

To Strengthen Institutional Repositories: GCRIS Platform and IZTECH Implementation



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Open Repositories (OR2023)
Stellenbosch, South Africa
June 12-15, 2023



izmir Institute of Technology



<https://en.iyte.edu.tr/>





İZMİR

- "İzmir" probably derives from the former Greek name "Smyrna"
- 3500 years of recorded urban history.
- The second largest port and the third city in Türkiye.
- Population 4.455.294
- Mediterranean climate



IZTECH

- Founded in 1992 as a state university
- The only internationally distinguished advanced technical university in Türkiye
- Emphasis on education and research in science and technology
- The biggest campus area in İzmir

7069 Students
660 Academicians

Programs
18 undergraduate
30 master's
20 doctorate

17 Research and
Application Center

159 International
Students from
39 Countries

Education
Language is
100% English

Memberships in International Networks

Being part of the international community is very important..



Pioneer of Open Science in Türkiye

Open Science Movement in IZTECH Milestones

● OpenAIRE Project

- 1st Research Data Management Directory
- COAR Task Force on Supporting Multilingualism and non-English Content in Repositories

● 1st Open Science Policy

2010

2013

2021

2023

2011

2019

2022

● 1st Institutional Repository

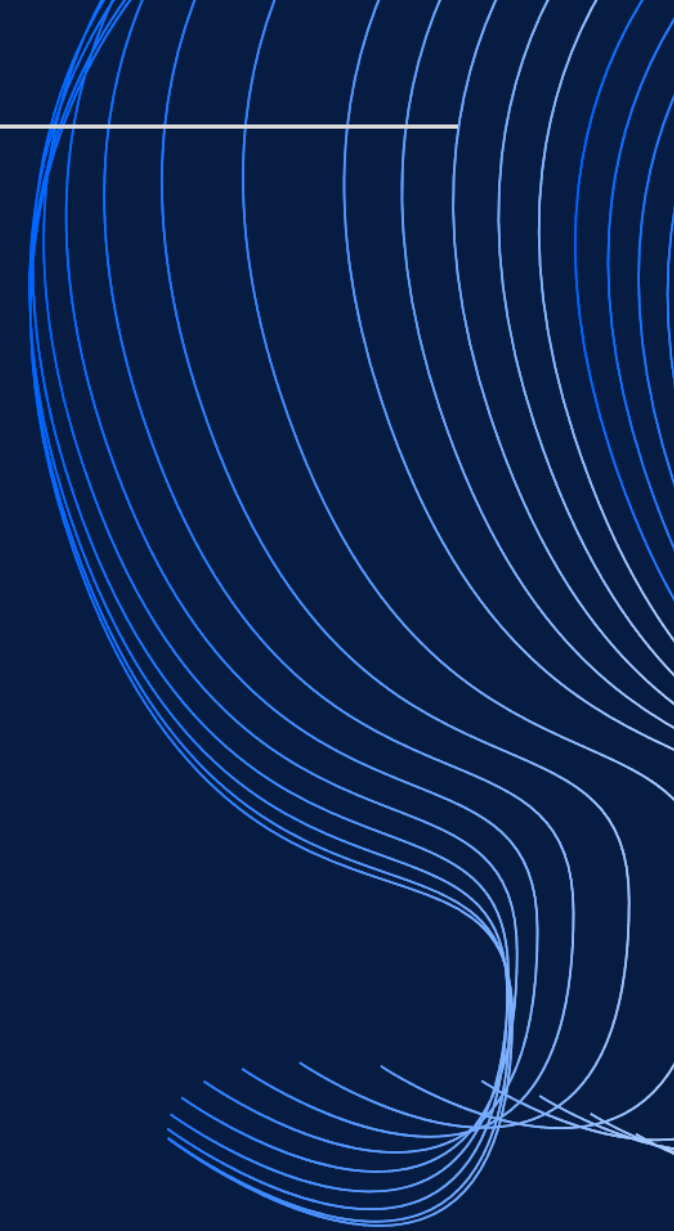
● 1st Open Access Policy

● EOSC building process
● Much more...

- OpenAIRE Executive Board Member (2021-)
- OpenAIRE Research Data Management Working Group
- COAR Repository Assessment Working Group



WHY GCRIS ?



IZTECH we need a new generation Repository...

Because 1

- DSpace was an institutional repository containing only publications.

Because 2

- It wasn't enough and interesting for researchers and institutional administration.

Because 3

- Our administration needed a decision support system.

November 28, 2017

Other **Open Access**

Next Generation Repositories: Behaviours and Technical Recommendations of the COAR Next Generation Repositories Working Group

Rodrigues, Eloy; Bollini, Andrea; Cabezas, Alberto; Castelli, Donatella; Carr, Les; Chan, Leslie; Humphrey, Chuck; Johnson, Rick; Knoth, Petr; Manghi, Paolo; Matizirofa, Lazarus; Perakakis, Pandelis; Schirrwagen, Jochen; Selematsela, Daisy; Shearer, Kathleen; Walk, Paul; Wilcox, David; Yamaji, Kazu

The widespread deployment of repository systems in higher education and research institutions provides the foundation for a distributed, globally networked infrastructure for scholarly communication. However, repository platforms are still using technologies and protocols designed almost twenty years ago, before the boom of the Web and the dominance of Google, social networking, semantic web and ubiquitous mobile devices. This is, in large part, why repositories have not fully realized their potential and function mainly as passive recipients of the final versions of their users' conventionally published research outputs. In order to leverage the value of the repository network, we need to equip it with a wider array of roles and functionalities, which can be enabled through new levels of web-centric interoperability.

In April 2016, COAR launched the Next Generation Repositories Working Group to identify the core functionalities for the next generation of repositories, as well as the architectures and technologies required to implement them. This report presents the results of work by this group over the last 1.5 years.

Our vision is to position repositories as the foundation for a distributed, globally networked infrastructure for scholarly communication, on top of which layers of value added services will be deployed, thereby transforming the system, making it more research-centric, open to and supportive of innovation, while also collectively managed by the scholarly community."

The next generation repository...

- manages and provides access to a wide diversity of resources, including published articles, pre-prints, datasets, working papers, images, software, and so on.
- is resource-centric, making resources the focus of its services and infrastructure
- is a networked repository. Cross-repository connections are established by introducing bi-directional links as a result of an interaction between resources in different repositories, or by overlay services that consume activity metadata exposed by repositories
- is machine-friendly, enabling the development of a wider range of global repository services, with less development effort

2,545

views

1,663

downloads

[See more details...](#)

Indexed in

OpenAIRE

Publication date:

November 28, 2017

DOI:

DOI [10.5281/zenodo.1215014](https://doi.org/10.5281/zenodo.1215014)

Keyword(s):

COAR Next Generation Repositories

Communities:

COAR

License (for files):

[Creative Commons Attribution 4.0 International](#)

Versions

Version 1

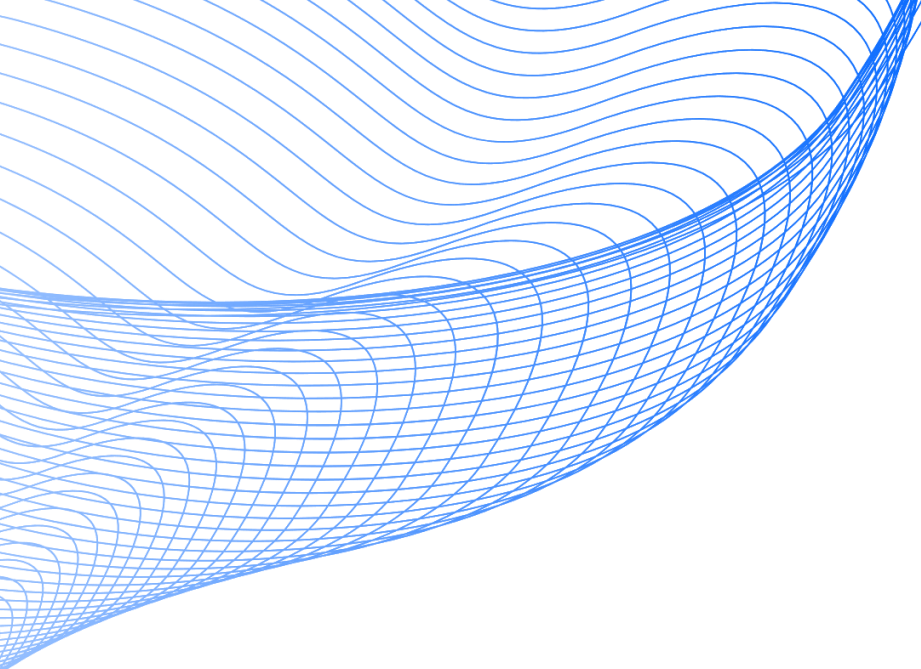
Nov 28, 2017

[10.5281/zenodo.1215014](https://doi.org/10.5281/zenodo.1215014)

COAR

Next Generation Repositories recommendations





What to expect of the next generation Repositories...

