Dr. Muhammad Mujtaba Asad (PhD, MS, BEng) Approved PhD Supervisor (HEC)

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ResearchGate: https://www.researchgate.net/profile/Engr_Asad

Google Scholar: https://scholar.google.com.my/citations?user=vMaCq-AAAAAJ&hl=en

Scopus: https://www.scopus.com/authid/detail.uri?authorId=57203360700



Professional Profile

Analytical and highly dedicated educationist with vast research experience in the domain of educational technologies for teacher education and technical and vocational education and training for skilled workforce. Having extensive knowledge and experience of working in a diverse and dynamic research groups and organizations on international research projects which endowed my competencies & expertise in professional as well as social spheres, enabled collective excellence and technical growth, personal fulfillment with welcoming attitude for new ideas and concepts to enhance the quality of the research work

Academic Qualification

- Doctorate of Philosophy (PhD) In Technical and Vocational Education
 - Universiti Tun Hussein Onn Malaysia, 2014-2018
 - Specialization Cluster: Educational Technologies and E-Learning
 - PhD Research Title: Development of A Novel Knowledge Based Decision Support System (HAZFO Expert 1.0) For Accident Prevention of Oil and Gas: A Sequential Explanatory Study (Gold Medal)
- Master of Technical and Vocational Education
 - Universiti Tun Hussein Onn Malaysia, 2012-2014
 - Specialization Cluster: Educational Technologies and E-Learning
 - Master Research Title: MATLAB Based Modeling and Simulink Package for DC-DC Boost Convertor to Enhance Learning Process of Power Electronics. (Gold Medal)
 - Major Courses Included: Statistic in Research, Research Methodology, Qualitative Research,
 Technology in TVE, Philosophy of TVE, Information Technology and Multimedia Application,

Management of Co-Curriculum, Leadership in TVE, Psychology in TVE, Pedagogy in TVE and Measurement and Evaluation.

Advanced Specialization Certification

- University of Colorado Boulder, United States of America 2020
- Area of Specialization: Teacher's Social and Emotional Learning

Bachelor of Electronics Engineering

- Hamdard University of Engineering and Technology Karachi Pakistan (FEST), 2011
- **Degree Research Title:** Development of Tri-Wheeler Spy Robot.
- Area of Specialization: Embedded Systems & Robotics (Industrial Safety Robotics)
- Major Courses Included: Basic Electronics, Computing and Programming, Electrical Circuit
 Analysis, Object Oriented Programming, Computer Communication Networks, Logic Design &
 Switching Theory, Robotics, VLSI, Embedded Systems, Signals and Systems, Linear Control
 Systems, Instrumentation and Measurement, Power Electronics, Industrial Electronics and Electrical
 circuit analysis.

Professional Working Experience

Assistant Professor, Sukkur IBA University (SIBAU), July 2019 – Present

- Teaching Educational Technology and related courses to Undergraduate and Postgraduate level.
- Courses and Content Designing for PhD and MPhil Program.
- Research Supervision of Undergraduate and Postgraduate students.
- Review and Assessment of Research Projects and Innovation Competitions.
- Organizer for Student and Faculty Development Programs.

▶ Head, Educational Technologies and TVET Research, SIBAU, July 2019 – Present

- Research Supervision of Faculty on Educational Technology and TVET domain.
- Local and International Research Grant Proposal Development and Management.
- National and International Participation in Research and Innovation Competitions.
- Quality Research Publications in reputed Impact Factor Journals.
- Lead Organizer of Knowledge Sharing Seminar Series Under Educational Technologies and TVET.

Departmental Quality Assurance and Management Committee, SIBAU, July 2019 – Present

- Quality Assurance of Research Proposals and Final Thesis.
- Review of Research Methodology and Data Analysis of Postgraduate Thesis.
- Design and Development of QA Models and Framework.
- Examination Panel and Assessment of research Defense.

Advisory Research Expert at Office of Research and Innovation, SIBAU, July 2019 - Present

- Research policy and strategy developer for university.
- Reviewer for research funding grant applications.
- Member of ORIC Think-Tank decisions on developing research culture.

Research Assistant, Universiti Tun Hussein Onn Malaysia (UTHM), June 2014 – Oct 2018

- Lead PhD Researcher for Oil and Gas Drilling Safety and Health Research Project.

