



Sur University College

# **Research Bulletin**

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## **Sur University College**

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### **Words from the Editors**

We have the pleasure to share some details of research activities completed during the academic year 2020/21. The 11<sup>th</sup> volume is the 4<sup>th</sup> annual Research Bulletin that highlights Sur University College's commitment to Research, Consultancy and Community Service. We are thankful to all faculty members for their effort and commitment.

The executive management encourages and supports faculty members to continue working on high quality research. Over the years, our local community needs have been addressed in research conducted at Sur University College. We also appreciate the significance of applied research and its impact on modern education. We appreciate faculty members at the university college who have been working hard to form research-teaching nexus. The editors, on behalf of the executive management, would like to thank all faculty members who have completed their research projects and successfully published the findings.

Editor

Dr. Ali Al Jarrah

The Dean

Associate Editor

Dr. Sitwat Usman Langrial

Assistant Dean for Academic and Research Affairs

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## 1. Research Publications for AY 2020/21

Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
1	Engineering	Vishal Mathur, R Bremananth, Pramod Kumar Arya	Material Science	Image analysis of PVC/TiO <sub>2</sub> nanocomposites SEM micrographs	Micron (Elsevier), Volume 139, 2020, <a href="https://doi.org/10.1016/j.micron.2020.102952">https://doi.org/10.1016/j.micron.2020.102952</a> . <b>Scopus</b>	Applied
2	Engineering	Rana Mukherji, Vishal Mathur, Manishita Mukherji	Green Energy	Performance and economic viability assessment of a 50 KWp rooftop solar photovoltaic system	International Journal of Green Economics (Inderscience Publishers) 2020, Vol. 14 (1), pp 15-33,	Applied
3	Engineering	A K Sharma, P K Jain, Rishi Vyas, Vishal Mathur, V K Jain	Material Science	Study of thermal stability and dielectric behavior of PANI/MWCNT nanocomposite	Materials Today: Proceedings (Elsevier), 2021, Vol.38, pp. 1259-1262 <b>Scopus</b>	Experimental
4	Engineering	A K Sharma, P K Jain, Rishi Vyas, Vishal Mathur, V K Jain	Material Science	Synthesis, characterization, and study of optical property of (PANI) <sub>1-x</sub> (MWCNT) <sub>x</sub> nanocomposites	Materials Today: Proceedings (Elsevier), 2021, Vol.38, pp. 1214-1217 <b>Scopus</b>	Experimental
5	Engineering	Rana Mukherji, Vishal Mathur, Arvind Samariya Manishita Mukherji	Material Science	Particle distribution analysis of Co-doped ZnO based dilute magnetic semiconductors	Materials Today: Proceedings (Elsevier), 2021, Vol.38, pp. 1250-1254 <b>Scopus</b>	Experimental
6	Engineering	A Hassan,	Thermodyn	Isobaric Specific Heat	J. Thermal Sci. Eng. Appl. Feb 2022,	Experimental

Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
		M Hassan, M <b>Shedid</b>	amics	Capacity for Al <sub>2</sub> O <sub>3</sub> /Water Ethylene Glycol Mixture Nanofluid	14(2): 021001.	
7	Engineering	M Gamal, MS Radwan, IG Elgizawy, M <b>Shedid</b>	Thermal design	Heat transfer performance and exergy analyses of MgO and ZnO nanofluids using water/ethylene glycol mixture as base fluid	Numerical Heat Transfer, Part A: Applications, DOI: 10.1080/10407782.2021.1962631 <b>PubMed Central</b>	Basic
8	IST	Al Harthy, Harith, Jehan Al Fannah, Hasina Al Harithi, Sitwat Usman <b>Langrial</b> , and Salah T. Al Awaidy.	Public Health	An Innovative Communication Approach to Mitigate Suffering Among COVID-19 Patients and Their Families: An Experience From Oman.	Frontiers in Public Health 9 (2021). <b>PuMed</b>	Basic
9	IST	Al Araimi, Fannah Al Fannah, Sitwat Usman <b>Langrial</b> , and Salah T. Al Awaidy	Behavior Change	Public health messages for social behavior change in the wake of COVID-19: A qualitative study.	Oman Medical Journal 36, no. 2 (2021): e254. <b>Scopus</b>	Basic
10	IST	Al Rashidi, Badria, Ahmed H. Al Wahaibi, Ozayr Mahomed, Sitwat Usman <b>Langrial</b> , and Salah T. Al Awaidy.	Public Health	Role of primary healthcare in the response to COVID-19: The Oman experience	Journal of Emergency Medicine, Trauma and Acute Care 2021, no. 1 (2021): 3. <b>WHO Medicus</b>	Basic
11	IST	<b>Langrial</b> , Sitwat Usman, and	EHealth	EHealth Interventions for People Suffering From Sleep Problems and Depressive	In Research Anthology on Mental Health Stigma, Education, and Treatment, pp. 1180-1200. IGI Global, 2021.	Basic

Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
		Päivi Lappalainen.		Symptoms: Qualitative Findings and Future Research Directions	<b>Web of Science</b>	
12	IST	<b>Langrial,</b> Sitwat Usman, and Fannah Al Fannah Al Araithi	Behavior Change	Social Behavior Change Messages for Tackling COVID-19 Pandemic in Oman: A Qualitative Study	9th International Workshop on Behaviour Change Support Systems 2021. CEUR-WS.org/vol-2885/paper4.pdf <b>Creative Commons</b>	Basic
13	IST	Vishal <b>Mathur,</b> <b>Bremananth</b> R, Pramod Kumar Arya	Image Analysis and localization	Image analysis of PVC / TiO2 nanocomposites SEM micrographs	Science Direct-Elsevier Micron 139 (2020) 102952. Available online 9 October 2020. <b>Scopus</b>	Applied
14	IST	Basil John <b>Thomas,</b> Salah Al <b>Khafaji</b>	Performance changes	Business Intelligence Tools and Team Performance of Oil and Gas Industries	Journal of Advance Research in Dynamical & Control Systems (JARDCS), Vol. 12, 04-Special Issue, 2020, pages 1045-1059.	Basic
15	IST	Salah Al <b>Khafaji,</b> Laila <b>Samea</b>	Information Systems and Education	The opportunities and challenges of using electronic information resources in higher education teaching and learning process: A case study	Shanlax International Journal of Arts, Science and Humanities. Volume 7 Issue 4, April 2020	Basic
16	IST	Malik Nimra, Muhammad Sardaraz, Muhammad Tahir, Babar Shah, Gohar <b>Ali,</b> and Fernando Moreira	Energy Efficiency	Energy-Efficient Load Balancing Algorithm for Workflow Scheduling in Cloud Data Centres Using Queuing and Thresholds	<i>Applied Sciences</i> , 11, no. 2, June 2021, Impact Factor 2.474, <b>Web of Science</b>	Applied

Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
17	IST	Masood Ahmad, Babar Shah, Abrar Ullah, Fernando Moreira, Omar Alfandi, Gohar <b>Ali</b> , Abdul Hameed	Internet of Things	Optimal Clustering in Wireless Sensor Networks for the Internet of Things Based on Memetic Algorithm: memeWSN.	Wireless Communications and Mobile Computing, vol. 2021, January 2021 Impact Factor 1.819. <b>Scopus</b>	Applied
18	IST	<b>Ali</b> , Gohar, Fernando Moreira, Omar Alfandi, Babar Shah, and Mohammed Ilyas	Real-Time Scheduling	A New Intra-Cluster Scheduling Scheme for Real-Time Flows in Wireless Sensor Networks	Electronics, IF: 2.412, 23 April 2020 <b>Scopus</b>	Applied
19	IST	Babar Shah, Ali Abbas, Gohar <b>Ali</b> , Farkhund Iqbal, Asad Masood Khattak, Omar Alfandi, Ki-II Kim	Energy Efficiency	Guaranteed Lifetime Protocol for IoT based Wireless Sensor Networks with Multiple Constraints	Ad Hoc Networks Volume 104, 1 July 2020, <b>Scopus</b>	Applied
20	IST	Abdu Salam, Qaisar Javid, Gohar <b>Ali</b> , Fahad Ahmad, Masood Ahmad, Ishtiaq Wahid	Internet of Things	Flying sensor network optimization using bee intelligence for Internet of Things	Published in Intelligent Systems and Applications. IntelliSys 2020. Advances in Intelligent Systems and Computing, vol 1252. Springer, Cham. <b>Scopus</b>	Applied
21	IST	Muhammad Adnan; Asad	M-Learning	Improving M-learners' Performance Through Deep	IEEE Access, Volume:8, July 2020,	Applied

Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
		Habib; Jawad Ashraf; Babar Shah; Gohar Ali		Learning Techniques by Leveraging Features Weights	I.F 4.098 <b>Scopus</b>	
22	BA	V.K. Vyas, Ali A. Al-Jarrah, S.D. Purohit, Kottakkaran Sooppy Nisar and Serkan Araki	Pure Mathematics	q-LAPLACE TRANSFORM FOR PRODUCT OF GENERAL CLASS OF q-POLYNOMIALS AND q-ANALOGUE OF I-FUNCTION	Journal of Inequalities and Special Functions ISSN: 2217-4303, Volume 11 Issue 3(2020), Pages 21-28. Indexed by: Emerging Sources Citation Index (ESCI)-Web of Science, Mathematical Reviews (MathSciNet) Zentralblatt fur Mathematik, EBSCO	Applied
23	BA	V.K. Vyas	Pure Mathematics	A class of the extended multi-index Bessel Maitland functions and it's properties	International conference of Georgian Mathematical Union, Batumi, August 23-28,2021 p-183	Applied
24	BA	Saed Adnan Mustafa and Randolph Von Salindo	Business	Factors Affecting Counterfeit Products Purchase Decision	International Journal of Business and Management Research (IJBMR)	Basic
25	BA	Saed Adnan Mustafa	Entrepreneurship	Factors effecting the entrepreneurs' success in Oman using Smart PLS approach	24 <sup>th</sup> FAI International Conference – 2021OnGlobal Trends of Data Analytics in Business Management, Social Sciences, Medical Sciences and Decision making24 <sup>th</sup> FAI-ICDBSMD 2021, PP. 85	Basic
26	BA	Basil John Thomas, Tarek Khalil, and Nisha Joseph	M-Learning	The Role of Educational Technologies in CSR Perception of Tourism Education: The Comparative Analysis of E-Learning and M-Learning Tools as Moderators	Journal of Risk and Financial Management. 2020; 13(12):318. <b>Web of Science</b>	Basic
27	BA	Mahmoud	Accounting	Auditor Independence and its	SHANLAX International Journal of	Basic



Serial No.	Department	Author/s	Research Focus	Research Title	Journal / Conference/ Indexing Details	Research Type
		Nayef <b>Al-Manayseh</b> , D.C. <b>Stalin</b>	and Finance	impact on Financial Statement Audits (Evidence from Oman)	Commerce	
28	BA	Ali Abdullah Bin <b>Al-Shiabah</b> , Abdullah moh'd Ahmed Ayedh and Zurina Shafii	Accounting and Finance	Measuring the Financial Performance of Islamic Banks in Oman Comparative Study (2020)	<i>Journal of Islamic Banking &amp; Finance</i> , 37(3) ISSN: 1814-8042	Applied
29	BA	Ali Abdullah Bin <b>Al-Shiabah</b> , Abdullah Moh'd Ahmed Ayedh and Zurina Shafii	Accounting and Finance	Shariah Governance Disclosure a Comparative Analysis between Islamic Banks in Oman. (2021)	Journal of Islamic Banking & Finance, 38(1). ISSN: 1814-8042	Applied
30	GFP	Mohammed Ahmad Al <b>Shallakh</b> Arturo G. <b>Palaming</b>	English Language Teaching	Investigating The Syntactic Errors Faced by Omani Learners at the College Level: Proposing A self-Learning Materials	Journal of Psychology and Education ISSN: 00333077 <b>Scopus</b>	Applied
31	GFP	Mohammed Ahmad Al <b>Shallakh</b> Arturo G. <b>Palaming</b>	English Language Teaching	The Effect of Autonomous Learning Theory in Improving Morphology at the College Level: Proposing a Self-Learning Kit	Solid State Technology Volume:63 Issue:6 <b>Scopus</b>	Applied
32	GFP	Fahad <b>Rafique</b>	Maths	Cyclic Super Magic Labelings for Tutorial and Klein-Bottle Fullerenes	IEEE Access Journal ISSN: 00900781 <b>Scopus</b>	Basic