- manages and provides access to a wide diversity of resources, including published articles, pre-prints, datasets, working papers, images, software, and so on.

- is resource-centric, making resources the focus of its services and infrastructure

- is a networked repository. Cross-repository connections are established by introducing bi-directional links as a result of an interaction between resources in different repositories, or by overlay services that consume activity metadata exposed by repositories

- is machine-friendly, enabling the development of a wider range of global repository services, with less development effort

- is active and supports versioning, commenting, updating and linking across resources



GCRIS Features and beyond...

- **Institutional Repository**

2. Research Information Systems

3. Decision Support System



New System Development

Collaboration

- The existing system did not meet our needs and a new system was designed.
- GCRIS is a RIS that was developed in Türkiye. IZTECH Management collaborated with Technopark company Research Ecosystems.
- GCRIS started to be developed as a result of the strategic cooperation agreement signed by the IZTECH Senate.
- IZTECH Library took a role in the development of the system with feedback.



GCRIS Development Process & Technical Features

- GCRIS is based on the DSpace-CRIS 6.3 platform.
- It was developed in response to the need for a RIS that met international standards.
- It is designed to be easy to use and maintain.
- It is scalable and can be easily adapted to the systems.
- GCRIS is a valuable tool for researchers, administrators, and policymakers.

gcris.iyte.edu.tr/?locale=en

GCRIS Home Collections Research Outputs Researchers Organizations Projects Reports Awards Equipments Help Sign on to:

Türkçe English

IYTE GCRIS Database

GCRIS Database is a research and performance evaluation information system that enables searching and discovering all research outputs within the Izmir Institute of Technology research ecosystem, associating these outputs with researchers, providing advanced reporting with different metrics, and supporting corporate strategic decisions. Besides, it is an institutional repository at international standards that brings together and organizes all kinds of academic outputs related to research activities and allows sharing with the whole scientific world by providing long-term preservation.

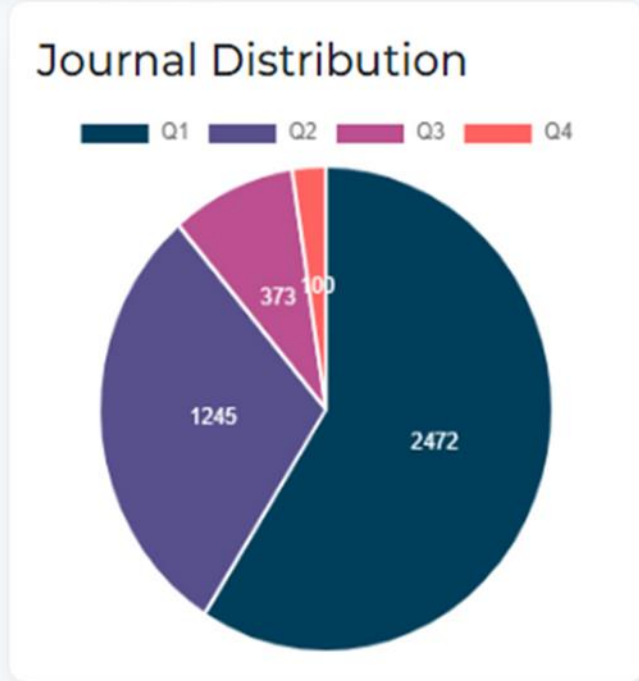
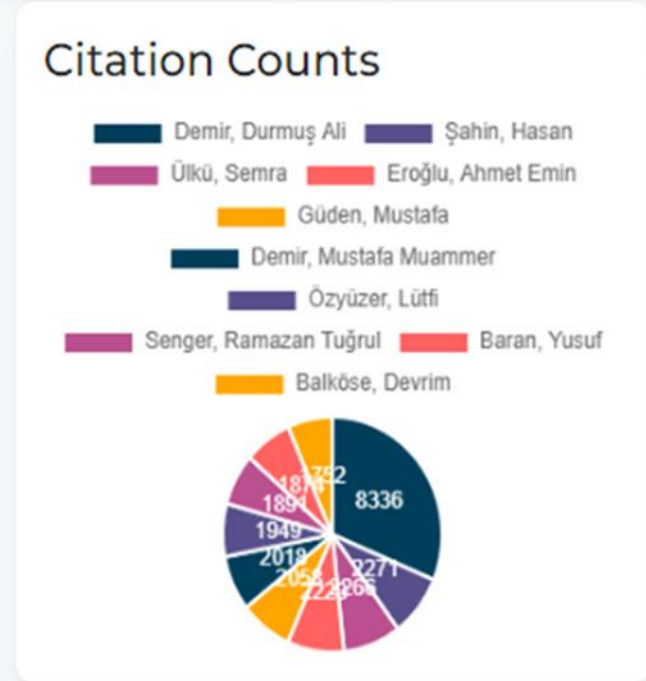
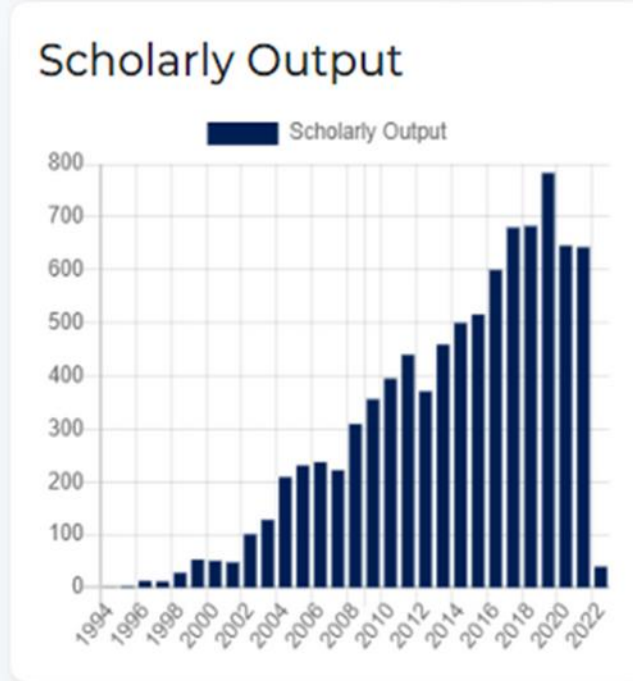
Search [] [] All []

Publications **8714**

Organisations **28**

Researchers **265**

Projects **1002**



GCRIS



GCRIS
Widening Your Research

<https://gcris.iyte.edu.tr/>





Publication
9846

Project
1082

Patent
17

GCRIS

Equipment
309

Dataset
4

Thesis
2628

Researcher
453

Award
176





Baran, Yusuf

Print

Variants	Baran, Y, Baran, Y.
Main Affiliation	04.03, Department of Molecular Biology and Genetics
Email	yusufbaran@iyte.edu.tr
Other Emails	ybaran@gmail.com
ORCID	0000-0002-1056-4673
Scopus Author ID	9636164400
WoS Researcher ID	F-8535-2012
Google Scholar	Google Scholar
YÖK Academic	YÖK Academic
Website	Web Site
Documents	CV
Status	Current Staff