- Research coordinator between University and Oil and Gas Industries.
- Developer of Potential Industrial Risk Identification Approaches for Drilling Operation.
- Developer of Innovative Hazard Controlling Strategies for Drilling Operations.
- Assisted for Qualitative and Quantitative Data Collection (Oil and Gas Industries).
- Developer of Information Management Systems (Design and Architecture).
- Documentation Controller and Auditor for Research Grants (National & International).
- Assisted in Conducting Courses and Workshops (Trainer and Facilitator).
- Teaching Assistant for Industrial OSH Management, Management Information Systems and Electrical and Electronics Engineering Courses.

Research Facilitator, Postgraduate Research Candidates (UTHM), August 2014 - April 2018

- Facilitator for the Selection of Appropriate Research Methodologies.
- Facilitator for Quantitative and Qualitative Research Design Interpretation.
- Facilitator for Quantitative and Qualitative Data Analysis and Interpretation.
- Advisor for Mix-Method Research Design and Instrument development.

System Engineer, Pakistan Freight Line (PFL), Karachi, Pakistan, June 2010 - July 2012

- Dealing with Technical, Information Systems Development and Maintenance Issues.
- E-Documentation and Technical Reporting.
- Managed the Organizational Safety and Environmental Protocols as Team Leader.
- Ensure compliance to legislative requirements.
- Head for Research and Publication Unit.

Avionics Engineer (Trainee), Aircraft Maintenance Hangers, Pakistan International Airlines (PIA), June 2010 – September 2010

- Handling and maintenance of Aerospace and Avionics Equipment's.
- Aircraft Engine Overhauling and Spare Parts Supply from Back-Up Shops.
- Aircraft Cockpits Equipment's Testing and Maintenance.

Instructor, Pakistan Students Academy (PSA), Karachi Pakistan, October 2006 - May 2010

- Academic Tutor for Pre- Engineering Courses.
- Management Work and Assignments.
- Coordinator for Short Courses and Trainings.

Lecturer, Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia, February 2014 - March 2014

- Conducted Theory and Laboratory of Electronics Engineering Courses.
- Conducted Theory and Laboratory of Educational Technology Course.
- Assessor for Educational Technology Projects.

Lecturer, Department of Electrical Engineering, Polytechnic Merlimau Melaka (PMM) Malaysia, January 2014 - March 2014.

- Conducted Theory and Laboratory of Digital Electronics and Course.
- Conducted Theory and Laboratory of Embedded System Applications Course.
- Portfolio Development and Management.
- Lecturer, Department Electrical Engineering. Polytechnic Ibrahim Sultan (PIS), Johor Baru Malaysia.

July 2013 - August 2013

- Conducted Theory and Laboratory of Logic Design Switching Theory.
- Conducted Theory and Laboratory of OSHA and Information System Courses.
- Portfolio Development and Management.
- Member for Curriculum Development Advisory Board.

Professional Affiliations and Services

- Member (International), Institute of Electrical & Electronics Engineers (IEEE), Membership Number: 92459465.
- Member (International), Malaysian Board of Technologist (Oil and Gas Technology), Number: GT18050770.
- Member (International), International Association of Engineers, Hong Kong Membership Number: 141208.
- Member (International), ICST Professional Society, Begijnhoflaan 93, 9000 Gent, Belgium.
- Member (International), International Society for Environmental Sciences, Regina, Saskatchewan Canada.
- Member (International), IAENG Society of Electrical Engineering, Hong Kong. Membership: 141208.
- Member (International), Michigan Association for Computer Learning (MACUL), Michigan USA.
- Member (International), Association of Human Factor and Ergonomic, Malaysia, Membership Number: 9443.
- **Member (International),** Research Synergy Foundation, Bandung, Indonesia.
- **Member (International),** Oil Gas Safety Council (OGSC).
- ▶ Program and Institution Assessor: National Vocational and Technical Training Commission, Pakistan
- Member (National), Registered Engineer, Member Pakistan Engineering Council (PEC# 25928).
- **Program and Institute Assessor,** National Vocational and Technical Training Commission, Pakistan.
- Founding Member (International) of International Society of Safety Engineers and Researchers (ISSER).
- Founding Member (National) Educational Technology and TVET Research Group, SIBA, Pakistan.
- Organizing Committee Member, 3rd International Conference on Computer Assisted System in Health (CASH 2018), Malaysia.
- Organizing Committee Member, Asian TVET Experts Forum (ATEF) 2018, Malaysia.

