



جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

عمادة خدمة المجتمع والتنمية المستدامة
Deanship of Community Service and Sustainable Development



SDG 4

Quality Education

Sustainable
Development Report

2021-2022



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1. IAU agreement with PNU

Imam Abdulrahman Bin Faisal University concluded a cooperation agreement with Princess Noura University, Riyadh with the aim of exchanging performance indicators for benchmarking in the field of quality and academic accreditation; To contribute to improving the quality of educational and research services between the two universities.



[أبرمت #جامعة الإمام عبد الرحمن بن فيصل اتفاقية تعاون مع جامعة PNU KSA @ PNU KSA](https://twitter.com/IAU_KSA)
 بهدف تبادل مؤشرات الأداء للمقارنة المرجعية في مجال الجودة والاعتماد الأكاديمي؛ للمساهمة في الارتقاء بجودة الخدمات التعليمية والبحثية بين الجامعتين خلال أعمال اليوم الثاني من #المؤتمر والمعرض الدولي للتعليم
<https://t.co/ZDDMcTfDIq> / Twitter

2. Deanship of E-Learning and Distance Learning Receives award

The Deanship of E-Learning and Distance Learning at Imam Abdulrahman Bin Faisal University received the Blackboard Award for Teaching and Learning in the Middle East.



[on Twitter: "حققت عمادة التعليم الإلكتروني والتعلم عن بُعد بـ" جامعة الإمام عبد الرحمن بن فيصل Anthology Together Middle East #جامعة الإمام عبد الرحمن بن فيصل جائزة البلاك بورد للتعليم والتعلم بالشرق الأوسط ، عن فئة: التميز في المشاركة المجتمعية ، وتسلمت الجائزة عميدة العمادة د. منيرة المهاشير 2022 . https://t.co/cTkyGmaqP5"](https://twitter.com/IAU_SDR)
[/Twitter](#)

2.1. Anthology Together Middle East In the category of: Excellence in Community Engagement 2022

Imam Abdulrahman bin Faisal University-Deanship of eLearning, has been named a winner of Excellence in Community Engagement Award 2022 at The Blackboard Teaching & Learning Conference Middle East (TLC ME): Anthology Together Middle East 2022, for launching a project that showcases the development of interactive e-courses on technology-enhanced level while adopting quality standards, and making cost effective informed decisions based on insights from the eLearning Data Intelligence and analytics Dashboard.

Anthology Together Middle East (#ATME22) introduced an expanded agenda, which Dr. Muneerah B. Almahasheer (Dean) of the Deanship of eLearning took part in and presented "Reshaping crafted e-Courses Based-on Anthology Educational Insights to Empower Students' Learning Experience" 18 October 2022

The idea of the current success story expedites the development of eCourses to include 432 e-courses in 9 colleges and 18 different academic programs. This project is the anchor of IAU's shift to blended learning best practices, it supports massive enrollment of students, cost savings initiatives, faculty members support, shortage of instructional designers and experienced faculty members.

To ensure the improvement of the learning experience of this promising project, the deanship developed an eLearning Data Intelligence and analytics Dashboard. The IAU eLearning deanship and Anthology/Blackboard teams developed 8 dashboards (with 405 measures, 17 perspectives and 3 data cubes) to enhance courses' design and development and provide insights to take informed decisions for improving teaching and students' engagements and faculty excellence. The insights from data analytics can lead to more informed decisions that can improve our e-courses design and

development process, as well as enhance the learning experience for our students and help increase their engagement.

2.2. IAU's Deanship of eLearning Wins Blackboard Catalyst Award 2021 for Leading Change



Staff from Deanship of eLearning have been named winners of the Blackboard Catalyst Award for Leading Change, which recognizes campuses that have developed and implemented high-impact educational strategies that scale. Awardees will have developed practices and/or technologies that have had a measurable effect on learning outcomes, student performance, or academic progression.

Founded in 2005, the annual Catalyst Awards recognize and honor innovation and excellence in the Blackboard global community of practice, where millions of educators and learners work every day to redefine what is possible when leveraging technology. Winners are selected by a cross-functional team of Blackboard experts and represent the very best in their field.

