>	<b>31.312.276</b>	<b>13.655.082</b>	<b>147.718.815</b>

Table 2. Research Funding by Faculty and Schools (2009-2021) (TL)

# SECTION II

## SUCCESS STORIES FROM 2021

This section presents national or international research projects accepted in 2021.



[grants@ozyegin.edu.tr](mailto:grants@ozyegin.edu.tr)



## Immersive Design and New Digital Competences for the Rehabilitation and Valorization of the Built Heritage

ÖzÜ Coordinator: Assoc. Prof. Dr. Alessandro Camiz

Sponsor: EU

ID4Excellence project intends to meet Europe 2030 growth strategy priorities on employment and education. The project also considers the EU Roadmap Opening up Education (04/2013) enhancing education and skills development through new technologies and underlining the "insufficient supply of quality digital contents across languages, subjects and needs".

Total Budget: 479,354.6 EUR



## Quality of Experience and Satisfaction of Humans and Machines in Video Applications

ÖzÜ Coordinator: Assoc. Prof. Dr. Ali Cengiz Beğen

Sponsor: TÜBİTAK

The main purpose of this project is to develop the hQoE and mQoE metrics and ways to calculate them in video applications. The results will help us evaluate performance in such applications in terms of quality of experience and find ways to improve performance.

Total Budget: 1,905,680 TRY



## Colonialist Foundations and Reflexive Re-Envisioning of the Social Sciences: A Theory-Driven Analysis of the JSTOR Corpus of Social Science Articles, 1890-2019

ÖzÜ Coordinator: Asst. Prof. Dr. Ali Oğulcan İlhan

Sponsor: Other International

This 5-year project will undertake a theoretically-driven interrogation of "big data"- with a focus on the erasure and misrecognition of two instances of subalternity: Orientalism (Said) and Indigenous peoples of North America. In prior research, members of the research team examined one instance of subalternity (Indigeneity), in one discipline (sociology), and one country (Canada).

Total Budget: -



## Discursive Construction of Refugeedom in Knowledge Production About European Refugee Crisis and Balkan Route

ÖzÜ Coordinator: Prof. Dr. Deniz Sert  
Sponsor: TÜBİTAK

The aim of this research is to innovate knowledge about 'refugee' and to develop contemporary understanding of how scientifically ingrained injustices are being questioned by contemporary refugees from Syria. This research will shift the scientific discourse about the contemporary 'migrant crisis' to the issues of 'refugee' by exploring the dynamics of its normative categorization (homogenisation, grounding, criminalisation, racialisation and dehumanisation/humanisation) and research strategies (conceptual discourse framework).

Total Budget: 94,920 TRY



## Perceptions Abroad on Turkey's Covid-19 Aid

ÖzÜ Coordinator: Prof. Dr. Deniz Sert  
Sponsor: TÜBİTAK

With the onset of the Covid-19 period, the project will focus on the perception of Turkey's aid abroad in the receiving countries. Looking at the Eurobarometer data, it is seen that Turkey is not wanted with a rate of 59% (EU average, 2010 data) in the survey, which evaluates the possibility of Turkey becoming a member of the European Union in the future. By taking this and similar Eurobarometer data as a reference, four countries (Germany, France, England and Italy) were selected, with a negative view of Turkey and lower public opinion than the EU average. It will be examined how Turkey's aid during the Covid-19 period affects the perception of Turkey in these countries.

Total Budget: 30,000 TRY



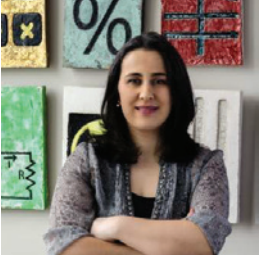
## The Role of Municipalities in Sustainable Development: An Example of a District Municipality in Istanbul

ÖzÜ Coordinator: Assoc. Prof. Dr. Ebru Ertugal Özveren  
Sponsor: TÜBİTAK

The aim of this project is to serve the long-term purpose i) To measure the extent to which a district municipality of Istanbul (Esenyurt Municipality) integrates two SDGs (Sustainable Development Goals) (SDG 4. Quality education and SDG 9. Industry, innovation and infrastructure) into its policies and actions ii) to measure the factors related to municipal capacity that affect the integration of these two SDGs into municipal policies and iii) to contribute to the support of sustainable development in our country with local actions by making policy recommendations to increase the degree of integration of these two SDGs by the municipality.

Total Budget: 45,000 TRY



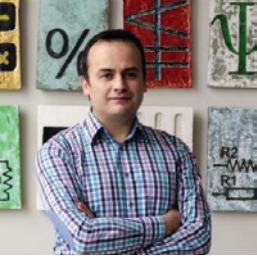


### Information Gathering and Damage Prediction Problems and Solution Methods for Urgent Post-Disaster Damage Assessment via Drones

Özü Coordinator: Asst. Prof. Dr. Elvin Çoban Göktürk  
Sponsor: TÜBİTAK

This project aims to establish an analytical framework that includes new routing problems and solution methods to carry out emergency damage assessment operations with drones and plan search and rescue operations with constantly collected damage assessment data during the response phase after a severe earthquake affecting a large area. It is planned to analyze the results of the framework with a realistic case analysis which is implemented for Istanbul.

Total Budget: 346,301 TRY



### Integrated Inventory Management for Single and Omni-Channel Retailers under Product Returns

Özü Coordinator: Asst. Prof. Dr. Enis Kayış  
Sponsor: TÜBİTAK

Due to increasing digitalization, end-consumers can easily access the product they desire and find another comparable product. Therefore, product returns are becoming increasingly common for retail firms. In the retail sector; product return rates are known to be up to 50% and these returns can be added to the inventory quickly upon return. In addition to the uncertainty in demand, stochastic returns make inventory management quite challenging for retail firms. In this project, new approaches will be proposed for integrated inventory management of retailers when both product sales and product returns are assumed to be uncertain.

Total Budget: 354,157 TRY



### Crosslinguistic Investigation of Events in Speech and Gesture

Özü Coordinator: Asst. Prof. Dr. Ercenur Ünal  
Sponsor: Other International

In study, it will be investigated how speakers of different languages encode different types of events in speech and gesture. We will elicit descriptions of three types of events: (a) instrument events (e.g., The woman sliced the bread with a knife), (b) information/ possession transfer events (e.g., The girl gave the man a book), (c) caused motion events (e.g., The boy kicked the ball into the bucket). This investigation will yield a large crosslinguistic video corpus of multimodal event descriptions which it will be used to answer two separate research questions.

Total Budget: 77,645.84 CAD



### Event Representation in Cognition, Language and Development

ÖzÜ Coordinator: Asst. Prof. Dr. Ercenur Ünal  
Sponsor: TÜBİTAK

The proposed project will combine theories and methods from cognitive science, developmental psychology and linguistics to study how language-thought interactions in event cognition change during development. To do so, this project will study two core event domains (event participants and spatial-temporal framework), using both linguistic and non-linguistic tasks, and with child and adult Turkish-speakers.

**Total Budget: 774,000 TRY**

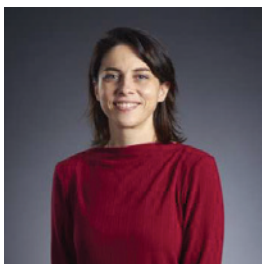


### Deep Learning and Computer Vision Assisted Multiple Search-Rescue UAV System

ÖzÜ Coordinator: Asst. Prof. Dr. Evşen Yanmaz Adam  
Sponsor: TÜBİTAK

The main objective of the project is the integrated design of communication, detection, action requirements and coordination for multi-UAV systems within the framework of Post-earthquake Search and Rescue (AVC) application. In addition to real-time data transmission to the Disaster Management Team, adaptive communication, detection and coordination algorithms will be designed and implemented to provide data analysis and action adaptation based on observation in UAV swarms

**Total Budget: 643,293 TRY**

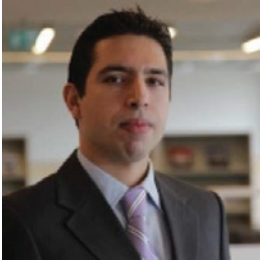


### Teaching Technology Design for Collaborative Reflection Practices in Higher Education

ÖzÜ Coordinator: Asst. Prof. Dr. Gökçe Elif Baykal  
Sponsor: EU

The objectives of the project are to: a) analyse and study the current status of research, innovative and best practices on technology design for collaborative interaction, b) develop effective and innovative teaching and assessment materials and activities aimed at training students and practitioners in technology design for collaborative interaction, c) pilot the teaching and assessment resources with students at technology design programmes, d) make the teaching resources accessible to all by publishing them online as an OER, e) analyse transferability of results obtained from the pilot tests of the teaching resources in different cultural contexts, f) share the results of the project to a network of teachers at technology design programmes, and g) disseminate and share project results in sustainable ways.