International/National Awards and Achievements

- Malaysian International Scholarship awarded for PhD Studies in Malaysia, from Malaysian Government (MOHE).
- ▶ Gold Medal (Industrial Design) in ITEX 2017 at Kuala lumpur, Malaysia.
- Gold Medal (Innovative Product) in Research and Innovation Festival 2016 at Universiti Tun Hussein Onn Malaysia.
- Gold Medal (Applied Research) in Research and Innovation Festival 2015 at Universiti Tun Hussein Onn Malaysia.
- **Bronze Medal** (Innovative Product of Engineering Technology) in Research and Innovation Festival 2015 at Universiti Tun Hussein Onn Malaysia.
- Silver Medal (Innovative Product of Engineering Technology) in Research and Innovation Festival 2014

- at Universiti Tun Hussein Onn Malaysia.
- Certificate of International Students Ambassador (Lifetime), awarded by Universiti Tun Hussein Onn Malaysia.
- Certificate of Award (2nd Place) in "Three Minutes Thesis (3MT)" competition at Universiti Tun Hussein Onn Malaysia 2018.
- Participation in 13th annual Seoul International Invention Fair (SIIF 2017) under the category of Industrial Design.
- **Best Paper Award** in International Symposium of Civil and Environmental Engineering 2018, Malaysia.
- **Best Reviewer 2017 Award,** Informing Science Institute (ISI), California 95409 USA.
- Nominated for Commercialized Research Product in Malaysian Book of Research and Development 2017, Published by, Ministry of Higher Education Malaysia (MOHE).
- **Certificate of Appreciation** for participation (PhD Category) in "Three Minutes Thesis (3MT)" competition at Universiti Tun Hussein Onn Malaysia 2015.
- Global Educationist Award 2021, International Council for Educators, India.

Journal Editorial and Reviewer Board Member

- **Editor-in-Chief**, International Journal of Innovative Educational Technologies, and Practices (IJIEP), RSF Press, Indonesia.
- Associate Editor, Sukkur IBA Journal of Educational Sciences and Technologies (SJEST), Pakistan.
- **Editorial Board Member,** Journal of Technical Education and Training UTHM Malaysia.
- **Editorial Board Member,** Journal of Information Technology Education: Innovations in Practice.
- **Editorial Board Member**, Journal of Information Technology Education: Research (JITE: Research)
- **Editorial Board Member**, International Journal of Vocational Education and Training Research.
- **Editorial Board Member,** Trends in Renewable Energy.
- **Editorial Board Member**, Journal of Health Environmental Research.
- **Editorial Board Member,** European Journal of Academic Essays (EJAE).
- **Editorial Board Member,** Middle East International Journal for Social Sciences.
- **Editorial Board Member**, Industrial Technology Innovation (Special Issue).
- **Editorial Board Member**, SIBA Journal of Educational Sciences and Technologies.
- **Reviewer Board Member**, Journal of Engineering, Design and Technology.
- **Reviewer Board Member,** Higher Education, Skills and Work-Based Learning.
- **Reviewer Board Member**, Research Publish Journal. 7/2013-Until Present.
- **Reviewer Board Member,** Journal of Physics: Conference Series (IOP).
- **Reviewer Board Member,** International Journal of Computer Science and Artificial Intelligence.
- **Reviewer Board Member,** International Journal of Advances in Engineering & Technology.
- **Reviewer Board Member**: Informing Science and IT Education Conferences: Vietnam 2017.
- Reviewer Board Member, ICOQSIA 2018: The 5th International Conference on Quantitative Sciences & Applications, Langkawi, Malaysia.
- Reviewer Board Member, ICME 2017, Langkawi, Malaysia.
- **Reviewer Board Member,** International Conference on Materials and Mechanics 2017: Malaysia.
- Reviewer Board Member, CASH 2018, Malaysia.
- **Reviewer Board Member:** CCRN, USA 2016-Until Present.