Bibliometrics

Sustainable Development Goals Report Points



Scopus

98 Documents	3316 Citations	31 h-index	307 Co-authors
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188 Documents	5491 / 3457 Citations <small>All / Since 2016</small>	38 / 26 h-index <small>All / Since 2016</small>	75 / 50 i10-index <small>All / Since 2016</small>	0 Co-authors
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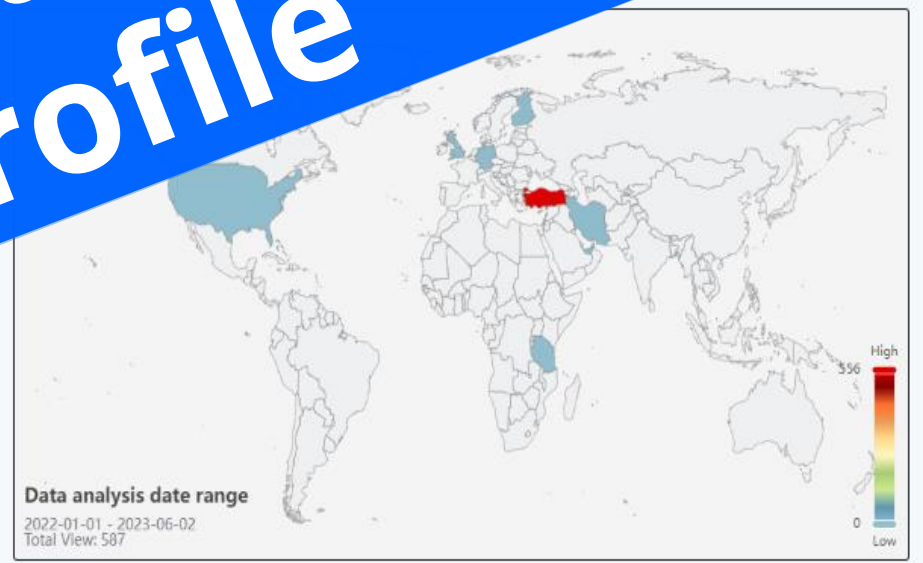
Citation Per Year

Interests

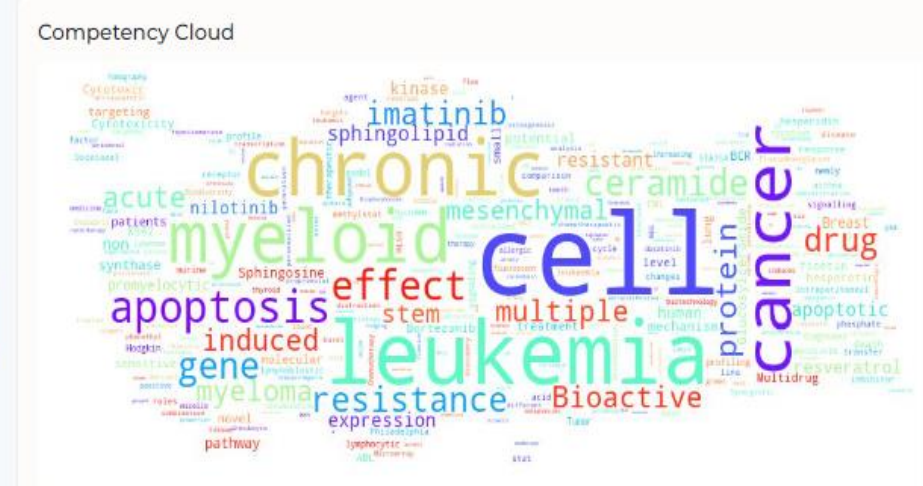
The numbers and metrics below are limited only to the scholarly outputs generated in this institute.

IYTE 154 Scholarly Output	2946 Citation Count	1.31 Field Weight
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Researcher Profile



- Publications
- Supervised Theses
- Projects
- Affiliations
- Educations
- Biography
- Competency Cloud
- Research Interests
- Awards





Overall Research Performance

Baran, Yusuf



Print

154

Scholarly Output

88

Journal Articles

2946

Citations

633.3K/169.4K

View / Download

29

H-Index

55

I10-Index

1.31

Field Weighted Citation Impact

1.75

Average Prestige Per Publication

12

Supervised MScTheses

3

Supervised PhDTheses

0

Patents

9

Projects

19.13

Citations per Publication

52

Distinct Journals

48

Distinct Journal Categories

€920.847

0 €

Total Funding

145

Open Access Count

Publication and index related metrics Scopus data were used to calculate.

Publications

Supervised Theses

Projects

Affiliations

Educations

Biography

Competency Cloud

Research Interests

Awards

Articles (86) Conferences (60) Book / Book Chapters (1) Others (4)

Publications

# ↑	Issue Date ↑	Title ↑	Author(s) ↑	Q Dist. ↑	Cited ↑
1	2014	Bioactive, functional and edible film-forming properties of isolated hazelnut (<i>Corylus avellana</i> L.) meal proteins	Aydemir, Levent Yurdaer; Adan Gökbulut, Aysun; Baran, Yusuf; et. all.	Q1	45
2	2016	Molecular mechanisms of drug resistance and its reversal in cancer	Kartal Yandım, Melis; Adan Gökbulut, Aysun; Baran, Yusuf;	Q1	214
3	2015	Revealing genome-wide mRNA and microRNA expression patterns in leukemic cells highlighted "hsa-miR-2278" as a tumor suppressor for regain of chemotherapeutic imatinib response due to targeting STAT5A	Tezcanlı Kaymaz, Burçin; Selvi Günel, Nur; Ceyhan, Metin; et. all.	Q1	22
4	2010	Nilotinib significantly induces apoptosis in imatinib resistant K562 cells with wild-type BCR-ABL, as effectively as in parental sensitive counterparts	Ekiz, Hüseyin Atakan; Can, Geylani; Gündüz, Ufuk; et. all.	Q1	7

Journals

Print Export CSV

Journal ↑	Count ↑
Haematologica	34
Leukemia Research	9
Hematology	8
Tumor Biology	6
EJC Supplements	5
Leukemia and Lymphoma	4
Biomedicine and Pharmacotherapy	4
Journal of Cancer Research and Clinical Oncology	4
Critical Reviews in Biotechnology	3
Archives of Medical Research	3

1 2 3 4 5 > >>

GCRIS:

Researcher Analytics

Scholarly Output

Print



Q Distribution

Print



Researcher Dashboard Reports

Export as CSV

Print

Copy URL

Parameters:

Articles x WoS Citation Count x Scopus citation Count x Q1 Distribution x

Year Range:

2018

2023

Refresh

#	Id	Name	Department	Articles	Q1 Distribution	WoS Citation Count	Scopus citation Count
1	rp00064	Şahin, Hasan	04.04. Department of Photonics	60	50	3406	3720
2	rp00122	Demir, Mustafa Muammer	03.09. Department of Materials Science and Engineering	50	31	2529	2874
3	rp00082	Baba, Alper	03.03. Department of Civil Engineering	47	22	858	1039
4	rp00609	Yağmucukardeş, Mehmet	04.04. Department of Photonics	34	28	908	997
5	rp00036	Bedir, Erdal	03.01. Department of Bioengineering	33	29	223	261
	rp01781	Gören, Ayşegül	03.07. Department of	31	18	168	260

GCRIS: Dashboard Reports

Organization Charts

Parameter:

Scholarly Output

Organizations:

04. Faculty of Science x 02. Faculty of Architecture x 03. Faculty of Engineering x

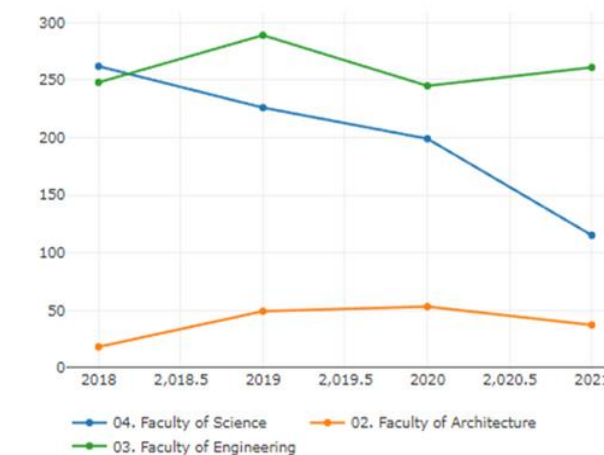
Year Range:

2018

2022

Refresh

Scholarly Output



#	Organization	Parameter	Total Count
1	01. Izmir Institute of Technology	Scholarly Output	802
2	02. Faculty of Architecture	Scholarly Output	157
3	02.01. Department of Architectural Restoration	Scholarly Output	1043