"We're pleased to honor this year's Blackboard Catalyst Award winners for their commitment to improving the educational experience for all learners through EdTech and sharing these insights with the broader community," said Lee Blakemore, Chief

Client Officer and President, Global Markets at Blackboard. "We're proud to partner with institutions who are innovating to advance student success."

Imam Abdulrahman Bin Faisal University - Saudi Arabia: Dr. Muneerah B. Almahasheer (Dean) and the Deanship of eLearning team were announced alongside other Blackboard Catalyst Award winners during BbWorld 2021, Blackboard's annual user conference that was held virtually over a two-week period, July 13 - 15 and 20 - 22.

For more information on the Blackboard Catalyst Awards, please visit: <https://community.blackboard.com/catalystawards>

3. IAU students win awards

The students of IAU won the first three places for the year 2021, which was organized by Jude Charity Association in cooperation with the university, where the winning projects were honored, namely:

1. Share project College of Business Administration, IAU
2. Project by College of Dentistry, IAU
3. The project to eliminate illiteracy through Al-Qaida Al-Nooraniah College of Arts, IAU

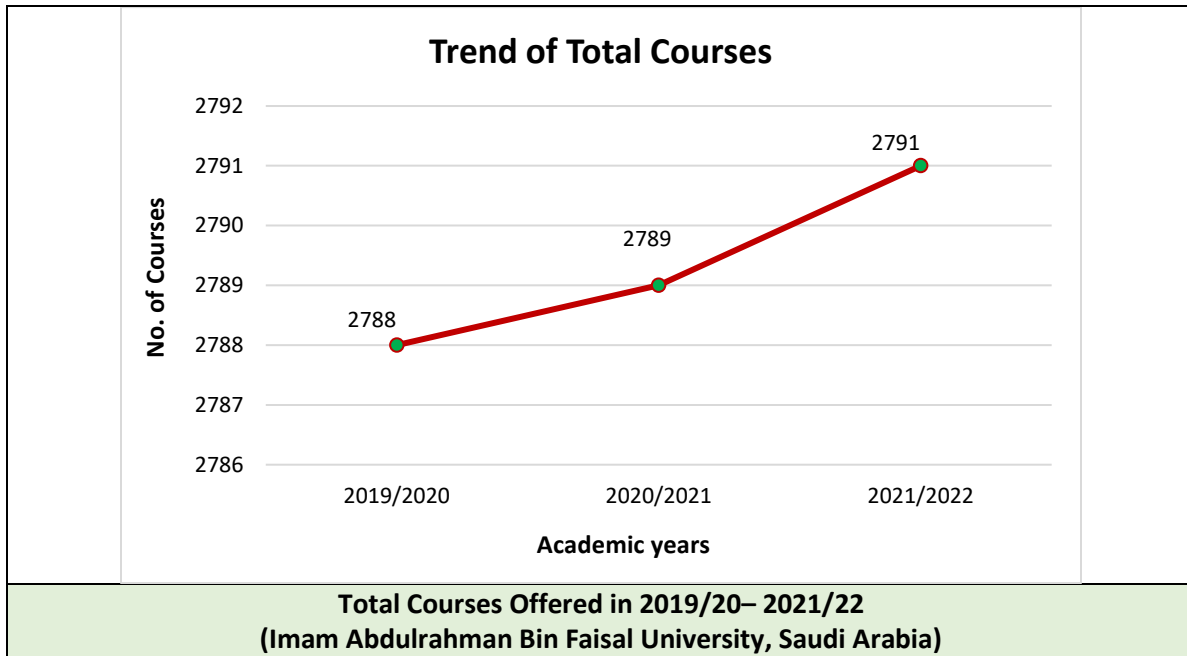


[حصلت طالبات #جامعة الإمام عبد الرحمن بن فيصل على المراكز الثلاث " on Twitter: "جامعة الإمام عبد الرحمن بن فيصل بالتعاون مع الجامعة حيث تم تكريم المشاريع الفائزة @jameyajoud الأولى بـ #جائزة جود الجامعة لعام ٢٠٢١م والتي نظمتها](#)