International Research Grants (Leader/ Member)

- **Principal Investigator,** National Research Program for Universities, HEC Pakistan. (Worth 3.2 million PKR)
- Principal Investigator, Sind Higher Education Commission Pakistan. (Worth 1.3 million PKR)
- Co-Leader, Development and Implementation of KBES for Health and Safety Environment (HSE) by Using Neural Network to Reduce the Workplace Risk and Hazards in offshore and on Shore Oil and Gas Industries, Universiti Tun Hussein Onn Malaysia. (Worth 8000 USD, 2014-2015)
- Co-Leader, A Drilling Health and Safety Training Module Based on Identification of Novel Hazard Controlling Measures and its impact on the performance of drilling crew at Malaysian Oil and Gas Industries, TIER Grant, Ministry of Higher Education Malaysia. (Worth 3000 USD, 2018-2020)
- Co-Leader, Suicidal Trend among Japanese Youth: Identification of Risks and Related Preventive Factors, UF Japan. (Worth 7000 USD, 2017-2018)
- **Co-Leader**, Development and Validation of the e-Smart Educational Counseling System for School Leaving Students. UF Japan. (Worth 8500 USD, 2017-2018)
- Conference Paper Presentation Grant, Center of Graduate Studies, Universiti Tun Hussein Onn Malaysia (Worth RM 1600, November 2017)

Patent and Copyrights

- **Patent (Application Filled):** HAZFO Expert 1.0 for Accident Prevention at Oil and Gas Drilling. (2017)
- **Copyright (Granted 2017):** Development of HAZFO Expert 1.0 for Onshore and Offshore Oil and Gas Drilling Operation. (LY2017001540)
- **Copyright (Granted 2018):** Operational Programming Code of a Novel KBDSS (HAZFO Expert 1.0) for Oil and Gas Drilling Operations.
- **Copyright** (**Granted 2018**): A New Architecture of Knowledge Base (KB) for the Open-Source HAZFO Expert 1.0.
- **Copyright (Granted 2018):** Development of Knowledge Base (KB) of a Novel HAZFO Expert 1.0.
- **Copyright (Granted 2018):** A New Architecture of Graphical User Interface for the Novel HAZFO Expert 1.0
- Copyright (Granted 2018): HAZFO Expert 1.0 Database Management Application Programming Code for Oil and Gas Drilling Activities.

Invited Keynote Speaker

- **Keynote Speaker Invitation**, 5th MASOS 2020 (28/05/2020), Research Synergies Foundation, Indonesia.
- **Keynote Speaker Invitation**, International Conference on Management, Education, Social Science (20/07/2020), Indonesia.
- **Keynote Speaker Invitation**, Fostering Quantitative Research Using SPSS Software, (06/0/7/2020), Indonesia
- **Keynote Speaker Invitation**, Knowledge Sharing Session (13/07/2019), Mastering Quantitative Data Analysis Using SPSS Software, SZABIS, Karachi, Pakistan.
- **Keynote Speaker Invitation**, Knowledge Sharing Session (13/07/2019), Mastering Quantitative Data Analysis Using SPSS Software, SZABIS, Karachi, Pakistan.
- **Keynote Speaker Invitation**, Knowledge Sharing Session (13/07/2019), Mastering Quantitative Data

- Analysis Using SPSS Software, SZABIS, Karachi, Pakistan.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (01/02/2019), Mastering Quantitative Data Analysis Using SPSS Software, QUEST Larkana, Pakistan.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (06/11/2018), Mastering Quantitative Data Analysis Using SPSS Software, UPSC, UTHM, Malaysia.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (29/04/2018), Mastering Quantitative Data Analysis Using SPSS and E-VIEW Software, Micropollutant Research Center, UTHM, Malaysia.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (07/05/2018), Secrets to succeed in Malaysian International Scholarship Award, Center of Graduate Studies, UTHM, Malaysia.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (11/12/2017), Applying Quantitative Research Techniques Using SPSS Software, Micropollutant Research Center, UTHM, Malaysia.
- **Keynote Speaker Invitation,** 18th International conference on Engineering and Technology, Penang 2016.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (22/03/2014), Polytechnic Merlimau Melaka Malaysia.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (01/02/2017), Tactics to Win Malaysian International Scholarship, UTHM, Malaysia.
- **Keynote Speaker Invitation,** Knowledge Sharing Session (01/02/2017), How to Successful Contestant in Research and Innovation Festivals, UTHM, Malaysia.
- Guest Speaker Invitation, Knowledge Sharing Session on Internationalization (04/06/2018), FM Radio, UTHM, Malaysia.