**Total Budget: 207,712.37 EUR**



### Additive Manufacturing Alloys Development, Application and Research Center

ÖzÜ Coordinator: Assoc.. Prof. Dr. Güney Güven Yapıcı  
Sponsor: Development Agency

With this project, it is planned to establish a center where related tests can be carried out as well as design and production activities based on additive manufacturing technologies. At the center, research and development activities will be carried out for production by using the equipment to be obtained within the scope of this project and the existing infrastructure facilities and different materials made possible by additive manufacturing. The studies will be shaped according to the target sector, and comprehensive characterization studies for different designs will be carried out after the application.

Total Budget: 3,171,454.08 TRY



### Recovery of Modular Software Architectures with Exact and Heuristic Clustering Methods

ÖzÜ Coordinator: Assoc. Prof. Dr. Hasan Sözer  
Sponsor: TÜBİTAK

Various types of interdependency data will be obtained and aggregated via analysis of source code and source repositories. Novel SAR approaches will be developed by employing modularity metrics that are well-defined in the physics literature as well as their multi-objective variants. the use two basic optimization methods are planned: i) exact methods to obtain the best modularity criterion value; and ii) scalable heuristic methods that converge to this value.

Total Budget: 363,301 TRY



### Realization of Biologically Plausible Super- Learning Paradigm on Neuromorphic Hardware to Accomplish Motor Control Tasks in Real-time

ÖzÜ Coordinator: Asst. Prof. Dr. İsmail Aktürk  
Sponsor: Other International

It is assumed that the brain achieves learning of all complex behaviors by three main mechanisms: unsupervised, supervised and reinforcement learning, where cerebral cortex, cerebellum and basal ganglia are believed to coordinate these mechanisms, respectively. In the last decade, strong evidence has been presented about the direct interconnection between basal ganglia and cerebellum. These interactions render a comprehensive learning paradigm called super-learning. Super-learning incorporates well-known supervised, unsupervised and reinforcement learning and gives rise to a learning that is more than the sum of these learning approaches and which involves recurrent interactions between neural structures. Inspired by the brain, the goal of this project is to develop a bio-plausible super-learning framework that can be implemented on a highly energy-efficient neuromorphic substrate, such as Intel's Loihi. It would be a versatile tool that can be used in complex decision making and motor control problems in different application domains (e.g., robotics, object tracking, and neuroprosthesis).

Total Budget: -



### Competitive Arming and Militarised Disputes: A Case Study of Greece and Turkey from 1833 to Present

ÖzÜ Coordinator: Asst. Prof. Dr. Konstantinos Travlos

Sponsor: EU

The project proposed here sets out to overcome this scientific deadlock by suggesting the very first interdisciplinary approach to the subject of arms races. In particular, it seeks to examine modern Greece and Turkey since 1833, in order to identify the external and internal factors that give rise to and sustain arms races, and to explain the relationship between arms races and militarized disputes. These two countries were selected because they constitute a neglected case in academic literature; they have a long-time engagement into competitive arming; a history of conflicts preceded by arms races; and a plethora of internal factors that influenced arms procurement.

Total Budget: 522,233.27 EUR



### Investigation of Phosphor Heat Generation and Particle Motion in Phosphor Converted Light Emitting Diodes

ÖzÜ Coordinator: Prof. Dr. Mehmet Arık

Sponsor: TÜBİTAK

In this research, relationship between LED chip and phosphor particles will be investigated to improve thermal and optical performance of Pc-LED. Different from other applications, phosphor particles will be immersed inside optically clear and dielectric fluid will be encapsulated in a dome shaped optical glass covering the blue LED chip. Phosphor particles disperse in the fluid will be induced by convective movement of the heated fluid.

Total Budget: 764,960 TRY



### Analysis of the Effect of Syntactic Characteristics of Science Centers on the Spatial Preferences and Learning Levels of Middle School Students

ÖzÜ Coordinator: Asst. Prof. Dr. Nevşet Gül Çanakçıoğlu

Sponsor: TÜBİTAK

Evidence-based research on the architectural designs of science centers has the potential to reveal beneficial results for students to learn more effectively and to make their knowledge more permanent. In this context, the research is based on the hypothesis that students' preferences, behaviors and learning levels are related to (1) the syntactic features of the science center and (2) the crowding level in the space depending on the syntactic features. It is aimed to examine the correlations between the syntactic features of the science center and the spatial preferences and learning levels of the students.

Total Budget: -



### CheckMate: Automatic Writing Assessment Program for Students Learning English as a Foreign Language

ÖzÜ Coordinator: Prof. Dr. Olcay Taner Yıldız  
Sponsor: TÜBİTAK

It is aimed that the automatic writing assessment tool named CheckMate, presented in the project proposal, not only responds to the needs of Turkish students and teachers as in the research question, but also contributes to equality of opportunity in distance education with its free and accessible structure. In line with this purpose, a multi-faceted and purposeful program is designed, taking into account the previous studies in the field.

Total Budget: 44,800 TRY



### Design, Control and Development of an Energy-Recycling Active Transfemoral Prosthesis

ÖzÜ Coordinator: Asst. Prof. Dr. Ramazan Ünal  
Sponsor: TÜBİTAK

In this research, it is aimed to design, control, develop and test a transfemoral prosthesis that can provide movements such as sit-to-stand, ascending and descending stairs and adapting to different speeds, inclinations and surfaces in an natural way. It is aimed that the proposed design of the prosthesis will be energy efficient and energy-recycling in order to reduce the metabolic energy consumption of the user and increase the quality of movement.

Total Budget: 399,000 TRY



### Multi-Scale Investigation of Soil-Pile Interaction for Wind Turbines by Discrete Element Method (DEM)

ÖzÜ Coordinator: Prof. Dr. Safiye Feyza Çinicioğlu  
Sponsor: TÜBİTAK

As in all parts of the world, there are sand-type floors with different characteristics in our country. These soils can be of different density and gradation according to the conditions of the region. The effect of soil gradation and particle shapes on sandy soils, which are the subject of this research, should also be considered. For this purpose, in this research proposal, it is aimed to examine the effect of soil conditions (soil gradation and grain shapes), whose effects have not been examined in previous studies, on the behavior of open-ended single piles used for wind turbines.

Total Budget: 204,000 TRY



## Higher Education Innovation Growth

**z Coordinator: Entrepreneurship Support Programs  
Manager, Sha Soydan  
Sponsor: EU**

Through open resources, stakeholders are enabled with tools for transformative change beyond the life of the project. HEIs will develop capacity in innovation and enterprise and a train-the-trainers method will ensure exponential growth of academic and non academic expertise and skills to support capacity building of innovative and entrepreneurial staff and students to effect great societal innovation.

**Total Budget: 623,626 EUR**



## Learn and Experience Science Together Online

**z Coordinator: Director of the Learning and Teaching Enhancement Office,  
Dr. Tufan Adıgzel  
Sponsor: EU**

The main aim of the project is to digitalize the physical environment and tools required by science education and eliminate the spatial dependencies of students and teachers and contribute to eliminating the gaps for disadvantaged groups. To support this aim, the "hands-on science digital education platform", "digital hands-on science education kits" and "the teacher and student" guide will be prepared within the project.

**Total Budget: 801,174.54 EUR**



## A Tool for Strategic Risk Assessment for the Waterways Based on the Principles-driven Method

**z Coordinator: Asst. Prof. Dr. Yiğit Can Altan  
Sponsor: EU**

This project aims to develop a tool that assesses the risk level of the waterway considering traffic, waterway complexity, and environmental factors. The proposed tool will be designed to analyze the risk of maritime traffic systems, rooted in first principles, supported by big data analysis, machine learning methods, as well as experts' knowledge along with their understanding of the subject.

**Total Budget: -**





## Development of a Modular System using Aerated-Calcined Clay Concrete Technology adapted for 3D- Printing Applications

ÖzÜ Coordinator: Asst. Prof. Dr. Zeynep Başaran Bundur

Sponsor: EU

The development of modern building technologies worldwide is aimed at designing durable concrete products using sustainable raw materials for innovative construction. Recently, majority of research has been focussed on 3D applications for innovative concrete technology. However, significant studies are limited to using conventional concrete despite the enormous CO2 emissions generated from cement production. In the effort to mitigate the energy consumption caused by cement, the use of lightweight concrete technology by developing an aerated concrete using calcined clays as a sustainable cement replacement is a potential approach for innovative concrete construction.

Total Budget: -

# SECTION III

## INTELLECTUAL PROPERTY RIGHTS AND COMMERCIALIZATION

This section focuses on Intellectual  
Property Rights (IPR) Management  
Overview for the years 2009-2021.



[ipr@ozyegin.edu.tr](mailto:ipr@ozyegin.edu.tr)

## 4. Intellectual Property Rights (IPR) Management at ÖzÜ

ÖzÜ as maintained its place in the top 10 in the Entrepreneurial and Innovative University Index (GYÜE) for the last two years. We rank in the top 3 in the "Intellectual Property (IP) Pool" dimension of the index. This success is the result of the IP strategies of ÖzÜ and our rich IP portfolio.