Institutions in Türkiye using GCRIS



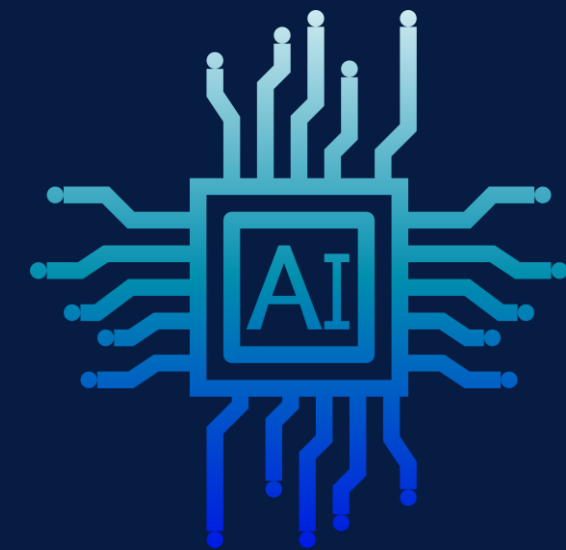
GCRIS Outlook



Upgrade to DSpace
CRIS 7.0



ORCID Integration



Much more AI &
Machine learning

Publications
9864



Organisations
29



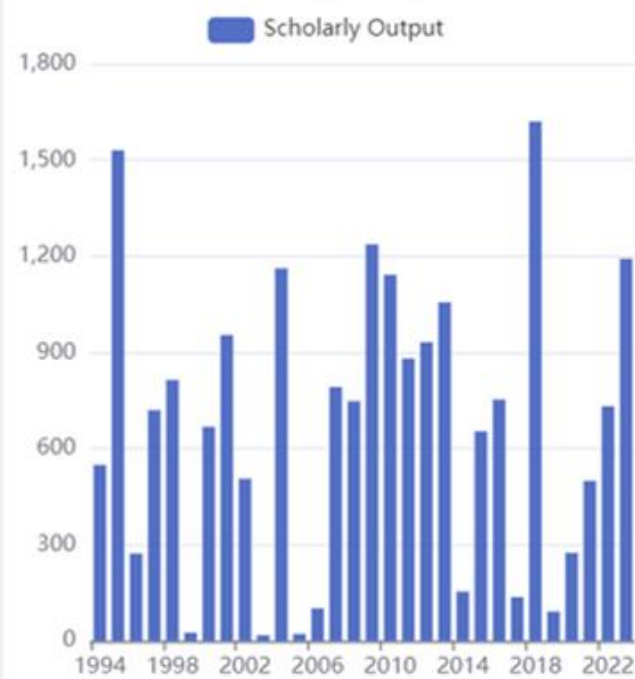
Researchers
453



Projects
1062



Scholarly Output



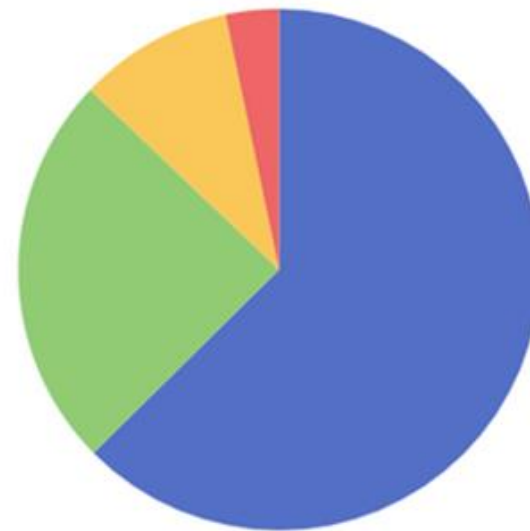
Citation Counts

Hasan Şahin Yusuf Baran
 Mustafa Muammer Demir
 Ahmet Emin Eroğlu Ramazan Tuğrul Senger
 Mustafa Güden Lütfi Özyüzer
 Gökmen Tayfur Ahmet Yemencioğlu
 Funda Tihminlioğlu



Journal Distribution

Q1 Q2 Q3 Q4



Home Page

The new interface

new design, dspace-angular and more friendly use...

Sustainable Development Goals Report Points



2

Research Products



2

Research Products



23

Research Products

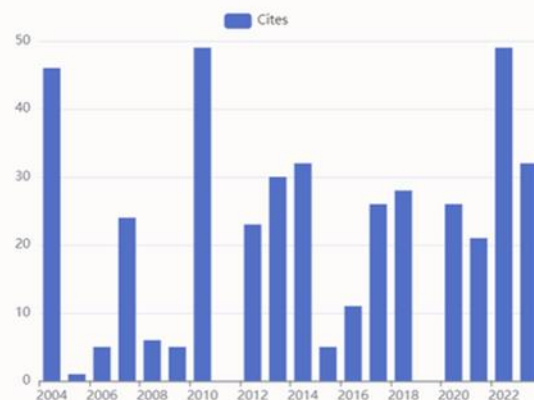
Bibliometrics SDGs



Google Scholar Bibliometrics

Documents: 70
 Citations: 367 / 229 (All / Since 2016)
 h-index: 10 / 8 (All / Since 2016)
 i10-index: 11 / 6 (All / Since 2016)
 Co-authors: 20

Citation Per Year



Interests

- Embedded systems
- Fault-tolerance
- Software testing
- Software reliability

Publications

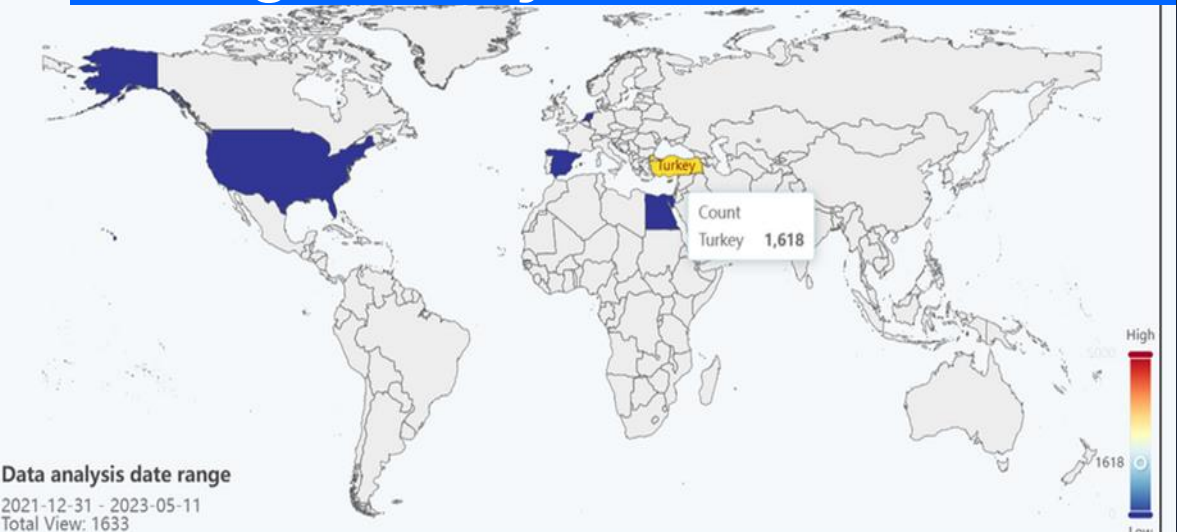
Articles (16) Conferences (30) Book / Book Chapters (0) Others (4)

Publications

#	Issue Date	Title	Author(s)	Q Dist.	Cited
1	2005	Gerçek-zamanlı uyarıamacı görev planlaması tekniğinin RT-Linux'ta uygulanması	Ayav, Tolga; Yılmaz, Sinan;		0
2	2020	Mutant selection by using Fourier expansion	Takan, Savaş; Ayav, Tolga;	Q4	0
3	2021	Otomotiv endüstrisinde zamanlama mimarilerinin değerlendirilmesi	Saydam, Berkay; Tos, Uras;		0
4	2017	Ensuring performance and provider profit through data replication in cloud systems	Mokadem, Riad; Hameurlain, Abdelkader;	Q2	24