International Research Journal Publications

- Asad, M. M., Khan, S., Sherwani, F., & Banerjee, J. S. (2022). Impact of asynchronous Web-based learning environment on students' interest and motivation in mathematics: a quantitative research study. The International Journal of Information and Learning Technology. (ISI & Scopus)
- Asad, M. M., Naz, A., Churi, P., Guerrero, A. J. M., & Salameh, A. A. (2022). Mix Method Approach of Measuring VR as a Pedagogical Tool to Enhance Experimental Learning: Motivation from Literature Survey of Previous Study. Education Research International, 2022. (ISI & Scopus)
- Khan, N., Aslam, R., Asad, M. M., Oad, L., & Almusharraf, N. M. (2022). Effects of WFH on educators' wellbeing: mediating role of institutional head's support and moderating role of employees' self-efficacy at university level. Journal of Professional Capital and Community, 7(3), 305-326. (ISI & Scopus)
- Cao Y, Asad M.M, Wang L, Naz A and Almusharraf N (2022) Role of personality traits for entrepreneurial intentions of young entrepreneurs: A case study of higher education institution. Front. Psychol. (ISI & Scopus)
- Ahmed, U., Aslam, R., Khan, N., & **Asad, M. M.** (2022). Investigating Knowledge Management Practices in an EFL Context in Pakistan. SAGE Open, 12(2), 21582440221094593. (**ISI & Scopus**)
- Asad, M. M., Aftab, K., Sherwani, F., Churi, P., Moreno-Guerrero, A. J., & Pourshahian, B. (2021). Techno-Pedagogical Skills for 21st Century Digital Classrooms: An Extensive Literature Review. Education Research International, 2021. (ISI & Scopus)
- Marzo, R. R., Ahmad, A., Islam, M. S., Essar, M. Y., **Asad, M. M.** (2021). Perceived COVID-19 vaccine effectiveness, acceptance, and drivers of vaccination decision-making among the general adult population: A global survey of 20 countries. PLoS neglected tropical diseases, 16(1), e0010103. (ISI & Scopus)
- Asad, M. M., Rind, A. A., & Abdulmuhsin, A. A. (2021). Impact of transformational leadership on

- educational institutes culture: a quantitative study in the context of Pakistan. International Journal of Organizational Analysis. (ISI & Scopus)
- Asad, M. M., Khan Soomro, R. B., Shamsy, A., & Churi, P. (2021). Students' Satisfaction towards E-Assessment for Academic Achievement in ESL at Public Schools and Colleges. Education Research International, 2021. (ISI & Scopus)
- Asad, M. M., Naz, A., Churi, P., & Tahanzadeh, M. M. (2021). Virtual Reality as Pedagogical Tool to Enhance Experiential Learning: A Systematic Literature Review. Education Research International, 2021. (ISI & Scopus)
- Asad, M. M., Hussain, N., Wadho, M., Khand, Z. H., & Churi, P. (2021). Integration of e-learning technologies for interactive teaching and learning process: an empirical study on higher education institutes of Pakistan. Journal of Applied Research in Higher Education. Emerald, UK (ISI & Scopus)
- Asad, M. M. (2021). Hybridized classification algorithms for data classification applications: A review. Egyptian Informatics Journal. (ISI & Scopus)
- Asad, M. M., Sherwani, F., Hassan, R. B., Sahito, Z., & Khan, N. (2021). Workforce safety education and training for oil and gas industry: a conceptual framework for virtual reality-based HAZFO expert 2.0. Journal of Engineering, Design and Technology. Emerald, UK (ISI & Scopus)
- Asad, M. M., Rind, A. A., & Abdulmuhsin, A. A. (2021). The effect of knowledge management in educational settings: a study of education management organizations (EMOs) schools of Pakistan. International Journal of Organizational Analysis. Emerald, UK (ISI & Scopus)
- Asad. M. M, Aftab. K, Datoo. A, Khand. Z (2021). Integration of Information and Communication Technology in Teaching and Learning of Engineering Content at Public Sector Universities of Pakistan, Journal of Applied Research in Education, Emerald, UK (ISI & Scopus)
- Abdulmuhsin, & Asad, M. M. (2021). How exploitative leadership influences on knowledge management processes: the moderating role of organizational citizenship behavior. International Journal of Organizational Analysis. Emerald, UK (ISI & Scopus)
- Aslam, R., Khan, N., **Asad, M. M.**, & Ahmed, U. (2021). Impact of technological pedagogical content knowledge on teachers' digital proficiency at classroom in higher education institution of Pakistan. Interactive Technology and Smart Education. Emerald, UK (**ISI & Scopus**)
- Rind, A. A., **Asad, M.** M., Marri, S. A., Sherwani, F., & Rehman, F. U. (2021). How integration of information and communication technologies impact academic achievement? An empirical study on Sindh education foundation. Journal of Applied Research in Higher Education. (ISI & Scopus)
- Rehman, F. U., Ismail, H., Al Ghazali, B. M., **Asad, M. M.**, Shahbaz, M. S., & Zeb, A. (2021). Knowledge management process, knowledge-based innovation: Does academic researcher's productivity mediate during the pandemic of covid-19? PloS one, 16(12), e0261573. (**ISI & Scopus**)
- Niaz, A., Asad, M. M., Abdulmuhsin, A. A., Shavanov, M., & Churi, P. (2021). Risk factors for the rice crop farming community in China: a documentary analysis of the challenges during post COVID-19. Asian Education and Development Studies. (ISI & Scopus)
- Churi, P., Mistry, K., Asad, M. M., Dhiman, G., Soni, M., & Kose, U. (2021). Online learning in COVID-19 pandemic: An empirical study of Indian and Turkish higher education institutions. World Journal of Engineering. (ISI & Scopus)
- Ismail, F., Alansari, Rehman, F., Din, A. U., **Asad, M. M.**, F. J., & Shiekh, S. I. (2021). Recruitment Process, Organizational Performance: Does Employees Commitment Mediate in the Manufacturing Sector of Pakistan? Multicultural Education, 7(11). (ISI & Scopus)
- Abbas, Z., Ahmad, A. R. B., Shahbaz, M. S., & Asad, M. M. (2021). Relationship between government and public sector universities in the perspective of agency theory: a brief review. International Journal of Services and Operations Management, 40(2), 188-202. (ISI & Scopus)