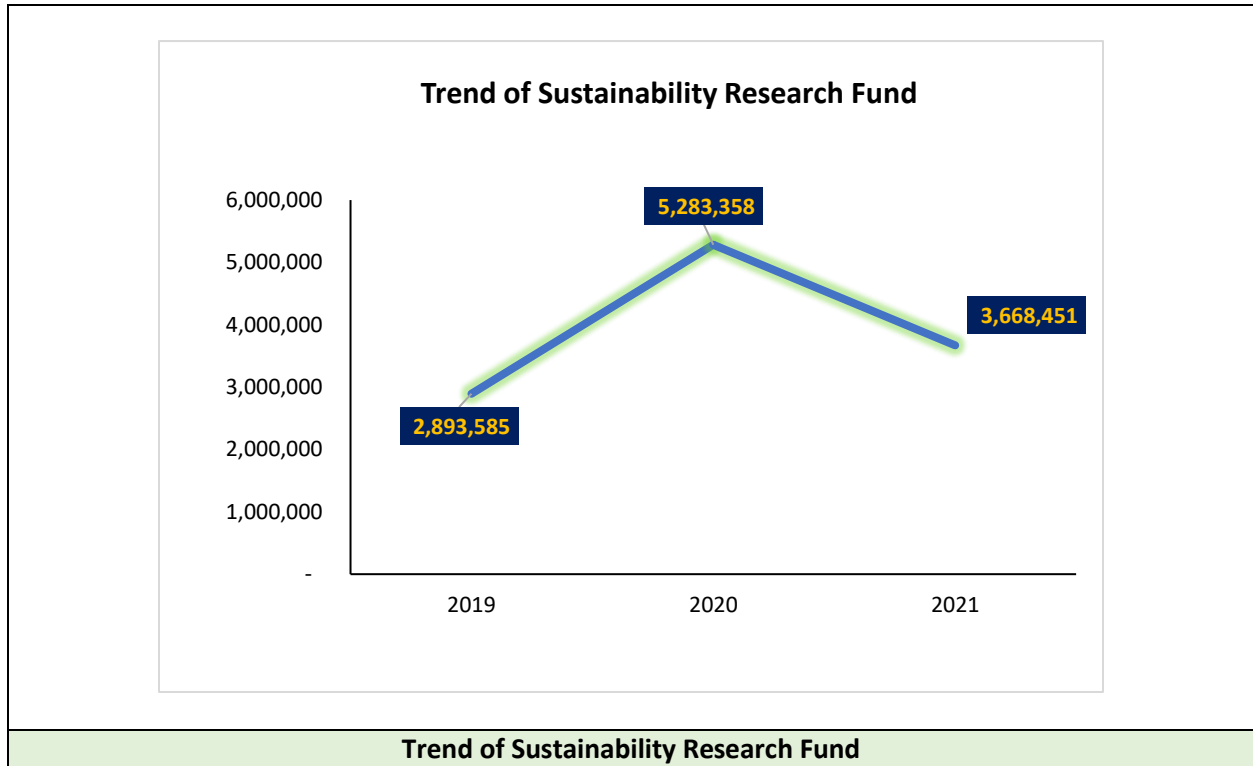


IAU @IAU @IAUdent @cbaikau @IAUca مشروع إزالة الأمية عن طريق القاعدة النورانية مشروع يسر @cbaikau وهي: مشروع شارك
<https://t.co/HMOTqDLIBV> / Twitter

4 . Total Number of Courses 2022



5. Total Research Funds Dedicated to Sustainability Research (in US Dollars)



6. Sustainability Funded Project For the Year 2021-2022

#	Title	Application Number	Duration in months	Type of project application	College	Department
1	The Simplifying-Integrating Approach to Deal with Contemporary Design, Planning and Urban Development Problems	2020-289-Arch	9	Theoretical	Arch	Department of Urban & Regional Planning
2	Water Desalination and Purification	IF-2020-018-BASRC	24	Experimental	BASRC	Department of Basic and Applied Scientific Research
3	Organic chemiresistors and water gated field effect transistors for the detection of low levels of benzene pollution in water	2020-054-CED	12	Experimental	CED	Department of Basic sciences