Publications

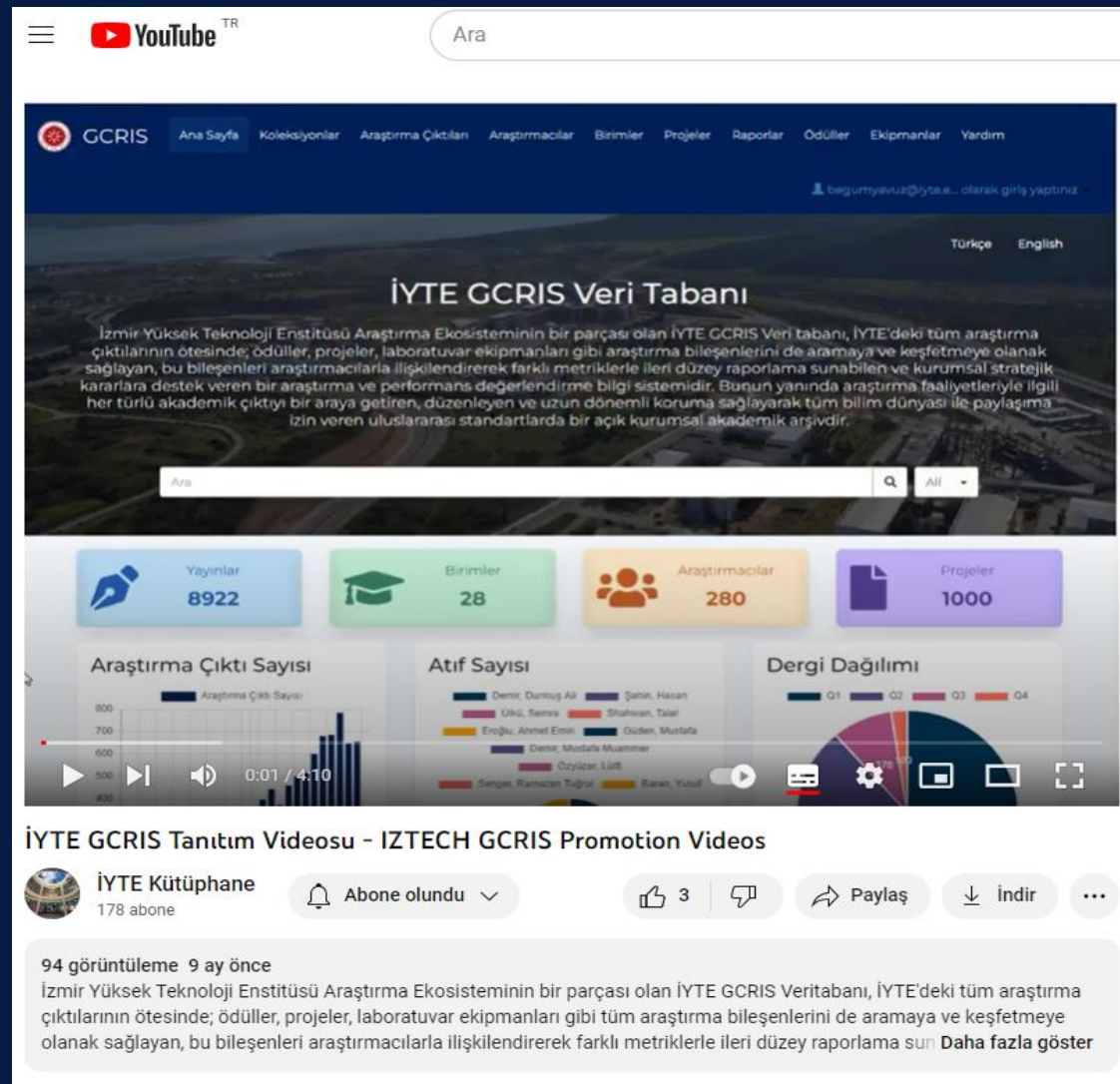
Google Analytics Visitor Traffic



IZTECH IMPLEMENTATION



Awareness of the New System



İYTE GCRIS Veri Tabanı

İzmir Yüksek Teknoloji Enstitüsü Araştırma Ekosisteminin bir parçası olan İYTE GCRIS Veri tabanı, İYTE'deki tüm araştırma çıktılarının ötesinde; ödüller, projeler, laboratuvar ekipmanları gibi araştırma bileşenlerini de aramaya ve keşfetmeye olanak sağlayan, bu bileşenleri araştırmacılarla ilişkilendirerek farklı metriklerle ileri düzey raporlama sunabilen ve kurumsal stratejik kararlara destek veren bir araştırma ve performans değerlendirme bilgi sistemidir. Bunun yanında araştırma faaliyetleriyle ilgili her türlü akademik çıktıyı bir araya getiren, düzenleyen ve uzun dönemli koruma sağlayarak tüm bilim dünyası ile paylaşımına izin veren uluslararası standartlarda bir açık kurumsal akademik arşivdir.

Yayımlar 8922 **Birimler** 28 **Araştırmacılar** 280 **Projeler** 1000

Araştırma Çıktı Sayısı **Atıf Sayısı** **Dergi Dağılımı**

İYTE GCRIS Tanıtım Videosu - IZTECH GCRIS Promotion Videos

İYTE Kütüphane 178 abone

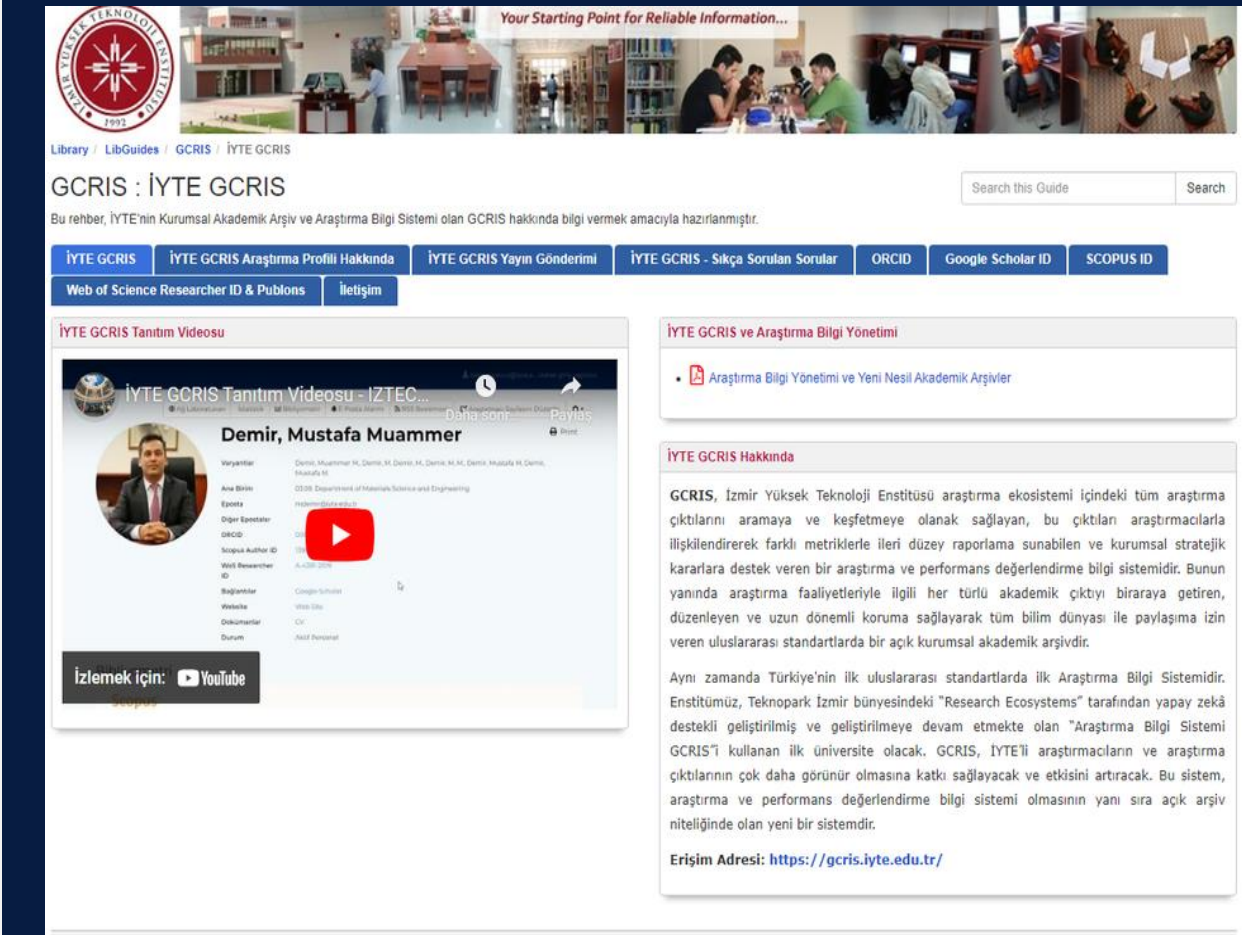
Abone olundu

3 Paylaş İndir

94 görüntüleme 9 ay önce

İzmir Yüksek Teknoloji Enstitüsü Araştırma Ekosisteminin bir parçası olan İYTE GCRIS Veritabanı, İYTE'deki tüm araştırma çıktılarının ötesinde; ödüller, projeler, laboratuvar ekipmanları gibi tüm araştırma bileşenlerini de aramaya ve keşfetmeye olanak sağlayan, bu bileşenleri araştırmacılarla ilişkilendirerek farklı metriklerle ileri düzey raporlama sun **Daha fazla göster**