- Asad, M. M., Rind, A. A., Khand, Z. H., Rind, I. A., & Mughal, S. H. (2020). Curriculum up-gradation practices among higher education institutions of Pakistan: does curriculum ideologies make difference? Journal of Applied Research in Higher Education. Emerald, UK (ISI & Scopus)
- Asad, M. M. (2020). Integration of Industrial Revolution 4.0 and IOTs in academia: a state-of-the-art review on the concept of Education 4.0 in Pakistan. Interactive Technology and Smart Education. Emerald, UK (ISI & Scopus)
- Mughal, S. H., Asad, M. M., & Adams, D. (2020). Goals of the national mathematics curriculum of Pakistan: educators' perceptions and challenges toward achievement. International Journal of Educational Management. Emerald, UK (ISI & Scopus)
- Gamil, Y, & Asad, M. M. (2020). Internet of things in construction industry revolution 4.0. Journal of Engineering, Design and Technology. Emerald, UK (ISI & Scopus)
- Ning, B., Rind, I. A., & Asad, M. M. (2020). Influence of Teacher Educators on the Development of Prospective Teachers' Personal Epistemology and Tolerance. SAGE Open, 10(1). (ISI & Scopus)
- Asad, M. M., Gul, J., & Lashari, M. A. (2020). Digital Skills and Literacy among Prospective Teachers of Sukkur Pakistan: A Conceptual Framework. Proceeding on Teaching and Science Education, 1(1), 27-36. (ISI & Scopus)
- Asad, M. M., Pitaffi, A. A., & Zia, S. (2020). Student's Satisfaction Level Towards Teachers' Pedagogical Skills: A Conceptual Action Plan for Sindh Pakistan. Proceeding on Teaching and Science Education, 1(1), 37-42. (ISI & Scopus)
- Nawab, A., & Asad, M. M. (2020). Leadership practices of school principal through a distributed leadership lens: a case study of a secondary school in urban Pakistan. International Journal of Public Leadership. (ISI & Scopus)
- Asad, M. M., Hassan, R., Sherwani, B., Sherwani, F. & Soomro, Q. M. (2019). Knowledge Base and Rule Base Safety Management Systems Development Strategies and Applications for Petrochemical Industries: A Brief Outline, Journal of Physics: Conference Series, IOP Publisher. (ISI & Scopus)
- Asad, M. M., Hassan, R., Amir, M., Sherwani, F. & Soomro, Q. M. (2019). Design and Development of Knowledge Base Decision Support System (HAZFO EXPERT 1.0) For Accident Prevention at Oil and Gas Drilling Industries, Journal of Engineering Design and Technology, Emerald Publishers, UK. (ISI & Scopus)
- Asad, M. M., Hassan, R., Sherwani, F. & Soomro, Q. M. (2019). Development of Health and Safety E-Vestibule Training Module Based on Novel Hazard Controlling Measures for Malaysian Oil and Gas Drilling Industries: A Proposed Concept, International Journal of Integrated Engineering, UTHM. (ISI & Scopus)
- Asad, M.M., Hassan, R., Sherwani, F., & Soomro, Q. M. (2019). Determination of Hazardous Oil and Gas Drilling Activity and Potential Hazards Associated with Hydrogen Sulfide (H₂S) and Chemical Operation: A Mix Method Investigation, International Journal of Integrated Engineering, UTHM. (ISI & Scopus)
- Asad, M. M., Hassan, R., K. Latif, Sherwani. F (2019), Identification of Potential Ergonomic Risk Factors and Mitigating Measures for Malaysian Oil and Gas Drilling Industries: A Conceptual Research Proposition, Journal of Physics: Conference Series, IOP Publisher. (ISI & Scopus)
- Asad, M. M., Hassan, R., S. Sohu., Sherwani. F (2019), Meticulous Severity Analysis for Sustainable Rig Construction Operation for Oil and Gas Drilling Industries: A Mix-Method Approach, International Journal of Sustainable Construction Engineering Technology, UTHM. (ISI & Scopus)
- Asad, M. M., Hassan, R., Sherwani, Abbas. Z, Shahbaz. S., (2019), Identification of Effective Safety Risk Mitigating Factors for Well Control Drilling Operation: An Explanatory Research Approach, Journal of Engineering Design and Technology, Emerald Publishers, UK. (ISI & Scopus)