4	Exploration of new efficient solar cell materials as an alternative for unstable hybrid organic-inorganic perovskites	2020-132-BASRC	12	Theoretical	BASRC	Department of Basic and Applied Scientific Research
5	Development of a smart nanohybrid materials for solar photodegradation and disinfection of organic (biological) pollutants in water	IF-2020-019-BASRC	24	Experimental	BASRC	Department of Basic and Applied Scientific Research
6	Industrial wastewater treatment	IF-2020-022-Sci	24	Experimental	Sci	Department of Physics
7	Development and implementation of a novel active cooled-PV system driving Air Gap Membrane Desalination	IF-2020-024-Eng	24	Experimental	Eng	Department of Basic Engineering
8	Innovative Technique for Achieving Uniform Temperatures across Solar Panels Using Heat Pipes and Liquid Immersion Cooling in the Harsh Climate in the Kingdom of Saudi Arabia	2020-055-Eng	12	Experimental	Eng	Department of Basic Engineering
9	A novel design for self-actuated cooling mechanism of solar panels with the integration of nitinol smart material	2020-085-Eng	12	Experimental	Eng	Department of Mechanical and Energy Engineering
10	Developing an Environmental Model using Water Quality Index in "Modon lake", Dammam 2nd industrial city	2020-103-CPH	18	Experimental	CPH	Department of Environmental Health
11	Polymer membranes for water treatment	IF-2020-020-BASRC	24	Experimental	BASRC	Department of Basic and Applied Scientific Research
12	Environmental pollutants impact on the biological diversity and their bioremediation by microorganisms	IF-2020-028-BASRC	24	Experimental	Sci	Department of Biology
13	The Analysis of Optoelectronic and Thermoelectric Characteristics of Lead-Free Double Perovskites for Renewable Energy	2020-131-BASRC	12	Theoretical	BASRC	Department of Basic and Applied Scientific Research



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14	Theoretical and experiments developments of Cost Effective and Green Corrosion Inhibitors for Steel in Cooling Water Systems.	2020-188-Sci	12	Theoretical	Sci	Department of Chemistry
15	Design of nanomaterials for fine chemicals production by depolymerization of solid wastes derived lignin	2020-084-BASRC	24	Experimental	BASRC	Department of Basic and Applied Scientific Research
16	Invasive Bird Species in Saudi Arabia: Status and Potential Threats	2020-130-BASRC	12	Experimental	BASRC	Department of Basic and Applied Scientific Research
17	Exploring the Plant-Derived Scaffolds for the Treatment of Influenza and Coronaviruses and Mechanistic Studies	Covid19-2020-003-IRMC	18	Experimental	IRMC	Department of Nano Medicine
18	An Industrial Scale for Photoreduction of Post-Combustion Carbon Dioxide Capture Technology	2020-133-BASRC	24	Experimental	BASRC	Department of Basic and Applied Scientific Research
19	Direct electricity production by harvesting solar energy; Fabrication of novel high efficiency photo-anodes assembled photo-bioelectrochemical fuel cells	2020-030-IRMC	24	Experimental	IRMC	Department of Genetic Research
20	Monitoring the similarities and differences of residential neighborhood planning in the Gulf countries, using an integrated model for residential neighborhood planning	2020-071-Des	12	Experimental	Des	Department of Interior Design
21	Designing of multifunctional nanocrystalline material: synthesis of novel aluminium chalcopyrites, characterization and study of their photovoltaic efficiency for solar cells and anticancer activity.	2020-180-IRMC	12	Experimental	IRMC	Department of Nano Medicine