- Vice Rector and Deans focus group (established 2021)
- Departments presentations
- GCRIS video and guide



GCRIS : İYTE GCRIS

Bu rehber, İYTE'nin Kurumsal Akademik Arşiv ve Araştırma Bilgi Sistemi olan GCRIS hakkında bilgi vermek amacıyla hazırlanmıştır.

İYTE GCRIS **İYTE GCRIS Araştırma Profili Hakkında** **İYTE GCRIS Yayın Gönderimi** **İYTE GCRIS - Sıkça Sorulan Sorular** **ORCID** **Google Scholar ID** **SCOPUS ID**

Web of Science Researcher ID & Publons **İletişim**

İYTE GCRIS Tanıtım Videosu

İYTE GCRIS ve Araştırma Bilgi Yönetimi

- Araştırma Bilgi Yönetimi ve Yeni Nesil Akademik Arşivler

İYTE GCRIS Hakkında

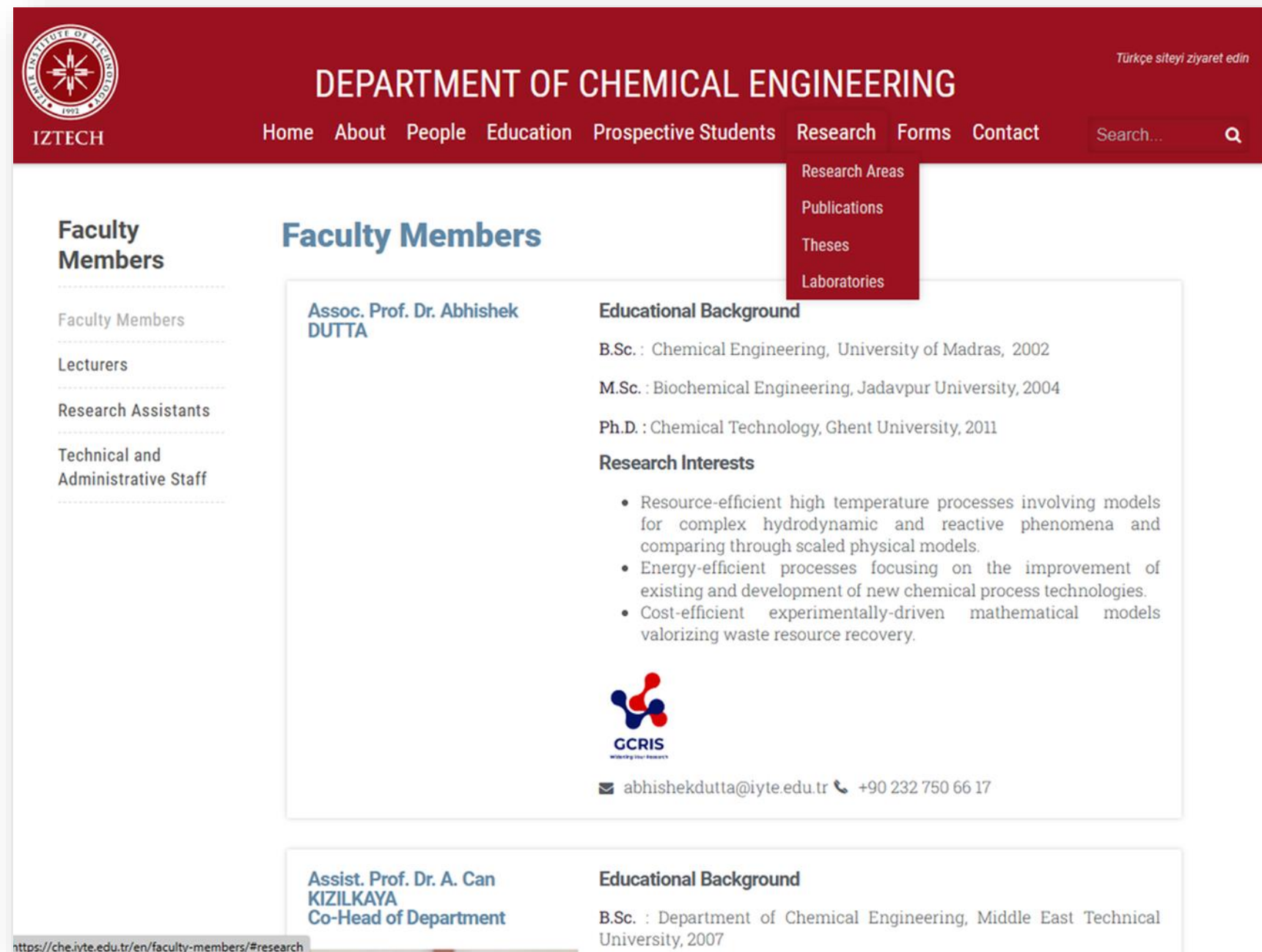
GCRIS, İzmir Yüksek Teknoloji Enstitüsü araştırma ekosistemi içindeki tüm araştırma çıktıları aramaya ve keşfetmeye olanak sağlayan, bu çıktılar araştırmacılarla ilişkilendirerek farklı metriklerle ileri düzey raporlama sunabilen ve kurumsal stratejik kararlara destek veren bir araştırma ve performans değerlendirme bilgi sistemidir. Bunun yanında araştırma faaliyetleriyle ilgili her türlü akademik çıktıyı bir araya getiren, düzenleyen ve uzun dönemli koruma sağlayarak tüm bilim dünyası ile paylaşımına izin veren uluslararası standartlarda bir açık kurumsal akademik arşivdir.

Aynı zamanda Türkiye'nin ilk uluslararası standartlarda ilk Araştırma Bilgi Sistemidir. Enstitümüz, Teknopark İzmir bünyesindeki "Research Ecosystems" tarafından yapay zeka desteği geliştirilmiş ve geliştirilmeye devam etmekte olan "Araştırma Bilgi Sistemi GCRIS"i kullanan ilk üniversite olacak. GCRIS, İYTE'li araştırmacıların ve araştırma çıktılarının çok daha görünür olmasına katkı sağlayacak ve etkisini artıracak. Bu sistem, araştırma ve performans değerlendirme bilgi sistemi olmasının yanı sıra açık arşiv niteliğinde olan yeni bir sistemdir.