ÖzÜ's annual research funds reached 30 million TL last year. This research volume leads to new technology, IP applications, software, and commercial products. ÖzÜ TTO is responsible for the management of IP portfolio and converting these assets into commercial value for the benefit of the industry and public. ÖzÜ TTO IP Team works closely with ÖzÜ inventors to protect and commercialize their IPs.

By the end of 2021, 23 new inventions were disclosed by ÖzÜ faculty members and students. ÖzÜ TTO organized some activities such as "Invention Disclosure Days" and "ÖzÜ Patent Competition" to encourage new applications. ÖzÜ TTO filed 34 new patent applications, 2 utility model applications in 2021 thus the number of total patent applications reached to 303. ÖzÜ's IP portfolio currently contains 93 granted patents out of which 24 were granted in 2021. Since 2013, 101 joint patent applications have been filed with industry and other universities. There is a wide range of technologies developed at ÖzÜ including those in Lighting and Energy Technologies, Mechanical and Thermal Technologies, Information and Communication Technologies, Health and Food Technologies, Industrial Application, Construction Materials, Educational Technologies.

The statistics of ÖzÜ IP portfolio between 2013-2021 are summarized in Figure 7 and the activities carried out in 2021 are given in Figure 8.

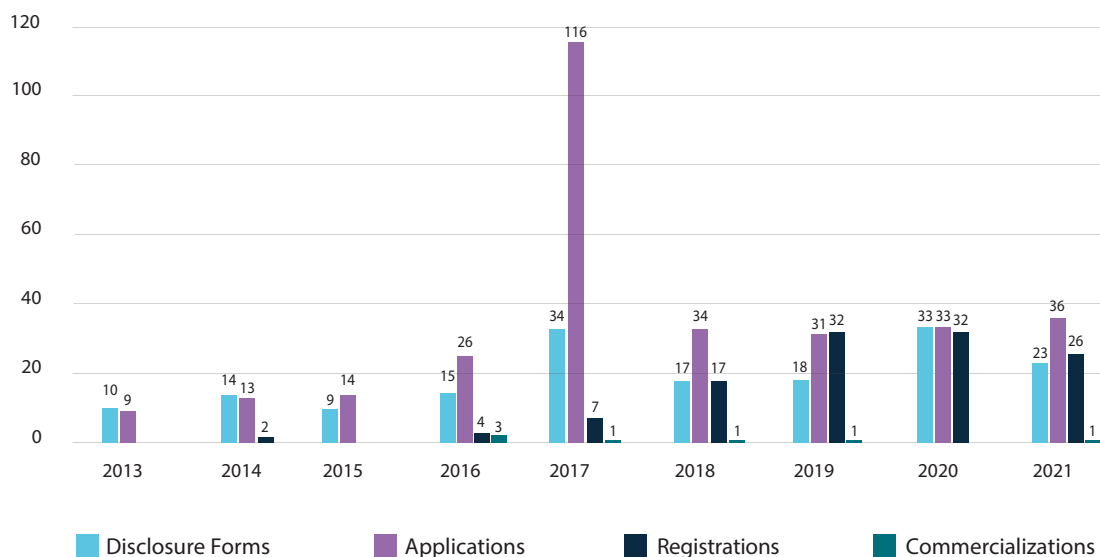


Figure 8. Patent & Utility Model Portfolio Statistics of ÖzÜ (2013-2021)

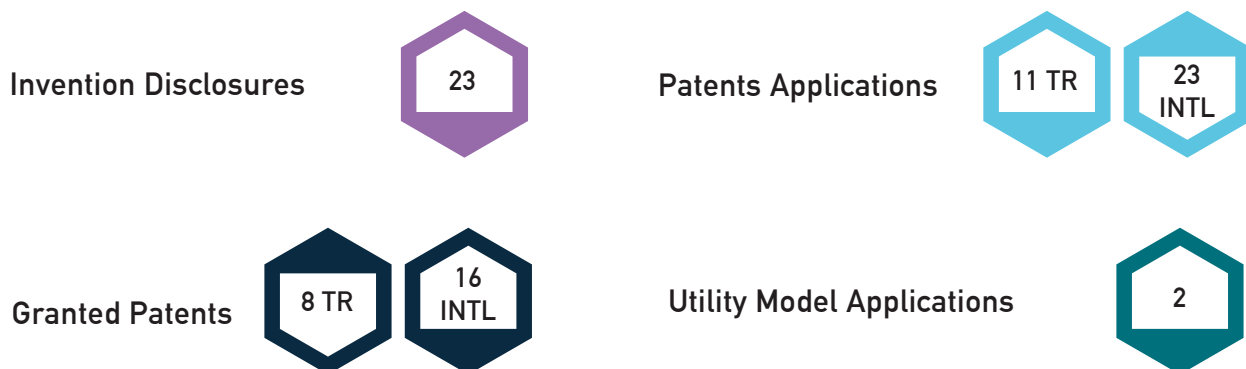


Figure 9. IPR Performance in 2021

## 4.1. ÖzÜ Technologies



Lighting & Energy  
Technologies



Mechanical & Thermal  
Technologies



Information &  
Communication  
Technologies



Health and Food  
Technologies



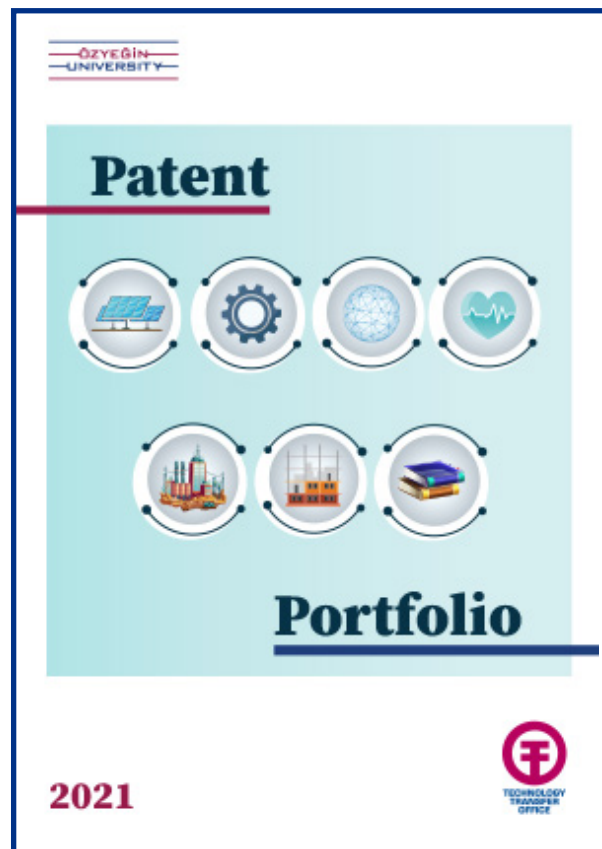
Industrial  
Application



Construction  
Materials



Educational  
Technologies



ÖzÜ Technologies are introduced in Patent Portfolio.  
<https://tto.ozyegin.edu.tr/en/tto-publications>

# SECTION IV

## ENTREPRENEURSHIP ACTIVITIES

This section focuses on Entrepreneurship Activities carried out by ÖzÜ TTO, Center for Entrepreneurship and the Fit Startup Factory in 2021.



[girisimcilik@ozyegin.edu.tr](mailto:girisimcilik@ozyegin.edu.tr)

Özyeğin University Center for Entrepreneurship has contributed to the growth of entrepreneurship ecosystem in and outside the university in 2021.

The programs managed and the events organized by the Center has helped individuals develop their entrepreneurship competencies, triggered the establishment of new startup companies and supported the growth of existing startups.

## Özyeğin University as an Interface Organization for TÜBİTAK 1512 BİGG Program



Özyeğin University supported entrepreneurs as an official interface organization for TÜBİTAK 1512 BİGG Program during the last year's calls with its The Fit Startup Factory BİGG Acceleration Program.

TÜBİTAK BİGG Program aims at supporting early stage entrepreneurs bring their technology oriented innovative business ideas to life with the support provided via Interface Organizations and equity free financial support by TÜBİTAK.

The Fit Startup Factory BİGG Acceleration Programs offers eligible early stage entrepreneurs training, mentorship and business plan support and help them access the 200K TL grant provided by TÜBİTAK.

To date, the Fit Startup Factory has helped numerous entrepreneurs not only from İstanbul but also from different parts of Turkey reach their BİGG goals and benefit from the training and funding opportunities.

Due to the pandemic conditions, all activities during the relevant period were carried out online. Some of the events organized as part of program include workshops and outreach events as well comprehensive training and mentorship support provided to the program participants.

## Landing Page Design Workshop for R&D Entrepreneurs - 12 July 2021:

A workshop was held on preparing a "Landing Pages", a digital tool that entrepreneurs can use during the validation process of their business ideas. The goal of the workshop was to increase the awareness of prospective entrepreneurs about a tool that can be very instrumental in their early stages of product development.