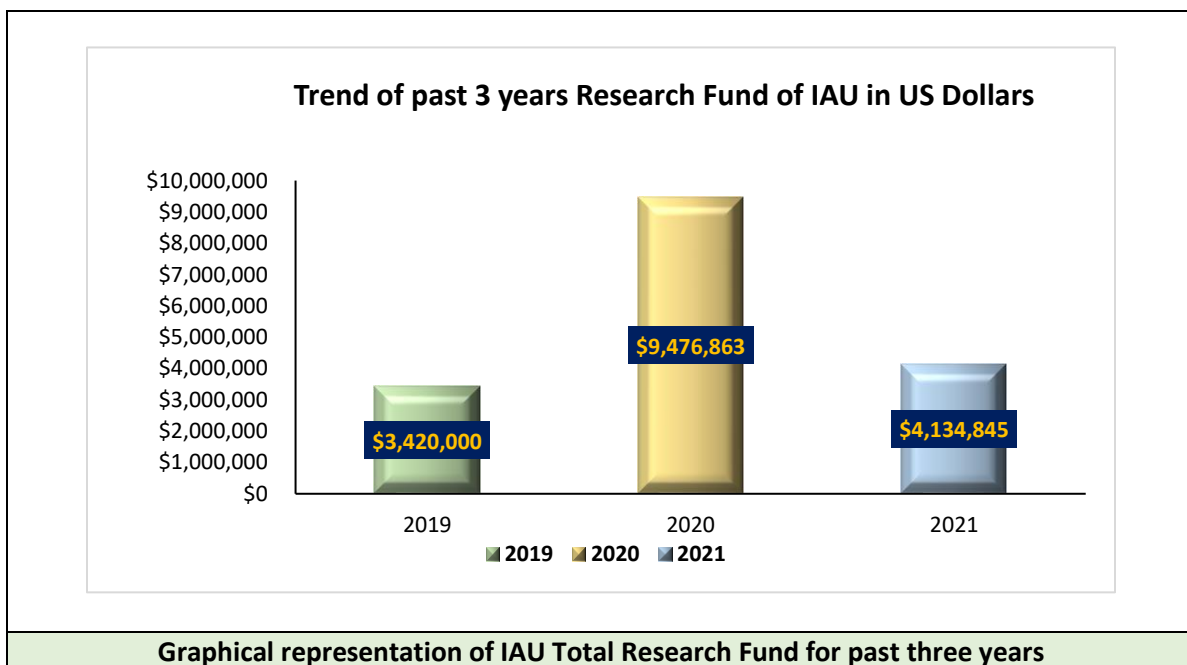
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22	Developing Corrosion resistant biodegradable metal oxide based silicalite coatings for medical implants	2020-165-IRMC	24	Experimental	IRMC	Department of Nano Medicine
23	Green Synthesis of Neodymium-Graphitic Carbon Nitride Based Ternary Materials for the Photocatalytic Abatement of Chlorophenol/Nitrophenol and Bisphenol A	2020-163-IRMC	24	Experimental	IRMC	Department of Nano Medicine
24	Genome sequencing of garlic	2020-166-IRMC	24	Experimental	IRMC	Department of Genetic Research
25	Evaluation of antifungal effectiveness of grape seeds extract on acrylic bases with Candida albicans.	2020-035-Dent	12	Experimental	Dent	Department of Biomedical Dental Science
26	Comparison of sky luminance distribution models with measurements done in Dammam Area	2020-016-Arch	12	Experimental	Arch	Department of Architecture
27	Extraction of biosilica from date palm rachis and arecanut leaf sheath fibers	2020-060-DSR	12	Experimental	DSR	Deanship of Scientific Research
28	Process optimization of cellulose nanocrystals from office paper waste and its utilization as renewable additive for strong green concrete	2020-107-Eng	24	Experimental	Eng	Department of Environmental Engineering
29	Benign routed synthesis, optimization and in vitro biological studies of biogenic based nanoparticles	2020-058-PYSS	24	Experimental	PYSS	Basic Science Department
30	Development and testing of scale and corrosion green inhibitors from natural extracts of sumac, pumpkin and clove oil for potential industrial applications	2020-112-Eng	24	Experimental	Eng	Department of Environmental Engineering
31	Experimental Investigation and Data Mining Approaches for Modeling and Optimization of Microalgae-based Biofuel Production	2020-147-CSIT	12	Experimental	CSIT	Department of Computer Science



32	A novel methodology to improve bearing capacity and settlement of Sabkha soil using ultra-micro piles and geotextiles	2020-105-Arch	12	Experimental	Arch	Department of Building Engineering
33	Air Quality Drone: Design of Smart Indoor and Outdoor Air Pollution Monitoring/Sampling System	2020-077-Eng	12	Experimental	Eng	Department of Environmental Engineering
34	The production of novel Hydrophobic/hydrophilic redox-active sulfonated solid/gel polymers as cost-effective electrolytes for flexible supercapacitor and lithium-sulfur battery	2020-177-IRMC	24	Experimental	IRMC	Department of Biophysics
35	The Influence of Surface-Treated Nanomaterials on Increasing Antibacterial Activity and Air Purification of The Grand Mosque Squares	2020-062-Arch	24	Experimental	Arch	Department of Architecture