- Asad, M. M., Hassan, R., Sherwani. F, K. Latif (2019). Key Factors Effecting the Use of KBDSS for Oil and Gas Industries: A Review on Work Based Educational Technologies Journal of Physics, IOP Publisher. (Scopus Indexed)
- Abdul Satar, Salim. A, **Asad, M. M** (2019). Factors Influencing the Adoption of Mobile Banking Service among Cihan Bank Customers in the Kurdistan Region of Iraq, International Journal of Advance Sciences and Technology, 27(1). (**Scopus Indexed**)
- Sherwani, F., Asad, M. M., & Ibrahim, B. S. K. K. (2020, March). Collaborative Robots and Industrial Revolution 4.0 (IR 4.0). In 2020 International Conference on Emerging Trends in Smart Technologies (ICETST) (pp. 1-5). IEEE. (ISI & Scopus)
- Ning, B., Rind, I. A., & Asad, M. M. (2020). Influence of Teacher Educators on the Development of Prospective Teachers' Personal Epistemology and Tolerance. SAGE Open, 10(1), 2158244020914639. (ISI & Scopus)
- Gamil, Y., Abdullah, M. A., Abd Rahman, I., & **Asad, M. M.** (2020). Internet of things in construction industry revolution 4.0. Journal of Engineering, Design and Technology. (**ISI & Scopus**)
- Butt, R., Siddiqui, H., Soomro, R. A., & **Asad, M. M.** (2020). Integration of Industrial Revolution 4.0 and IOTs in academia: a state-of-the-art review on the concept of Education 4.0 in Pakistan. Interactive Technology and Smart Education. (ISI & Scopus)
- Asad, M. M., Hassan, R., K. Latif, Sherwani (2018), Development of A Work-based Vestibule Training E-module For Accident Prevention at Malaysian Oil and Gas Drilling Industries: A Proposed Framework, International Journal of Integrated Engineering, UTHM. (ISI & Scopus)
- Asad, M. M., Hassan, R., Sherwani. F, K. Latif, (2018), Identification of Potential Risks and Controlling Factors Associated with Helicopter Operation: A Mix-Method Investigation from Oil and Gas Industries, International Journal of Integrated Engineering, UTHM. (ISI & Scopus)
- Abbas, Z., Ahmad, A., **Asad, M. M.** (2019). Relationship between Government and Public Sector Universities in the Perspective of Agency Theory: A Brief Review. (**Scopus**)
- Asad, M. M., Sherwani. F, Khoso. S, A. M. Medani. Soomro, Q. M, (2018), Workforce Safety Risk Factors for Construction Projects Towards Sustainable China-Pakistan Economic Corridor (CPEC), International Journal of Sustainable Construction Engineering Technology, UTHM. (ISI & Scopus)
- ▶ Hassan, R., **Asad, M. M**, F. Sherwani (2018), Development and Evaluation of a Simulation Based Module of Dc-to-Dc Boost Convertor for Power Electronics: Towards IR 4.0, Journal of TVET Practitioners, UTHM. (**DOAJ & Google Scholar**)
- M. S. Shahbaz, R. Z. R. Rasi, M. H. Zulfakar, M. F. Bin Ahmad, and **Asad, M. M** (2018), Theoretical Framework Development for Supply Chain Risk Management for Malaysian Manufacturing, Int. J. Supply Chain Manag., vol. 7, no. 6, 2018. (**Scopus**)
- Asad, M. M., Hassan, R., Soomro, Q. M., & Sherwani, F. (2017). Development of KBES with Hazard Controlling Factors and Measures for Contracting Health and Safety Risk in Oil and Gas Drilling Process: A Conceptual Action Plan, The Social Sciences, 12 (3), Medwell Publisher. (Scopus)
- Asad, M. M., Hassan, R., Sherwani, F., & Soomro, Q. M. (2017). Level of Satisfaction for Occupational Safety and Health Training Activities: A Broad-Spectrum Industrial Survey, Journal of Physics: Conference Series, IOP Publisher. (ISI & Scopus)
- Asad, M. M., Hassan, R., Sherwani, F., & Soomro, Q. M. (2017). Indication of Decision Making through Accident Prevention Resources among Drilling Crew at Oil and Gas Industries: A Quantitative Survey, Journal of Physics: Conference Series, IOP Publisher. (ISI & Scopus)
- ▶ Hassan, R., Asad, M. M., Soomro, Q. M., & Sherwani, F. (2017). Severity of the Casing and Cementing Operation with Associated Potential Hazards in the Drilling Process in the On and Offshore Oil and Gas Industry: A Cross-Sectional Investigation into Safety Management. Pertanika Journal of Social Science