The workshop was organized specifically for R&D Entrepreneurs who would like to apply to TÜBİTAK 1512 BİGG Program. The workshop focused on the ways how entrepreneurs can test their value propositions with real customers and points to consider when launching landing pages even if their products are not ready.



## AR-GE Girişimcileri için Landing Page Atölyesi

Ürün henüz hazır olmayan girişimlerin  
karşılama sayfası nasıl olmalı ?

12 Temmuz 2021, Pazartesi | 18:00

[bit.ly/GF-landing](https://bit.ly/GF-landing)



### Interaction / Collaboration with Different Institutions as an Interface Organization for TÜBİTAK 1512-BİGG Program

To reach more qualified entrepreneurs within the scope of the BİGG Program and to contribute to the dissemination efforts of the TÜBİTAK 1512-BİGG Program we reached out to universities which are not authorized as an Interface Organization for TÜBİTAK 1512-BİGG Program.

As a result of the collaboration with relevant staff from respective TTOs, Project Management Offices and / or Entrepreneurship Centers, we were able to carry out 5 different online outreach events in 5 different universities for the promotion of the TÜBİTAK 1512-BİGG Program.

	Organizations	Date
1	Fenerbahçe University	18.10.2021
2	Gedik University	22.10.2021
3	Doğuş University	22.10.2021
4	Piri Reis University	25.10.2021
5	İstanbul Bilgi University	27.10.2021

## No-Code Pre-Incubation Program

### Turkey's first No-Code oriented Entrepreneurship Program!

The Startup Fit Factory's No-Code Pre-Incubation Program; was designed for Özyeğin University stakeholders from non-technical backgrounds to help them develop their technology-oriented entrepreneurship ideas by means of using No-Code and Low-Code tools.

The 8-week pre-incubation program included training sessions, mentoring and infrastructure supports and focused on helping program participants implement their entrepreneurial ideas with the lean entrepreneurship (Lean Startup) approach by using various digital tools.

At the end of the program participants built their MVP (Minimum Viable Product) products by using No-code and Low-code development tools of their choice.

8 teams completed the program with success by launching their MVPs. With this result we were able to confirm our initial hypothesis that entrepreneurs from non-technical backgrounds can launch digital products / services and can test their ideas in search for finding the product-market fit by means of using No-Code / Low-Code technologies.

It was great to see one of the program participant achieve her first online sale via the platform she developed as soon as the program was over.

Turkey's first "No-Code Summit" event was held as the closing event of the program. Within the scope of the online event, ecosystem stakeholders who develop and effectively use No-Code / Low-Code tools shared their experiences, and program participants presented their projects to before an investor.

## No-Code Summit Event



No-Code Summit was held on June 11, 2021, to bring the stakeholders of the No-Code / Low-Code Ecosystem together. The online event showcased seasoned entrepreneurs actively using or developing No-Code / Low-Code technologies and included Demo Presentations of the Turkey's first No-Code Pre-Incubation Program Participants to an investor. The recordings of the online event was published on the YouTube channel of the Fit Startup Factory.

## HEIght (Higher Education Innovation and Growth Training) Project

HEIght is supported by the European Institute of Innovation and Technology (EIT) Higher Education Institutions (HEI): Innovation Capacity Building for Higher Education Program.

The goal of the HEIght project is to boost the entrepreneurial and innovation capacity of universities and its stakeholders such as students, faculty, staff and alumni.

With a total budget of 1.2 million Euros 'Higher Education Innovation Growth and Training (HEIght)', includes Özyeğin University along with partner universities from the UK, Malta, Cyprus.

HEIght Project is composed of 2 phases. The first phase of the project lasted for 6 months and the second phase will last 18 months.

With this project Özyeğin University Center for Entrepreneurship and the Faculty of Business Administration aim at creating more opportunities for International Students to be more involved in Entrepreneurship Ecosystem!

The program run by Özyeğin University is focused on working with International Students to:

- \* Develop entrepreneurship skills
- \* Learn how to test business ideas and start a business
- \* Learn how to be more involved in Turkish and international entrepreneurship ecosystem

In the first phase of the program which lasted from July – December 2021, international students from more than twenty different countries applied. Program participants were provided in-class / out-of-class training sessions for the development of their entrepreneurial competencies. Students with innovative service, hardware, mobile application, and internet-based business development ideas were offered a 10-week program including online and offline sessions as well as practice and mentorship opportunities.



*\*A photo from the HEIght Project training sessions held in hybrid form.*

---

## Global Entrepreneurship Week Events

As Özyeğin University Center for Entrepreneurship we would like to create more opportunities for international students and stakeholders to be involved in with the wider Turkish Entrepreneurship Ecosystem.

To this end we took the opportunity to celebrate the Global Entrepreneurship Week 2021, by organizing an event series of 3 events and hosted international stakeholders who actively take part in and contribute to the entrepreneurship ecosystem in Turkey as founders, trainers / mentors.

In order to increase the awareness in the wider ecosystem about international talents available in Turkey and benefits of diversity, we hosted three international entrepreneurs who either started their entrepreneurial journeys or working with / for entrepreneurs in Turkey. We had a chance to talk about different phases / dimensions of entrepreneurship, challenges and opportunities faced by those international stakeholders.

The events attracted a great interest and received a total of 1154 registrations via the event forms. All the events were conducted in English. The events were broadcasted online via Zoom and events attracted as much as 300 participants in each session. Participants were able to contribute to lively discussions by sharing their questions and comments.

We hosted the first event on 9 November 2021 with the title of 'From Startup to Exit: Journey of an International Entrepreneur'. We hosted Sean X. Yu, the founding partner & CEO of Parasut.com in an online event. We talked about the process he went through as an international entrepreneur and his journey from China to America and then to Turkey. He shared his experiences on his successful exit of his startup Parasut.com. He also shared advices for future entrepreneurs and his perspective on life and venture development.

We hosted the second event on 10 November 2021 with the title of 'Bridging the Gap between Corporate and Startup Worlds'. We hosted Jason Lau, Partner at Core Strategy in an online event. We talked about his observations as an international ecosystem stakeholder who used to work at a startup incubator / accelerator and now as an intrapreneurship consultant. He shared insights about opportunities for young professionals in corporations with regards to entrepreneurship.

We hosted the third event on 11 November 2021 with the title of 'From Idea to MVP: Experiences of an Early-Stage Entrepreneur'. We hosted Bahareh Vahidian, Co-founder of defaro.io on in a hybrid event which was bot open to in-person attendance and broadcasted live at the same time. We talked about her entrepreneurial journey as an international student while continuing her Master's studies in Istanbul.

Date	Events	Speakers	Startups
09.11.2021	From Startup to Exit! - Journey of an International Entrepreneur	Sean X. Yu	CEO & Co-founder, Paraşüt
10.11.2021	Bridging the Gap between Corporate and Startup Worlds	Jason Lau	Partner, Core Strategy
11.11.2021	From Idea to MVP! - Experiences of an Early-Stage Entrepreneur	Bahar Vahidian	Co-founder, defaro.io



The recordings of the sessions were shared publicly on the YouTube channel of the Fit Startup Factory after the event, and the content library was expanded.

*\*A photo from Global Entrepreneurship Week 2021 events.*

## Important Developments from Our Academic and Non-Academic Entrepreneurs

2021 became a year in which participants from the various programs of Özyeğin University, showed great progress.

---

### Pacha Receives Investment with 2.5 Million Dollars Valuation!

The functional food startup “Pacha” showed a rapid development in 2021. The growth potential of the startup attracted the attention of investors and received its first investment with a valuation of 2.5 Million Dollars. Pacha’s first investors include Umur Özal from Galata Business Angels, Işıl Ilgın Ceylanlı and Rıza Kadılar from Arya Women’s Investment Platform, and individual angel investors Bedia Erden, Mehmet Uslu, Murat Tortopoğlu, and Mustafa Ülker.

Pacha was founded by Asst. Prof. Dr. Aslı Zuluğ who is an Assistant Professor at Özyeğin University. Asst. Prof. Dr. Zuluğ was entitled to a grant by participating in the Fit Startup Factory BIGG Acceleration Program.

---

### Optiyol Successfully Completed Its New Investment Round!

Cloud-based new generation route optimization solution Optiyol was founded by Tuba Gözbaşı Assistant Professor at Özyeğin University and Ozan Gözbaşı, who participated in the acceleration program organized by Fit Startup Factory in 2014.

Optiyol digitizes both micro-distribution and macro distribution operations for its customers with algorithms specially designed for the supply chain needs of enterprises.

Optiyol received an investment of 810 thousand dollars in the investment round participated by Ford Otosan’s corporate venture capital company Driventure, Fark Holding, Dinçer Lojistik, Coşkunöz Holding and Arya Women’s Investment Platform. With this investment, the valuation amount of which has not been disclosed, the total the investment received by Optiyol as of May 2021 has reached 1.1 million dollars.