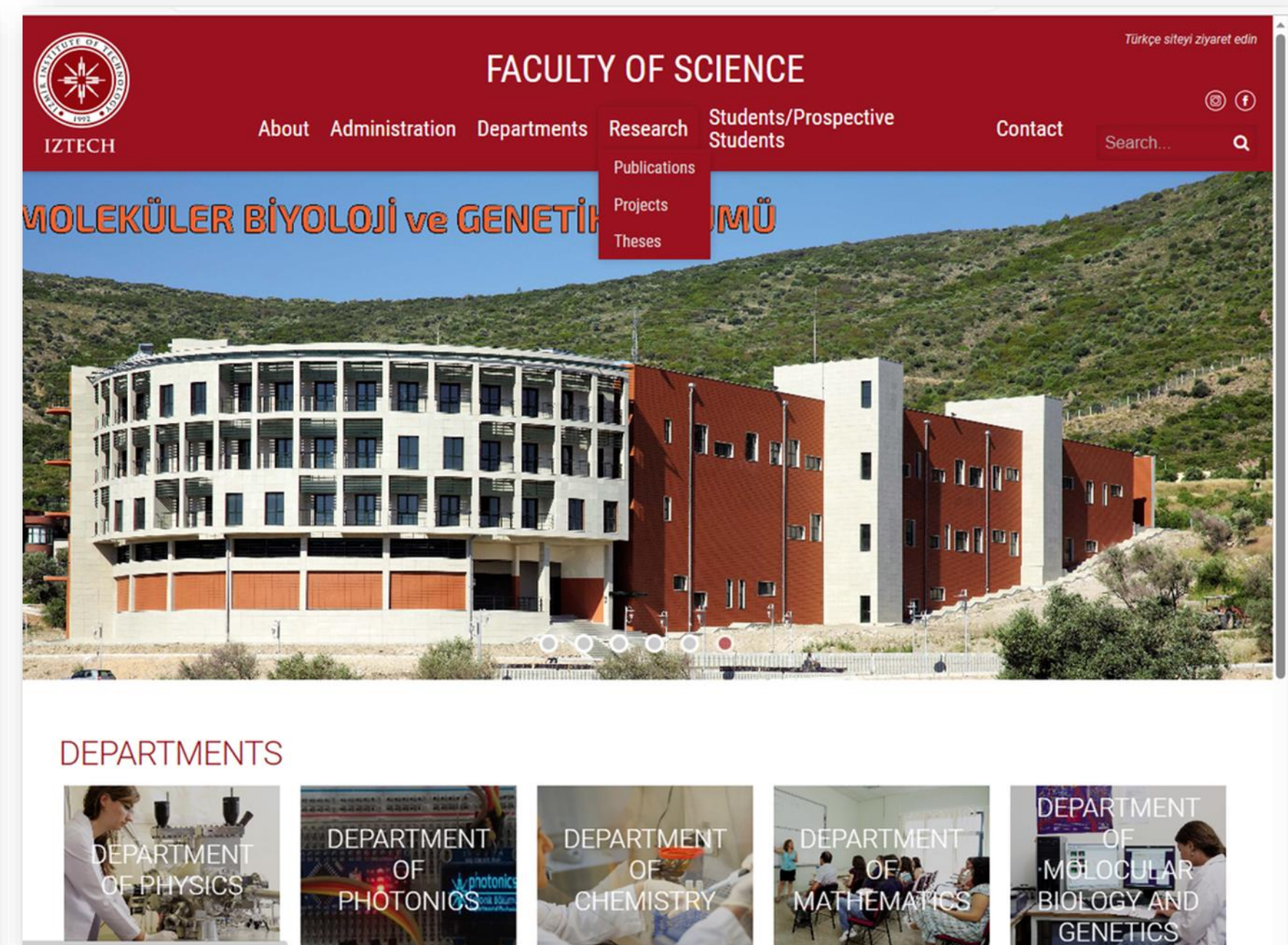
Erişim Adresi: <https://gcris.iyte.edu.tr/>

Dissemination Efforts

Faculty and Department Web Pages



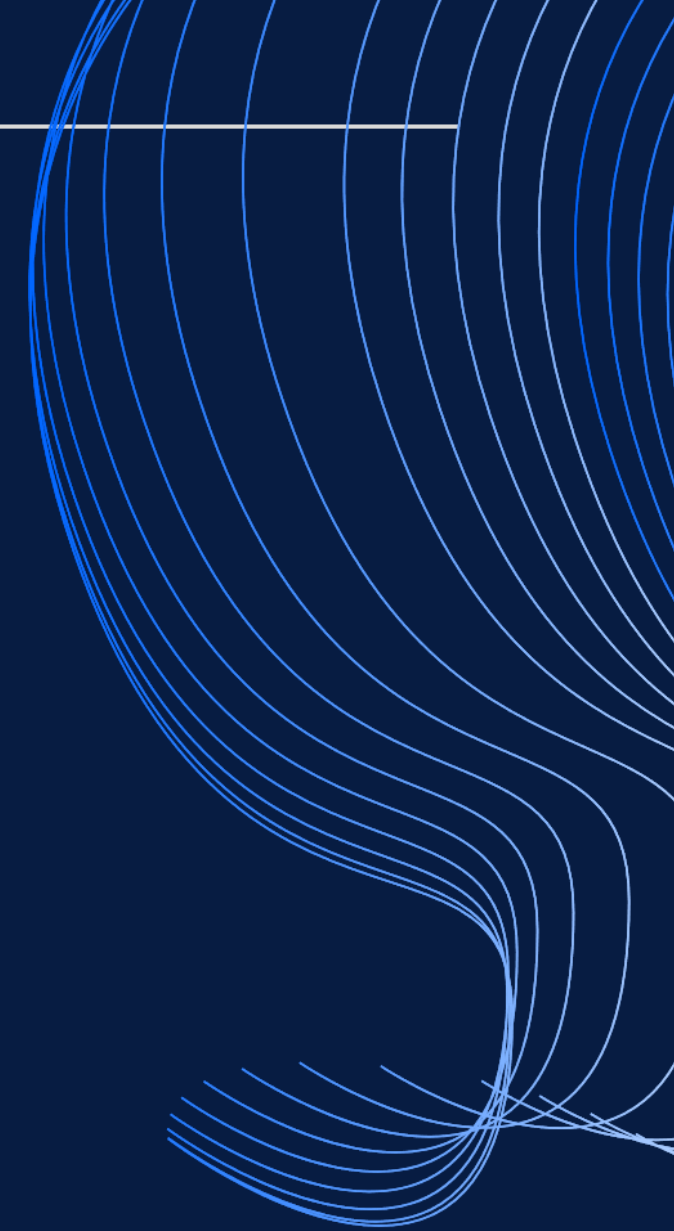
The screenshot shows the website for the Department of Chemical Engineering at IZTECH. The header is dark red with the IZTECH logo on the left and the text "DEPARTMENT OF CHEMICAL ENGINEERING" in the center. Navigation links include Home, About, People, Education, Prospective Students, Research, Forms, and Contact. A search bar is on the right. A dropdown menu for "Research" is open, showing options for Research Areas, Publications, Theses, and Laboratories. The main content area features a "Faculty Members" section with a sidebar on the left listing categories like Faculty Members, Lecturers, Research Assistants, and Technical and Administrative Staff. The first faculty member profile is for Assoc. Prof. Dr. Abhishek DUTTA, including his educational background (B.Sc. in Chemical Engineering from University of Madras, 2002; M.Sc. in Biochemical Engineering from Jadavpur University, 2004; Ph.D. in Chemical Technology from Ghent University, 2011) and research interests in high-temperature processes, energy-efficient processes, and waste resource recovery. Contact information for GCRIS and an email address is provided. The second profile is for Assist. Prof. Dr. A. Can KIZILKAYA, Co-Head of Department, with a B.Sc. from Middle East Technical University, 2007.



The screenshot shows the website for the Faculty of Science at IZTECH. The header is dark red with the IZTECH logo on the left and "FACULTY OF SCIENCE" in the center. Navigation links include About, Administration, Departments, Research, Students/Prospective Students, and Contact. A search bar is on the right. A dropdown menu for "Research" is open, showing options for Publications, Projects, and Theses. The main content area features a large banner image of a modern building with the text "MOLEKÜLER BİYOLOJİ ve GENETİK MÜ" overlaid. Below the banner is a "DEPARTMENTS" section with five thumbnail images representing different departments: Department of Physics, Department of Photonics, Department of Chemistry, Department of Mathematics, and Department of Molecular Biology and Genetics.