## 2. Internal Seminars and Workshops

Sl. No.	Name	Seminar / Workshop Title	Date	Venue
1	Mr. Sriram	Workshop on Mapping ILO_PO Attainment.	07.12.2020 09.12.2020 15.12.2020	Engineering Theatre Business Theatre Online
2	Mr. Sriram	Incorporating Contemporary Teaching, Learning and Assessment Strategies: A QA Perspective.	09.03.2021 10.03.2021 15.03.2021	Online
3	Dr. Saed	How to prepare action plan to achieve your committee goals?	13.10.2020	Online
4	Dr. Thaw	WEKA- Data Mining Package.	10.12.2020	Online
4	Dr. Von	Bitcoin and other Cryptocurrency Movements Status and Future Prospects.	16.03.2021	Online
6	Dr. Ehab	Current Application of Options Contracts in Financial Markets and the Position of Islamic Law on them.	30.03.2021	Online
7	Dr. Manayseh	Introduction of human asset accounting.	06.04.2021	Online
8	Mr. Ali	Shariah Governance Disclosure a Comparative Analysis between Islamic Banks in Oman.	06.04.2021	Online
9	Dr. Tarek	Big Data application in CRM.	13.04.2021	Online
10	Dr. Kumar	Application of integral Transform in mathematical modelling.	16.03.2021	Online
11	Dr. Mohammed Al Arami	How to Develop Your Leadership Style.	13.10.2020	Online
12	Ms. Roqya	Corporate Entrepreneurship: Current Trends and Research.	20.10.2020	Online
13	Dr. Basil	Hybrid and Blended learning in HEI's in Oman: Objectives and Challenges, A review based on E learning and M learning perspective.	30.03.2021	Online
14	Dr. Hesham	AI Applications in Mechanical Engineering.	17.12.2020	Online

Sl. No.	Name	Seminar / Workshop Title	Date	Venue
15	Mr. Hesham	Moodle and its applications in e-learning.	28.01.2021	Online
16	Dr. Abdelhady and Ms. Fatima	Understanding different approaches of 3D modelling in Architectural Revit.	05.04.2021	Online
17	Dr. Stalin	Taxation in Accounting software – Tally.	23.03.2021	Online

### 3. National/International Webinars

Sl. No.	Name	Title	Date	Venue
1.	Mr. Sriram, Sur University College, Oman	Quality Perspectives in Research Publications	19.02.2021	Webinar (Hosted by KG College of Arts and Science, India)
2.	Dr. Jawad Shah, University of Kuala Lumpur-British Malaysian Institute.	Professional development on Amazon Web Services (AWS) Cloud Foundation	17.01.2021	Webinar
3.	Dr. Vishal, Sur University College, Oman	Introduction to Nanotechnology and Nano Science	05.11.2020	Webinar
4.	Mr. Tahseen, Sur University College, Oman	Application of nano materials in cement and concrete.	23.02.2021	Webinar
5.	Dr. Abdelhady and Ms. Fatima Sur University College	Understanding the different approaches of 3D modelling in architectural Revit	15.03.2021	International Webinar
6.	Dr. Vijay Kumar Sur University College	Application of Calculus in Business and Economics	28.01.2021	Webinar

Sl. No.	Name	Title	Date	Venue
7.	Dr. Saed Adnan Sur University College	Application of Calculus in Business and Economics	28.01.2021	Webinar

#### 4. Publications in National, International Conferences and Journals

Publications	Basic	Experimental	Applied	Total
Engineering	1	4	2	7
Information Systems and Technology	7	---	7	14
Business Administration	4	---	4	8
GFP	1	---	2	3
Total	13	4	15	32

#### 5. Yearly Publications Based on Indexing

Indexing	No. of Publications
Scopus and Web of Science	17
PubMed, Creative Commons and WHO Medicus	4
Peer Reviewed Indexed Platforms	11
Total	32

## 6. Yearly Publications

Publications	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
International Journals	8	12	7	38	36	36	32	169
National Journals	---	---	---	---	---	---	---	0
Books/Chapters	3	2	1	5	2	0	---	13
National/International Conferences	5	7	---	9	14	5	---	40
Patents	---	---	---	2	8	---	---	10
Total	16	21	8	54	60	41	32	232

## 7. An Overview of Research during AY 2020/21.

Research activities carried out during the academic year 2020/21 reflects the extra ordinary efforts by faculty members especially in wake of ongoing pandemic. This research bulletin highlights the achievements of all researchers who have added value to the literature base. It is worth noting that majority of the research publications have focused on areas that have direct impact on local and international community. These areas include Material Science, Thermodynamics, Energy Efficiency, Information Systems and Education, Internet of Things, M-learning, Entrepreneurship, Accounting and Public Health. In addition, internal seminars and workshops have focused on areas that have helped faculty members share their expertise creating an environment of collaborative learning and knowledge sharing. National and international webinars have strengthened Sur University College's ties with the community both within and outside of the Sultanate of Oman. All faculty members are encouraged to carry on with their efforts in research as it serves the community and helps the university college stay on track in terms of its vision and mission.