---

### QuantWifi received investment from TT Ventures!

Quantwifi, which was officially established at the Fit Startup Factory located on the Özyeğin University Campus, develops technological solutions for internet service providers that better identify problems related to wireless network connections and suggest ways to resolve them.

The Founder Ali Sayinta, who has many years of experience in the telecom industry, took an important step towards in expanding to international markets by receiving investment from Türk Telekom’s corporate venture capital company TT Ventures.

---

### Our Entrepreneurial Academician is in the Preparation of a New Patent Application!

Özyeğin University faculty member and the Co-founder of Ebrandvalue Prof. Dr. Tolga Akçura has developed a new model for a method that measures brand health in real-time through data obtained from the social media environment. The model aims at offering more meaningful and applicable insights to its customers and significant advantage in the competition.

Ebrandvalue provides technologies and services to help companies increase their brand value by analyzing the social data shared in digital media in real time.



## "Counterfake" at CES 2022, the Most Influential Tech Event in the World!

Furkan Aslan, Thesis MSc in Computer Science graduate from the Graduate School of Engineering and Science at Özyeğin University and BIGG Program Graduate of the Fit Startup Factory, attended the Consumer Electronic Show (CES), the most influential tech event in the world, in Las Vegas, the US, from January 5 through 7, 2022 to introduce his startup "Counterfake". In the pavilion installed for Turkish tech-entrepreneurs in coordination with the Ministry of Industry and Technology under the auspices of the Istanbul Development Agency (ISTKA), 28 startups showcased their new products and technologies for the first time.

Furkan Arslan, an Özyeğin University graduate who is one of the select few entrepreneurs representing Turkey at CES with his initiative "Counterfake", has developed an artificial intelligence engine that detects the suspicious features of counterfeit products and distinguishes the original from the counterfeit by using the online images of the original product. Counterfake's unique algorithm analyzes products sold online and reports counterfeit products, rogue websites, and fake sellers to its customers. "Counterfake" also initiates removal for approved fake products. To date, Counterfake, the brainchild of Furkan Aslan that garnered a great deal of attention at CES 2022, has scanned a total of 11,728 possible counterfeit products, and detected a total of 1,859 fake products. "Counterfake" is also awarded the TÜBİTAK BIGG grant and became a company, securing a 200,000 TL in grant support.

## Ecosystem Collaborations and Activities

To contribute to the development of entrepreneurs from different target groups, joint events were organized in cooperation and interaction with various institutions. Within the scope of the activities to be organized, the needs of the target groups were taken into account and thematic-oriented activities were organized. In this context, the following activities were held with private institutions and non-governmental organizations. Due to the COVID-19 conditions, all of the events were held online.

Date	Events	Collaborating Organization	Target Group
08.01.2021	Growth Tactics for Global Markets	Teknasyon	Startups
03.03.2021	Liyakat Startup School Event	Liyakat - Lider Yaratıcı Katılımcılar Derneği	University Students
10.04.2021	No-Code Application Development Workshop	Genç Başarı Eğitim Vakfı	High School and University Students
17.05.2021	Equity-Based Crowdfunding Interview	Fonbulucu Platformu	Startups and Investor Candidates

In addition to these activities, we took part as a speaker, panelist, and jury member in entrepreneurship events organized by different institutions.



# SECTION V

LIST OF EVENTS AND  
TRAININGS ORGANIZED  
BY ÖZÜ TTO IN 2021



[tto@ozyegin.edu.tr](mailto:tto@ozyegin.edu.tr)

**Table 3. Events Organized by ÖzÜ TTO in 2021**

Number	Training/ Event	Date
1	TURKPATENT Patentle Türkiye Jürisi ve Hezarfen Projesi	10.06.2021
2	Eğitimler, Patent Yazım Günleri	11.08.2021
3	Patent Yarışması, BBF Çağrılar	18.10.2021
4	FMHK Toplantıları	9.02.2021 - 4.11.2021
5	"2021 ÜSİMP Ulusal Patent Fuarı ve ÜSİ Ulusal Kongresi"	16-20.11.2021
6	ISIF 2021-İstanbul Buluş Fuarı ve Yarışması	21-26.09.2021
7	2021 SAHA EXPO	10-13.11.2021
8	"İSTKA Yenilikçi Arayüz Yapıları ( projesi)"	14.12.2021
9	ÜSİMP TTO Eğitimleri	12.04.2021, 30.04.2021, 11.05.2021
10	"IP 2021 Düzenleme Komitesi Boğaziçi Koç, ODTÜ, ÖzÜ"	23.09.2021
11	Girişim Fabrikası BİGG Hızlandırma Programı Tanıtım Etkinliği	18 - 27.10.2021
12	Global Pazarda Büyüme İpuçları Söyleşisi	8.01.2021
13	Liyakat Girişim Okulu Etkinliği	3.03.2021
14	No-Code Uygulama Geliştirme Atölyesi	10.04.2021
15	Paya Dayalı Kitle Fonlaması Söyleşisi	17.05.2021
16	Girişim Fabrikası No-Code Summit	11.06.2021
17	"Kuruluştan Exit'e! Uluslararası bir Girişimcinin Yolculuğu"	9.11.2021
18	Kurum ve Girişim İşbirliği, İki Dünyayı Yakınlaştırmak	10.11.2021
19	"Fikirden MVP'ye Erken Aşama Girişimcinin Tecrübeleri"	10.03.2021
20	TÜBİTAK ARDEB 1001 Programı Bilgilendirme Günü	10.02.2021
21	Ufuk Avrupa Programı Tanıtımı	24.06.2021
22	AB Projeleri Deneyim Paylaşımı	15.01.2021
23	BAGEP Ödül Programı Tanıtım Etkinliği	5.01.2021

# SECTION VI

## LIST OF SPONSORED RESEARCH PROJECTS IN 2021

\*Projects are listed in alphabetical order by the first name of the coordinator.



grants@ozyegin.edu.tr

**Table 4. The List of Projects Carried out in 2021**

Number	Project Title	Coordinator	Sponsor	ÖzÜ Budget
1	Immersive Design and New Digital Competences for the Rehabilitation and Valorization of the Built Heritage	Alessandro Camiz	EU	31.958 EUR
2	Quality of Experience and Satisfaction of Humans and Machines in Video Applications	Ali Cengiz Beğen	TUBITAK	1.000.000 TRY
3	Colonialist Foundations and Reflexive Re-Envisioning of the Social Sciences: A Theory-Driven Analysis of the JSTOR Corpus of Social Science Articles, 1890-2019	Ali Oğulcan İlhan	Other International	-
4	Türkiye’de Çocuk Yargılamasında Görev Alan Avukat ve Uzmanların Çocukluk ve Çocuk Dostu Adalet Algısıyla ilgili Mevcut Durum Tespiti	Asiye Kumru	Other International	50.000 TRY
5	BAGEP Awards - 2021	Begüm Güney	Awards	40.000 TRY
6	Yenilikçi Üretim ile Katma Değer (YAY-YÜKA Platformu)	Ceren Kutlu Kaya	Development Agency	-
7	Discursive Construction of Refugeeedom in Knowledge Production About European Refugee Crisis and Balkan Route	Deniz Sert	TUBITAK	94.920 TRY
8	Perceptions Abroad on Turkey's Covid-19 Aid	Deniz Sert	TUBITAK	30.000 TRY
9	The Role of Municipalities in Sustainable Development: An Example of a District Municipality in Istanbul	Ebru Ertugal Özveren	TUBITAK	45.000 TRY
10	Information Gathering and Damage Prediction Problems and Solution Methods for Urgent Post-Disaster Damage Assessment via Drones	Elvin Çoban Göktürk	TUBITAK	346.301 TRY
11	Integrated Inventory Management for Single and Omni-Channel Retailers under Product Returns	Enis Kayış	TUBITAK	399.133 TRY
12	Crosslinguistic investigation of events in speech and gesture	Ercenur Ünal	Other International	8.785 CAD
13	Event Representation in Cognition, Language and Development	Ercenur Ünal	TUBITAK	705.536 TRY
14	Derin Öğrenme ve Bilgisayarlı Görü destekli Çoklu Arama-Kurtarma IHA Sistemi	Evşen Yanmaz Adam	TUBITAK	718.200 TRY
15	Teaching Technology Design for Collaborative Reflection Practices in Higher Education	Gökçe Elif Baykal	EU	23.880 EUR