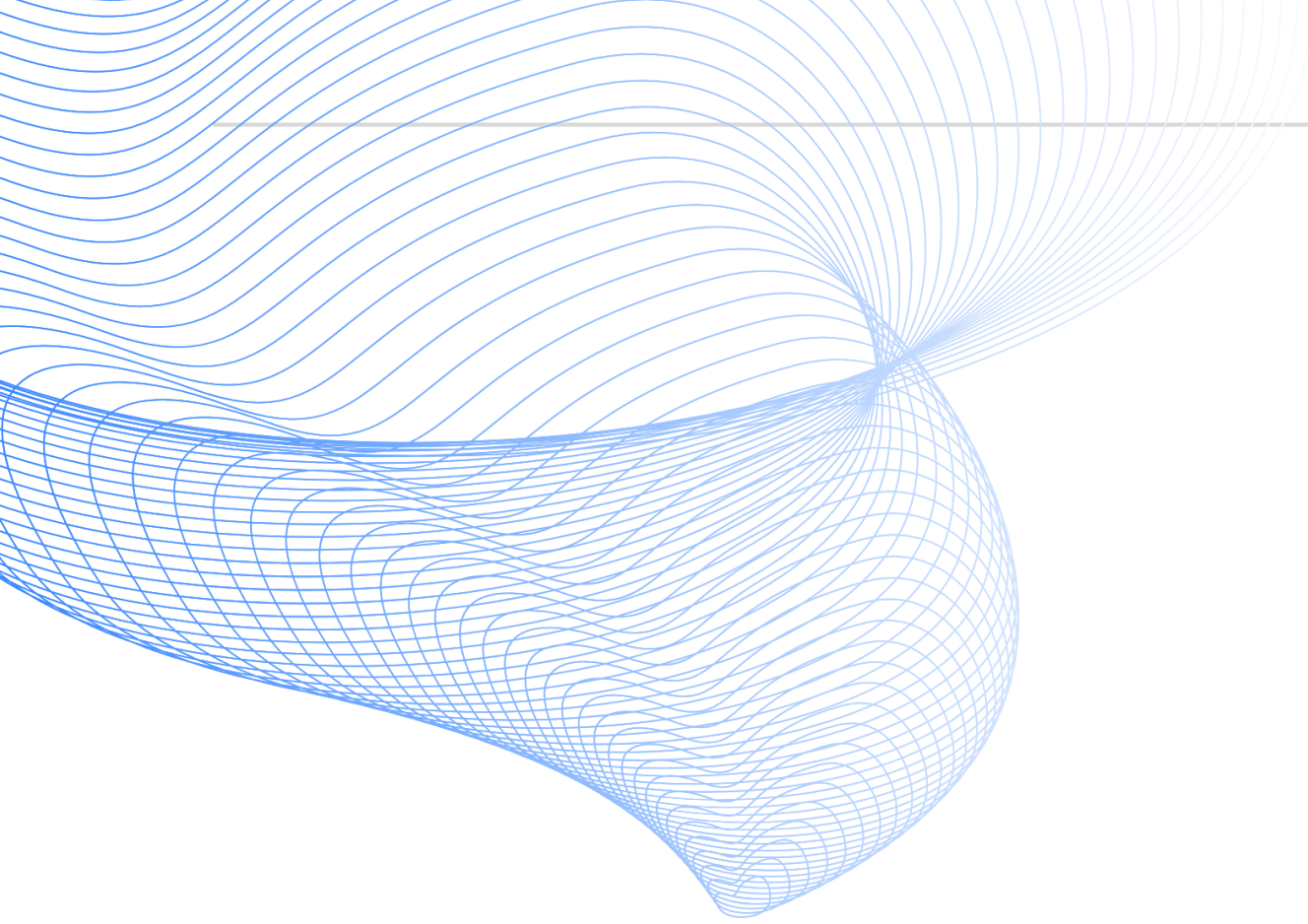
BENEFITS



Benefits of migrating to GCRIS

- Increased visibility for the institution's publications, researchers, and departments (by monitoring the number of citations, downloads. etc.)
- Monitoring and track all the research outputs
- Automatically update researchers' profiles with the most recent publications, which reduces the administrative burden on the researcher, allowing them to concentrate on their work
- Support the institution fulfill its reporting obligations
- Provide business intelligence for the institution and assist in the development of its strategies





Conclusion

1

GCRIS is a valuable tool for our institution.

2

GCRIS helps our institution to improve its research performance and visibility.

3

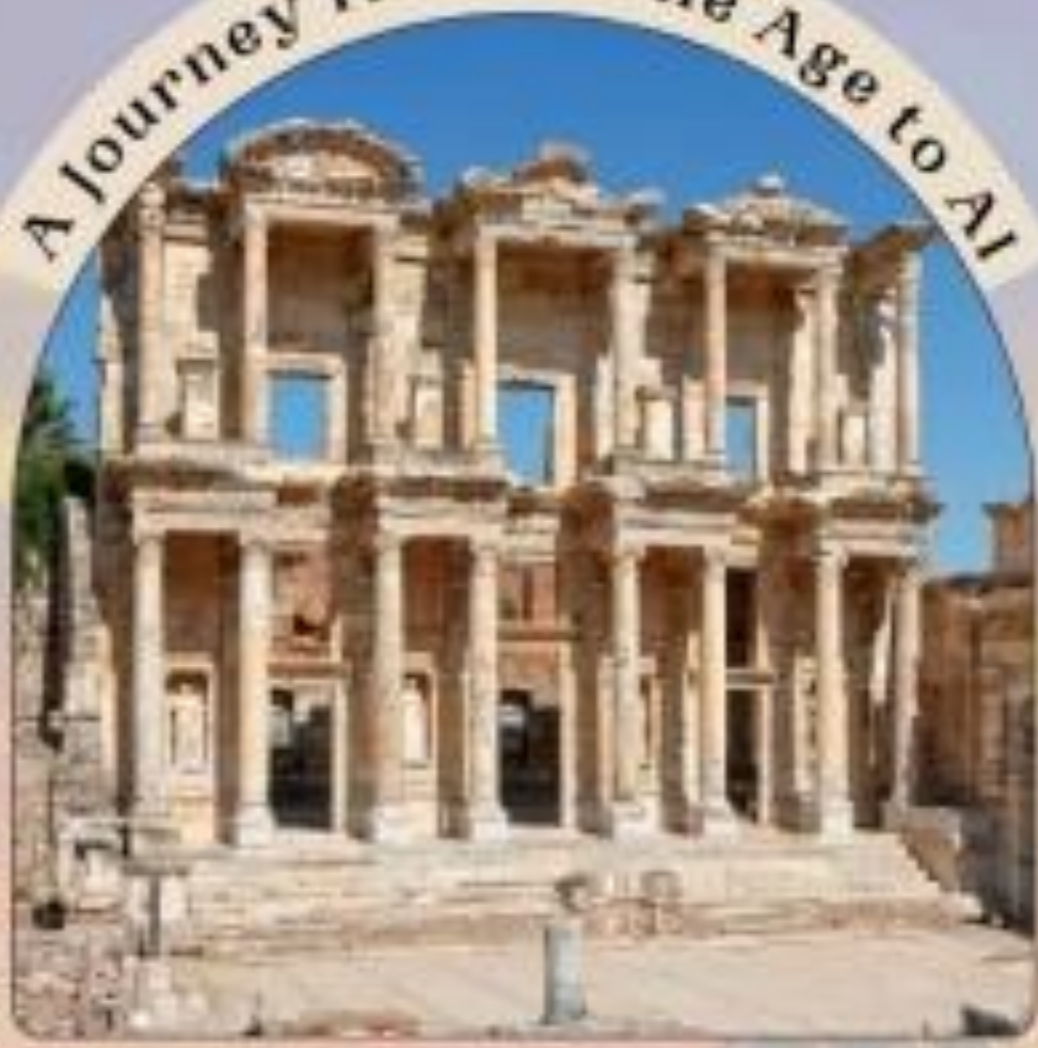
GCRIS is a key part of the IZTECH research ecosystem.

4

GCRIS is a valuable tool for researchers, administrators, and policymakers.



A Journey from Stone Age to AI



Libraries as Transformers

IATUL FALL SEMINAR 2023

Save the Date

4-7 September 2023
İzmir, Türkiye



International Association
of University Libraries

Seminar Website:
<https://libguides.iyte.edu.tr/iatulfall2023>



New Technologies and Best Practices
Ranking of University Libraries
Transformative Agreements
Publishing Models



Artificial Intelligence and Libraries
Research Data Management & Impact
Open Science & EOISC



Gültekin GÜRDAL

Library Director



Begüm YAVUZ

Data Steward



Ayşen BİNEN

Librarian



Arda YIKAMACI

Full stack developer

Thank you!

Authors



Contact Us

openaccess@iyte.edu.tr