7. Total Research Funds (in US Dollars) for past 3 years



Description:

Total research fund in 2019 = 3,420,000 US Dollars
Total research fund in 2020 = 9,476,863 US Dollars
Total research fund in 2021 = 4,134,845 US Dollars

Years	Total Research Funding (SAR)	
	SAR (Saudi Riyal)	US Dollar*
2019	12,825,000	3,420,000
2020	35,538,238	9,476,863
2021	15,505,670	4,134,845
Total Research fund for the last three years		17,031,708
Averaged research fund		5,677,236

Total Research Fund in past 3 years = **17,031,708** US Dollars

The averaged annum last 3 years of research fund = **5,677,236** US Dollars

Additional Information:

Excerpts from the past Three-year report submitted to *Education & Training Evaluation Commission (ETEC) KPIs [Formerly National Commission on Academic Accreditation & Assessment (NCAAA)]

EDUCATION & TRAINING EVALUATION COMMISSION KPIs [Formerly National Commission on Academic Accreditation & Assessment (NCAAA)]										
NCAAA KPI Code	Details	Key Performance Indicators (KPIs)	Data Source	2016	2017	2018	2019	2020	2021	
KPI-I-16	Numerator	Total number of faculty members who published at least one research during the year	SPC	283	377	420	623	687	In-Process	
	Denominator	Total faculty members in the institutions	DHR & SPC	2301	2419	2277	2344	2460	1943	
	Actual KPI	Percentage of Publications of Faculty Members		12.30%	15.58%	18.45%	26.58%	29.06%		
KPI-I-17	Numerator	Total number of refereed and/or published research	Scopus	462	588	966	1262	1680	2099	
	Denominator	Total number of faculty members during the year	DHR & SPC	2301	2419	2277	2344	2460	1943	
	Actual KPI	Rate of published research per faculty member		0.2	0.24	0.39	0.52	0.68	1.08	
KPI-I-18	Numerator	Total number of citations in refereed journals from published research for full-time or equivalent faculty members	Scopus (Concerned year citations of previous year publications)	6986	8268	17478	18228	22376	12766	
	Denominator	Total number of faculty members during the year	DHR & SPC	2301	2419	2277	2344	2460	1943	
	Actual KPI	Citations rate in refereed journals per faculty member		3.04	3.42	7.67	7.77	9.09	6.57	
KPI-I-19	Number of		Patents	PTTO	1	4	19	28	8	48
			Innovations		0	0	0	0	0	0
			Awards of Excellence	Sci.Council	64	68	248	244	388	467
KPI-I-20	Numerator	Proportion of the budget dedicated to research (in SAR)	DSR (New Method)	12,800,000	35,440,381	26,995,405	32,278,048	24,026,048	12,433,358	
	Denominator	Total budget of the institution (in SAR)	Budget & Planning	3,194,036,000	2,712,880,175	2,925,762,714	2,548,869,806	2,470,329,000	2,215,298,000	
	Actual KPI	Proportion of the budget dedicated to research		0.40%	1.30%	0.92%	1.27%	0.97%	0.56%	
KPI-I-21	Numerator	Research external funding (in SAR)	DSR	16130000	3960070	9,246,330	540,000	51,850,604	0	
	Denominator	Total budget of research during year (in SAR)	DSR (New Method)	12,800,000	35,440,381	26,995,405	32,278,048	24,026,048	12,433,358	
	Actual KPI	Proportion of external funding for research		1.26	0.11	0.34	0.02	2.16	0	

Abbreviations: - DHR: Deanship of Human Resource; SPC: Scientific Production Committee; DSR: Deanship of Scientific Research; PTTO: Patent & Technology Transfer Office (updated: 26 Oct 2022)

*1 US Dollar = 3.75 Saudi Riyal

*The Education & Training Evaluation Commission (ETEC) is a Saudi Arabian organization established to evaluate, assess, and accredit educational and training systems. It is meant to support and promote the quality and adequacy of education and training, and to strengthen the role of education and training in the national economy.