Number	Project Title	Coordinator	Sponsor	ÖzÜ Budget
16	İstanbul Oyun Girişimciliği Akademisi: 9999in1 Space	Gülten Aslıhan Ünlü	Development Agency	-
17	Additive Manufacturing Alloys Development, Application and Research Center	Güney Güven Yapıcı	Industrial Partnerships	3.858.001 TRY
18	BAGEP Awards - 2021	Güney Güven Yapıcı	Awards	40.000 TRY
19	Recovery of Modular Software Architectures with Exact and Heuristic Clustering Methods	Hasan Sözer	TUBITAK	391.949 TRY
20	Realization of Biologically Plausible Super-Learning Paradigm on Neuromorphic Hardware to Accomplish Motor Control Tasks in Real-time	İsmail Aktürk	Other International	-
21	Comparison and correlation of particle size measurements of emulsified systems by various light scattering measurement techniques	Konstantinos Travlos	EU	40.800 EUR
22	Investigation of Phosphor Heat Generation and Particle Motion in Phosphor Converted Light Emitting Diodes	Mehmet Arık	TUBITAK	764.960 TRY
23	BAGEP Awards - 2021	Naci Saldi	Awards	40.000 TRY
24	Analysis of the Effect of Syntactic Characteristics of Science Centers on the Spatial Preferences and Learning Levels of Middle School Students	Nevşet Gül Çanakçıoğlu	TUBITAK	309.869 TRY
25	CheckMate: Automatic Writing Assessment Program for Students Learning English as a Foreign Language	Olca Taner Yıldız	TUBITAK	44.850 TRY
26	Design, Control and Development of an Energy-Recycling Active Transfemoral Prosthesis	Ramazan Ünal	TUBITAK	359.994 TRY
27	Multi-Scale Investigation of Soil-Pile Interaction for Wind Turbines by Discrete Element Method (DEM)	Safiye Feyza Çinicioğlu	TUBITAK	206.000 TRY
28	Higher Education Innovation Growth	Süha Soydan	EU	54.800 EUR
29	Learn and Experience Science Together Online	Tufan Adıgüzel	EU	59.901 EUR
30	A Tool for Strategic Risk Assessment for the Waterways Based on the Principles-driven Method	Yiğit Can Altan	EU	710.764 TRY
31	Development of a Modular System using Aerated-Calcined Clay Concrete Technology adapted for 3D- Printing Applications	Zeynep Başaran Bundur	EU	631.250 TRY

# SECTION VII

LIST OF PATENT APPLICATIONS AND  
REGISTRATIONS IN 2021

THIS SECTION PRESENTS THE LIST OF  
NATIONAL AND INTERNATIONAL PATENT  
APPLICATIONS AND REGISTERED  
PATENTS of ÖzÜ IN 2021



[ipr@ozyegin.edu.tr](mailto:ipr@ozyegin.edu.tr)



**Table 5. National and International Patent and Utility Models Applications of ÖzÜ in 2021**

Number	Application Number	Application Date	Title of Invention
1	PCT/TR2021/050422	03.05.2021	2 DEGREES OF FREEDOM PROSTHETIC WRIST STRUCTURE
2	PCT/TR2021/051642	30.12.2021	3 DEGREES OF FREEDOM ANKLE PROSTHESIS
3	PCT/TR2021/051062	19.10.2021	A GENERATOR FOR USAGE IN ELECTRICITY GENERATION AND HEATING IN BUILDINGS
4	PCT/TR2021/051036	11.10.2021	A HAND PROSTHESIS
5	US 17/565,471	30.12.2021	A MODEL OF BRAND HEALTH
6	2021/021518	29.12.2021	A NOVEL THIXOTROPIC AND RHEOLOGIC REGULATING ADMIXTURE MATERIAL FOR CEMENT-BASED MORTARS AND PRODUCTION OF CEMENT-BASED COMPOSITIONS INCLUDING THE ADMIXTURE MATERIALS
7	WO2020139208A1-US	24.06.2021	A PREFERRED SYSTEM FOR MEASURING JUNCTION TEMPERATURE OF PHOTONICS DEVICES
8	2021/010395	24.06.2021	A PREFERRED SYSTEM FOR MEASURING JUNCTION TEMPERATURE OF PHOTONIC DEVICES
9	PCT/TR2021/051588	29.12.2021	A SILICON-BASED CLOSED AND INTEGRATED PLATFORM FOR THE INVESTIGATION OF RADIATION TRANSFER AT MICRO-NANO SCALE
10	US 17/278,686	23.03.2021	A SOLAR POWER GENERATING SYSTEM AND THE METHOD OF GENERATING ELECTRICITY AND PROVIDING HEAT IN SUCH A SYSTEM
11	2021/004738	12.03.2021	A SOLAR POWER GENERATION SYSTEM AND METHOD.
12	PCT/TR2021/051625-EP	30.12.2021	A TEST PLATFORM SYSTEM
13	PCT/TR2021/051620	30.12.2021	A TRANSFEMORAL PROSTHESIS FOR WALKING, SITTING- STANDING, STAIR CLIMBING
14	EP 19 772 889.2-EP	15.12.2021	A WEARABLE LOWER EXTREMITY EXOSKELETON
15	US 17/621,372-US	21.12.2021	A WEARABLE LOWER EXTREMITY EXOSKELETON
16	2021/004108	02.03.2021	ACCIDENT NOTIFICATION SYSTEM
17	US 17/293,048	12.05.2021	AN ACTUATION SYSTEM TO ACHIEVE SOFT LANDING AND THE CONTROL METHOD THEREOF
18	2021/007949	10.05.2021	AN ACTUATION SYSTEM TO ACHIEVE SOFT LANDING AND THE CONTROL METHOD THEREOF
19	PCT/TR2021/050775	05.08.2021	AN OPTICAL ARRANGEMENT FOR A COLLIMATED LIGHT BEAM
20	2021/021698	30.12.2021	COFFEE BREWING APPARATUS

Number	Application Number	Registration Date	Title of Invention
21	PCT7TR2021/050399	27.04.2021	FLUID ATOMIZER
22	PCT7TR2021/050370	21.04.2021	FLUID ATOMIZER WITH HELICAL INLET CHANNEL
23	US17294708	18.05.2021	GEODETTIC LEVELLING STAFFS AND METHOD OF USE THEREOF
24	2021/008480	18.05.2021	GEODETTIC LEVELLING STAFFS AND METHOD OF USE THEREOF
25	2021/005116	19.03.2021	INTEGRATED DISTRIBUTED FORCE SENSING BRACE FOR EXOSKELETAL APPLICATIONS
26	US 17/418,279	25.06.2021	METHOD OF QUANTUM KEY DISTRIBUTION VIA A LOAD NODE
27	2021/021755	30.12.2021	MOISTURE-RESISTANT WALL COVERING MATERIAL
28	US17601438	05.10.2021	OPTICAL DATA TRANSMISSION FOR SWIMMERS
29	2021/015476	05.10.2021	OPTICAL DATA TRANSMISSION SYSTEM FOR SWIMMERS
30	2021/010609	29.06.2021	QUANTUM KEY DISTRIBUTION METHOD VIA A CARGO NODE
31	EP16816763A-DE	16.08.2021	RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING
32	EP16816763A-SW	16.08.2021	RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING
33	US 17/274,549	09.03.2021	ROBOTIC MANIPULATOR INCLUDING PNEUMATIC ARTIFICIAL MUSCLE
34	2021/004581	10.03.2021	ROBOTIC MANIPULATOR WITH PNEUMATIC ARTIFICIAL MUSCLE
35	PCT/TR2018/050889	24.06.2021	SYSTEM FOR MEASURING JUNCTION TEMPERATURE OF PHOTONICS DEVICES
36	2021/015837	11.10.2021	WEARABLE ARM SUPPORT

**Table 6. National and International Patent and Utility Models Registrations of ÖzÜ in 2021**

Number	Application Number	Registration Date	Title of Invention
1	2019/13952	31.12.2021	A FOLDABLE CARRYING CASE SUITABLE FOR CARRYING ELECTRONIC GADGETS
2	2014/08817	22.11.2021	A LIGHTING SYSTEM THAT CAN ADJUST THE LIGHTING DURATION AND INTENSITY
3	2019/14534	21.09.2021	A THERAPY SUIT
4	CN201780087311A	10.12.2021	ACOUSTO-OPTIC TRANSDUCER, ARRAY, AND METHOD
5	CN201680064334.2	22.10.2021	CEMENT-BASED COMPOSITIONS WITH IMPROVED RHEOLOGICAL PROPERTIES AND METHODS PROCESSES FOR THEIR MANUFACTURE PRODUCTION THEREOF
6	JP2019553623	21.06.2021	DATA TRANSMISSION METHOD AND DATA TRANSMISSION DEVICE
7	US20190375132A1	12.10.2021	DESIGN AND MANUFACTURING METHOD FOR A BUILDING SYSTEM IN REGARDS TO STRUCTURAL AND ENVIRONMENTAL FACTORS
8	EP17157226.6-GB	21.07.2021	DISPLAY SYSTEM AND DISPLAY METHOD
9	DE 60 2017 042 350.5-DE	27.10.2021	DISPLAY SYSTEM AND DISPLAY METHOD
10	EP17157226.6-EP	21.07.2021	DISPLAY SYSTEM AND DISPLAY METHOD
11	EP17172207.7-DE	24.02.2021	IMPLANTABLE MEDICAL DEVICE, AND INTRABONE WIRELESS COMMUNICATION SYSTEM AND METHODS
12	EP17172207.7-GB	24.02.2021	IMPLANTABLE MEDICAL DEVICE, AND INTRABONE WIRELESS COMMUNICATION SYSTEM AND METHODS
13	EP17179007.4-DE	29.12.2021	MIMO COMMUNICATION APPARATUS AND METHOD OF TRANSMITTING INFORMATION
14	EP17179007.4-GB	29.12.2021	MIMO COMMUNICATION APPARATUS AND METHOD OF TRANSMITTING INFORMATION
15	2018/21269	21.10.2021	QUANTUM KEY DISTRIBUTION METHOD VIA A CARGO NODE
16	2015/14750	09.04.2021	RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING
17	EP16816763A-DE	26.05.2021	RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING
18	EP16816763A-SW	26.05.2021	RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING

Number	Application Number	Registration Date	Title of Invention
19	2017/22855	22.03.2021	ROBOTIC ARM
20	EP17178964.7-GB	01.12.2021	SUPERCAPACITOR ASSEMBLY FOR PORTABLE ELECTRONIC DEVICES, AND METHOD OF OPERATING THE SAME
21	EP17178964.7-DE	01.12.2021	SUPERCAPACITOR ASSEMBLY FOR PORTABLE ELECTRONIC DEVICES, AND METHOD OF OPERATING THE SAME
22	2018/07564	26.07.2021	TROUT SOUP CHIPS
23	US201716473097A	16.03.2021	VISIBLE LIGHT COMMUNICATION USING COLOUR SHIFT KEYING
24	2018/00340	22.11.2021	WEARABLE ARM SUPPORT
25	EP17184292.5-DE	13.01.2021	WIRELESS IDENTIFICATION SYSTEM AND WIRELESS IDENTIFICATION METHOD
26	EP17184292.5-GB	13.01.2021	WIRELESS IDENTIFICATION SYSTEM AND WIRELESS IDENTIFICATION METHOD

Table 7. List of Technologies Available for Licensing in 2021

Technology	Patent Title
 Lighting and Energy Technologies	A LIGHTING SYSTEM THAT CAN ADJUST THE LIGHTING DURATION AND INTENSITY ACOUSTO-OPTIC TRANSDUCER, ARRAY, AND METHOD
 Mechanical and Thermal Technologies	SUPERCAPACITOR ASSEMBLY FOR PORTABLE ELECTRONIC DEVICES, AND METHOD OF OPERATING THE SAME WIRELESS IDENTIFICATION SYSTEM AND WIRELESS IDENTIFICATION METHOD
 Information & Communication Technologies	DATA TRANSMISSION METHOD AND DATA TRANSMISSION DEVICE DISPLAY SYSTEM AND DISPLAY METHOD IMPLANTABLE MEDICAL DEVICE, AND INTRABONE WIRELESS COMMUNICATION SYSTEM AND METHODS MIMO COMMUNICATION APPARATUS AND METHOD OF TRANSMITTING INFORMATION MIMO COMMUNICATION APPARATUS AND METHOD OF TRANSMITTING INFORMATION QUANTUM KEY DISTRIBUTION METHOD VIA A CARGO NODE RANDOM NETWORK CODING IN ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS (OFDMA) NETWORKS USING CONTROL SIGNALING VISIBLE LIGHT COMMUNICATION USING COLOUR SHIFT KEYING WIRELESS IDENTIFICATION SYSTEM AND WIRELESS IDENTIFICATION METHOD
 Health & Food Technologies	A THERAPY SUIT ROBOTIC ARM TROUT SOUP CHIPS WEARABLE ARM SUPPORT
 Construction Materials	CEMENT-BASED COMPOSITIONS WITH IMPROVED RHEOLOGICAL PROPERTIES AND METHODS PROCESSES FOR THEIR MANUFACTURE PRODUCTION THEREOF DESIGN AND MANUFACTURING METHOD FOR A BUILDING SYSTEM IN REGARDS TO STRUCTURAL AND ENVIRONMENTAL FACTORS
 Industrial Applications	A FOLDABLE CARRYING CASE SUITABLE FOR CARRYING ELECTRONIC GADGETS

# ÖzÜ TTO Team



[tto@ozyegin.edu.tr](mailto:tto@ozyegin.edu.tr)





### Dr. İsmail Arı

#### Director of Knowledge, Technology Transfer and Entrepreneurship

Dr. İsmail Arı, who is currently Özyeğin University's TTO and Entrepreneurship Director, served as the Vice President of TÜBİTAK (The Scientific and Technological Research Council of Turkey) and Deputy General Manager of Teknopark İstanbul between 2013-2018. Before these roles, he worked as an Assistant Professor at Özyeğin University in Computer Science Department and a senior researcher at Hewlett Packard Labs in Silicon Valley/USA (2004-2009). He received his PhD degree in 2004 from University of California Santa Cruz, Computer Science Department. His research areas include big data, cloud computing, and networked storage systems. He has international publications and US patents related to these topics. After joining Özyeğin University in 2009 he has received several awards and research grants including IBM Top Faculty Contributor Award, EU Marie Curie IRG (International Reintegration Grant), TÜBİTAK National Young Researcher Career Award, and Rector's Merit Award. Dr. Arı, has also been involved as a lead investigator, consultant and referee in a large numbers of industrial projects within the scope of University Industry Cooperation. Dr. Arı is a member of IEEE, ACM and a founding member of the IBM Cloud Academy.



### Dr. Ceren Kutlu Kaya

#### Grant Projects Manager

She completed her undergraduate studies at Ege University Bioengineering Department in 2008, her master's degree at Hacettepe University Bioengineering Division in 2011, and PhD studies at İstanbul Technical University, NanoScience and NanoEngineering Department in 2020. She started her professional career working as a research assistant and then she transferred to the private sector and prepared and managed national and international grant projects for companies to benefit from the grant incentives. Afterward, she worked on grant projects at İstanbul Şehir University and as a researcher at İstanbul Technical University. She had been a visiting researcher at Edinburgh University for a year and joined OZU TTO team in 2019.



### Nazlı Ceylan

#### University Industry Collaboration Manager

Nazlı Ceylan obtained bachelor's degree Public Finance Department and her master's degree in Accounting and Auditing. Since 2008, she has provided consultancy services about national finance resources to many of the leading companies of Turkey. She has experience in project management and reporting of TUBITAK (TEYDEB& ARDEB), KOSGEB, Development Agencies, National Agency and Ministry projects. Additionally, she joined the "Business Development Mentoring Training" program which was funded by TUBITAK 1601 program and she is still a Mentor.



### Elif Akbaş Şener

#### IPR and Commercialization Manager

Elif Akbaş Şener holds a BS degree from Department of Statistics at Yıldız Technical University in 2011 and also worked as market research analyst at IPSOS during her education. After her graduation, she started to work at NoviCor Technology Partners and provided consulting services for R&D companies and entrepreneurs as Project Manager between 2011-2016. The main roles in this company were domestic and international R&D funds, project management, university-industry collaboration and relationship management in innovation ecosystem. She also focused on strategical activities to gain technology related clients like new customer visit, company promotion, management of bidding and contracting processes and to build customer relationships as Business Development Manager. In the middle of 2016, she joined one of successful start-up in the international area, EVAM Computing Consulting A.Ş. as Sales Operation and Customer Relationship Manager.



### Süha Soydan Entrepreneurship Support Programs Manager

Süha Soydan joined Özyeğin University in 2009. Prior to his current role, he served as the National Admissions Team Manager at Özyeğin University. In November 2016, he joined the Center for Entrepreneurship as Project Manager. Since 2017, he has been serving as Program Manager for the TUBITAK-funded BIGG Acceleration Program at the Fit Startup Factory. He is responsible for coordinating collective efforts to support the entrepreneurial activities of faculty, students, and alumni from Özyeğin University or other higher education institutions, and expanding collaborations in this area. He holds an M.A. in Teaching English as a Foreign Language (TEFL), a five-year BA & MA combined program in English Teacher Education, from Bilkent University. Prior to his graduation, he went on an exchange program in Austria within the scope of the Erasmus Program, and in the US with the Fulbright scholarship. He completed the Master of Arts in Business Administration at Özyeğin University and received an MBA degree in 2014.



### Kübra Yüksel Event Communication and Visual Design Specialist

Kübra Yüksel received her bachelor's degree from Istanbul Technical University, Department of Urban and Regional Planning in 2019. After her graduation, she did a digital marketing internship for a year at Earnado, which a startup. Between 2020 and 2022, she worked as a corporate communication specialist at PROPIN Property Investment Consultancy. She participated on various platforms as a freelancer content editor during and after her undergraduate education. She continues her career as Event Communication and Visual Design Specialist at OzU TTO.



