ENGR. DR. KEHKASHAN ASMA MEMON

Personal Information	rsonal Information		
Name	Engr. Dr. Kehkashan Asma Memon		
Email	Kehkashan@faculty.muet.edu.pk		
Phone	92-22-2772254(4111)		
Research Area	Optics and Photonics		
Number of Publications	12		

Qualification			
Degree	Passing Year	Majors	University
PhD	2022	Passive Optical Networks	MUET, Jamshoro
ME	2009	Telecommunication and control	MUET, Jamshoro
BE	2004	Electronics	MUET, Jamshoro

Teaching Experience			
Designation	From	То	Organization
Assistant Professor	Oct 2009	Present	MUET, Jamshoro
Lecturer	July 2005	Oct 2009	MUET, Jamshoro

Publications				
	Journal	Cat		
1.	Memon, A., Memon, F, Memon, F. A, Memon, K. A, & Hussain, A (2022). Autonomous Farming Robot. <i>Journal of Applied Engineering & Technology</i> (<i>JAET</i>), 6(2), 20–33. https://doi.org/10.55447/jaet.06.02.64	Υ		
2.	Memon, K.A., Umrani, A.W., Unar, M.A. et al. Design and Analysis of High-Speed Bottleneck-Free One-Dimensional OCDMA Based Gigabit Symmetric PON. Wireless Pers Commun 126, 3147–3165 (2022). https://doi.org/10.1007/s11277-022-09857-x	W		
3.	<u>Kehkashan A. Memon</u> , Ahmad Atieh, A. Waheed Umrani, Mukhtiar A. Unar, Wajiha Shah, "Design and performance analysis of GPON-employed two-dimensional multi-diagonal OCDMA code," <i>Optical Engineering</i> 59(7), 076105 (2020), https://doi.org/10.1117/1.OE.59.7.076105	W		
4	Memon, K. A., Umrani, A. W., Unar, M. A., Shah, W." Implementation & Performance Analysis of Bidirectional FSO channel in Hybrid TDM/WDM Gigabit Passive Optical Network", <i>3c Technologia</i> , May 2019			

- 5 Memon, K. A., Umrani, A. W., Unar, M. A., Shah, W. & Chowdhry, B. S. (2018). "Spectral Amplitude Coding Optical CDMA: Performance Analysis on Free Space Optical Channel". *International Journal of Engineering & Technology*, 7(4.38), pp. 31–33
- 6. Fahim A. Umrani, Naveed A. Umrani, Abdul Waheed Umrani, <u>Kehkashan A. Memon</u>, and Imtiaz H. Kalwar, "Performance Analysis of Spectral Amplitude Coding Based OCDMA System with Gain and Splitter Mismatch", **J. Opt. Comm.**. Volume 34, Issue 3, Pages 247–253, ISSN (Online) 2191-6322, ISSN (Print) 0173-4911, DOI: 10.1515/joc-2013-0021, July 2013
- 7. Memon, Kehkashan A., Umrani, Fahim A., Umrani, A. W. and Umrani, Naveed A.. "Throughput of Coded Optical CDMA Systems with AND Detectors" J. Opt. Commun., vol. 33, no. 3, sept 25th 2012, pp. 143-145. https://doi.org/10.1515/joc-2012-0041
- **8** Adil Ansari, Fahim A. Umrani and <u>Kehkashan A. Memon</u>, "Design and implementation of SONAR based obstacle detection and avoidance mobile robot", MUET Research J. of Eng & Tech. (**MURJ**), Vol. 30, No. 3, pp. 371-382, Jul 2011.

Conference

- 1 <u>Kehkashan Asma Memon</u>, Presented in PhD symposium "5th International Multi-Topic ICT Conference" Mehran U.E.T Jamshoro, April 2018
- 2 Muhammad Waqas Soomro, <u>Kehkashan A. Memon</u>, Fahim A. Umrani, "Identification Of Aquatic Inhabitants Of Pakistan Using Image Feature Extraction", Poster paper **International Multi-Topic Conference** 2012 held at Mehran UET, Jamshoro 2012.
- Kehkashan A. Memon, Fahim A. Umrani, B. S. Chowdhry, "Cubosomes: Bicontinuous Cubic Liquid Crystalline Nanostructured Particles for revitalizing natural Hair color", Poster paper International Multi-Topic Conference 2012 held at Mehran UET, Jamshoro 2012. Best Poster Award
- 4 Ahmed Ali, Asghar, <u>Kehkashan</u> "Power Generation from Waste Heat in Pakistan It's Growth and Impact", conference paper presented at 25th IEEEP All Pakistan Students' Seminar held at Bahria University Karachi Campus on 3rd March,2010

Professional Memberships

- 1. Pakistan Engineering Council (PEC) ELECTRO/7165
- 2. Mehran University Teacher's Association (MUTA)
- 3. Optica Society Student chapter MUET
- **4.** Institute for Engineers of Pakistan (I.E.P.)
- **5.** IEP Women Engineering Forum

Professional Development 1. Pak-Europe GIKI Photonics Symposium 2023 on 17th July 2023 by Epic and SPIE Student chapter Ghulam Ishaq Khan University. 2. Mathworks workshop on ""Tips to get most out of MATLAB and Simulink" - Presented by Mathworks Australia on 4th May 2023 3. One day PEC CPD webinar on "Cellular Networks (2G to 5G Technology): future Applications on 14th April 2023 4. Completed Coursera online course on "Exploring concepts of Optics using Wolfram notebook" 5th March 2023 **5.** One day Seminar on OBE based System by Dr. Naeem Mahoto on 1st March 2023 **6.** Guest lecture at MUET on "Enabling Technologies for IoT in Nov 6G Networks" by Dr. Waleed Ejaz, Dept of Electroical, LakeHead University, Canada, 18 Nov 2022 7. One day seminar on Professional career Development held on 5th October 2021 in USPCAS-W auditorium, MUET Jamshoro 8. One day CPD live webinar on "Entrepreneurship for Engineers" (1 CPD) on 10 March 2021 at Palace Hall, PC hotel Lahore. **9.** Workshop webinar on "Academic writing and plagiarism policy awareness" (0.5CPD) on 25 Feb 2021 at MUET, Jamshoro **10** Workshop on "National language processing – an introduction" (0.5CPD) on 26

Skills	
1.	Computer skills
2.	Optisystem Software
3.	Matlab
4.	Electronic workbench, Multisim

Dec2020 at MUET Jamshoro