<https://www.etec.gov.sa/en/Pages/default.aspx#?>

8. Sustainability related published research 2021-2022

Activity Type	Title of Activity	Sustainability impact	Description
Scientific Paper reviewer	Review of 10 articles on socio-cultural issues	Socio-Cultural	Review of 10 articles on socio-cultural issues
Research- Book Chapter	The Holy Mosque of Mecca	Socio-Cultural	The Holy Mosque of Mecca. In Kathryn Moore & Hasan Uddin Khan (eds.). The Religious Architecture of Islam. Vol.1.
Published Research	المدينة الذكية: من قوة الحداثة إلى القوة الذكية	Socio-Cultural	Journal of King Saud University for Architecture and Planning. Vol.33, no.4, 2021, pp. 405-421.
Published Research	Smell in Industrial Design: A Systematic Review	Environmental socio-cultural	The Scientific Journal of King Faisal University. Vol.22, no.1, 2021.
Book review	Review of a book published by Brepolis publishers.	Socio-Cultural	Book review containing many articles, to be published by IJAR
Published Journal Article	Integrated Recreation Cities and Sustainable Development in Saudi Arabia: Contributions, Constraints, and Policies	Environmental, social, economic	Sustainability, 2022, 14, 6182. Brief: The research identifies the potential contributions of mega recreational projects (Integrated Recreation Cities), the main barriers against their implementation, and policies of integration in Saudi Arabia.

Published Journal Article	The impact of the acoustic environment on human emotion and experience: A case study of worship spaces	Environmental, social, cultural	
Invited Conference Presentation	Enhancing Well-being through Acoustic Environments	Environmental, social	
Research	Peer-reviewed papers for Building Acoustics	Environmental, social	
Research presentation - United Kingdom Acoustics Network	The impact of the acoustic environment on human emotion and experience	Environmental, social	
Research	Participated as a review committee member for the Simulation for Architecture and Urban Design Conference (SimAUD)	Environmental, social	
Published Journal Article	A Method for Analyzing Room Modal Response Using Auralization	Environmental	
Research- Book Chapter	Urban Framing Utilization to Re-engage Local Communities with Abandoned Areas in Modern Cities	Socio-Cultural	Paper / Chapter on Urban Framing Utilization to Re-engage Local Communities with Abandoned Areas in Modern Cities
Conference reviewer: Islamic Heritage 2022	Review of 6 articles on socio-cultural issues	Socio-Cultural	Review of 6 articles on socio-cultural issues
Published Journal Article	Smell in Industrial Design: A Systematic Review	Env.-socio-cultural	The Scientific Journal of King Faisal University. Vol.22, no.1, 2021.
Published Journal Article	The Development of Bacterial Cellulose Biomaterials Using the Material Design-Driven Approach for Packaging Industry	Environmental	Vol 7 No 1 (2022): Ideology Journal (April 2022)
Published Research - Conference	The Development of Bacterial Cellulose Fiber Reinforced Composite: Material Strength and Product Application	Environmental	Regional Conference in Civil Engineering & Sustainable Development Goals in Higher Education Institutions 2021
Published Research- Proceedings	Product Categories Affected by Odorous Materials	Environmental	Proceedings of the 2nd International Conference on Design Industries & Creative



			Culture, DESIGN DECODED 2021
Published Research- Proceedings	Sustainable Materials in Malaysia: A Systematic Review on Academic Research and Application in Product Design Industry	Environmental	Proceedings of the 2nd International Conference on Design Industries & Creative Culture, DESIGN DECODED 2021
Research Competition: Poster	The Perceived Smell Intensity of Emerging Sustainable Materials in Industrial Design	Environmental	3MT Research Competition, Kuala Lumpur Malaysia, DECEMBER 2021
Published Research- Proceedings	Appreciative of the Biomimicry Design Process for Revolutionary Furniture Development	Environmental	Proceedings of the 2nd International Conference on Design Industries & Creative Culture, DESIGN DECODED 2021