### Nevra Bulut Grant Projects Specialist

She completed her undergraduate and master's degrees at Istanbul Technical University (ITU) Department of Geophysical Engineering in 2013 and 2016, respectively; and she completed her PhD at ITU Eurasia Institute of Earth Sciences in Geodynamics program in 2022. She worked as a research assistant at the Faculty of Mines and Eurasia Institute of Earth Sciences. She also visited the University of Oslo - Norway as a guest PhD researcher. And now she is a member of OzU TTO team as a specialist.



### Zeynep Yalçiner Grant Projects Specialist for Sustainability

Zeynep Yalçiner received her bachelor's degree from Yeditepe University, Department of Political Science and International Relations in 2016. She has completed her master's degree at King's College London, Department of Middle Eastern Studies in 2018. After her graduation, she worked as a research intern at International Crisis Group and emergency intern at UNICEF, respectively. Between 2020-2022, she continued her career as a Disaster Risk Management and Climate Change Specialist at Business Resilience 360. She joined OzU TTO team in November 2022.



### **Müge Erdoğan** **University Industry Collaboration Specialist**

Müge Erdoğan received her BSc degree in 2016 and her MSc degree in 2021 from Yildiz Technical University, Physics Department. During her undergraduate studies, she also completed the associate degree from the programme of OEF (Open Education Faculty) Laboratory and Veterinary Health at Eskisehir Anadolu University. She continues her Ph.D. studies in physics at Yildiz Technical University as of 2021. In the period 2017 - 2018, she worked at the company of Fixa Construction Chemicals (R&D section). In between 2018 and 2019 she worked at Basarili Anatolian High School as a physics teacher. In July 2019, she worked in R&D centre at the company of Hatko as an R&D specialist.



### **Güler Çelik Karabulut** **Intellectual Property Rights Specialist**

Güler Çelik graduated from Bartın University, Department of Molecular Biology and Genetics in 2018. During her high school education, she took part in the analysis department along with his internship at the Food Company Trouw Nutrition Turkey. Between 2018-2019, she worked as a Molecular Biologist at the Intergen Genetic Diagnosis Center. Within the scope of her duty, she undertook the duties of administrative affairs, organization, follow-up and taking part in R&D projects. She joined OzU TTO team in August 2019.



### **Cansu Kabasakal** **Entrepreneurship Support Programs Specialist**

Cansu Kabasakal received her undergraduate degree from the Hacettepe University Department of Biology in 2015 and started to work as a Project Coordinator in ERES Biotechnology in the same year. Afterwards, she worked as Laboratory Assistant at Gazi University and later assisted in the preparation of application files for many support programs as freelance. Between 2019-2021, she worked as an Entrepreneurship Assistant Specialist at Ankara University Technopolis. She continues her career as Entrepreneurship Support Programs Specialist in The Center for Entrepreneurship at Özyeğin University.



## NEWS FROM ÖZÜ TTO

### TRAINING AND EVENTS

In the activities organized by Özü TTO, it was tried to attract interest and awareness to grant programs and shared information that guides researchers during application processes. In 2021 it has been made various brainstorming meetings for project development, info days and a total of 25 trainings were organized.

## BAGEP AWARDS TO 3 ÖZÜ RESEARCHERS

The Science Academy Young Scientists Award Program (BAGEP), which has been organized by the Science Academy since 2013 to encourage promising young academics to conduct quality research with a prestigious scholarship, has found its owners for the 2021 awards. Our researchers Assoc. Prof. Dr. Güney Güven Yapıcı, Assoc. Prof. Dr. Begüm Güney and Assist. Prof. Dr. Naci Saldı, were also entitled to receive an award.

## TRIADIC PATENT FOR THE INVENTION OF WHICH PROF. DR. M. PINAR MENGÜÇ IS AMONG THE DEVELOPERS

The invention of "Flow System For Avoiding Particle Agglomeration", which Prof. Dr. M. Pinar Mengüç who is the director of EÇEM (Energy, Environment and Economy Center) at Özyeğin University is among the developers, was registered by three different international patent offices and took its place among the triadic (triple) patents, which are less than 20 in Turkey. The application has registered the completed patent application at the United States Patent and Trademark Office (USPTO) (US10837604B2), was previously registered by the European Patent Office (EPO) (EP3365627B1) and the Japanese Patent Office (JPO) (JP6559363B2) in cooperation with Özyeğin University and Sabancı University.

The invention developed with Prof. Dr. Ali Koşar and Prof. Dr. Kürşat Şendur of Sabancı University which proposes an innovative system for preventing nanoparticle aggregation in a flow limiter, was thus registered by all three patent offices and became the owner of the prestigious triadic patent. The invention could pave the way for the long-term use of nanoparticles in various industrial applications.

## "BUILDING MATERIAL INSPIRED BY NATURE" BY ASSIST. PROF. DR. ZEYNEP BAŞARAN BUNDUR

When concrete is mentioned, the cold side of cities comes to mind, and the death-resembling side of cement, which is actually a building material, is brought to the fore with the phrase "we are buried in concrete". Assist. Prof. Dr. Zeynep Başaran Bundur has succeeded in transforming concrete into a self-healing and living material by adding living additives to cement with the biomineralization method.

## ÖZÜ AMONG THE CHAMPIONS OF EUROPEAN PATENT REGISTRATION

Özyeğin University became the only university in the list of European Patent Registration Champions for the First Quarter of 2021 published by Patent Effect, sharing the third place with 2 European Patent (EP) registrations.

## EIT HEI INITIATIVE PROJECT ACCEPTED

The "HEIGHT: Higher Education Innovation Growth and Training" project "EIT HEI INITIATIVE Innovation Capacity Building for Higher Education" pilot program, in which Özyeğin University is a partner, was awarded a total of 1.2 million Euros.



## PACHA CHIPS RECEIVED INVESTMENT WITH 2.5 MILLION DOLLARS VALUATION

Guru Sağlıklı Gıda was founded by Asst. Prof. Dr. Aslı Zuluğ and known for its products in the field of healthy nutrition received investment with a valuation of 2.5 million dollars in its first investment round.

The company was established with the support The Fit Startup Factory of Özyeğin University is the producer of Turkey's first natural collagen and protein chips PACHA brand.

Founded with the vision of "healthy food in the light of science", Guru Sağlıklı Gıda creates a food and culture bridge between the past and the future, local and global, with its patented products. The initiative is also supported by TÜBİTAK and the Royal Academy. The first investors of Guru Sağlıklı Gıda were Umur Özal from Galata Business Angels, Işıl Ilgın Ceylanlı and Rıza Kadılar from Arya Women's Investment Platform, and individual informal investors Bedia Erden, Mehmet Uslu, Murat Tortopoğlu and Mustafa Ülker.

## OPTİYOL RECEIVED 810 THOUSAND DOLLARS OF INVESTMENT

Optiyol, a cloud-based new generation route optimization solution, received an investment of 810 thousand dollars in the tour attended by Ford Otosan's corporate venture capital company Driventure, Fark Holding, Dinçer Lojistik, Coşkunöz Holding and Arya Women's Investment Platform. The amount of investment that the domestic enterprise has received so far has reached 1.1 million dollars.

Optiyol was founded by Asst. Prof. Dr. Tuba Gözbaşı and Ozan Gözbaşı who participated in the acceleration program organized by The Fit Startup Factory in 2014 provides a unique SaaS routing solution to many industries from fast-moving consumer goods to retail, e-commerce to transportation, and logistics operations. It digitizes both micro-distribution and macro distribution operations for its customers with specially designed algorithms for the supply chain needs of businesses.

## TURKEY'S FIRST NO-CODE SUMMIT

The Fit Startup Factory, which implemented Turkey's First No-Code Focused Pre-Incubation Program, organized an event series called No-Code Summit on June 11, 2021, with the aim of bringing the no-code world to more entrepreneurs by bringing together the entrepreneurs, productive and startups operating in this field.

In addition to the presentations of entrepreneurs who graduated from The Fit Startup Factory No-Code Pre-Incubation Program at Turkey's first No-Code summit, sessions were held to explore the opportunities awaiting entrepreneurs and new graduates in the no-code ecosystem.

The No-Code Summit event, which lasted approximately 3 hours and was broadcast live, was completed with 6 different sessions and Demo Presentation of 7 startups from the No-Code Pre-Incubation Program. The event was held with the participation of Girisimler.net's Founder Firat Demirel, Codeless' Founder Eren Dik, Composto's Co-founder Halil Burak Yılmaz, Code2's Co-founder Mustafa Sakalsız, Userspots.com's Founder Mustafa Dalcı, Userguiding.com's Head of Revenue Levent Aşkan.



**Address:**

Nişantepe Mah., Orman Sok., 34794  
Çekmeköy/İstanbul

Phone: +90 (216) 564 90 35

Email: [tto@ozyegin.edu.tr](mailto:tto@ozyegin.edu.tr)

ÖZYEGİN  
UNIVERSITY



TECHNOLOGY  
TRANSFER  
OFFICE