- and Humanities, 25, 129-138. Published (ISI & Scopus)
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International Book Chapters

- Asad, M. M., Mahar, A. M., Datoo, A. K., Khand, Z. H., & Abdulmuhsin, A. A. (2021). Adaptability of Computer-Based Assessment Among Engineering Students at Higher Educational Institutions. In Technology and Tools in Engineering Education (pp. 81-95). CRC Press, Taylor and Francis.
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- Siddiqui, H., Butt, R., Soomro, R. A., **Asad, M. M.**, & Sherwani, F. (2021). Engineering Students' Motivation Toward Education 4.0: A Conceptual Framework for Rural Sindh. In Innovative Education Technologies for 21st Century Teaching and Learning (pp. 199-214). CRC Press. Taylor and Francis.

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- Asad, M. M., Sherwani, F., Hassan, R. B., & Churi, P. (Eds.). (2021). Innovative education technologies for 21st century teaching and learning, Taylor and Francis CRC Press.
- **Asad, M. M.,** Hassan, R., Sherwani, F. (2014). How to Boost Academic Observation Skills, ISBN-13: 978-149617011. Publisher Create Space Amazon Group of Companies, USA.
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- Asad, M. M. (2011), Tri Wheeler Spy Robot, Thesis for Bachelor of Electronic Engineering, Faculty of Engineering Science and Technology, Published by, Hamdard University, Karachi, Pakistan.

Research Supervision

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Professional Certifications

- Oil and Gas Safety Passport (OGSP), NIOSH Malaysia. (March 2016)
- Web-Designing, Computer System Hardware, MS Office and C++ from Pakistan International Airlines (PIA) Training Center. (2004)
- Basic Electronics Engineering Certification from Skill Development Council, Karachi, Pakistan. (2006)
- Certification of Recreation Instructor Melaka, Malaysia. (June 2013)
- Certification of Recreation Instructor Kayak (Level.1) by Ministry of Human Development Malaysia. (May 2013)
- Certificate of Supervisor Health and Safety Awareness Training, Minster of Labor Ontario Canada. (30 May 2014)

Area of Research Interest

- ▶ STEM and TVET 4.0 Integration.
- Infrastructural Development in Technical and Vocational Education.
- Innovative Industrial Product Development.
- Information and Communication Technologies (ICT).
- Electrical and Electronics Engineering (Embedded Systems & Robotics).
- Simulation and Game based Learning
- Production Management and Industrial Transformation.
- Occupational Hazard Identification and Prevention.
- E-Learning Aids and Prototypes Designing.
- Industrial Psychology and Human Factors.
- Engineering Hands-on Training and Work-Based Learning.
- Research and Development Approaches.
- Industrial HSE Management Expert Systems.

Technical Expertise and Skills

Decent knowledge and command in the following skills:

- Auto CAED Software (2D and 3D Modeling).
- SPSS Software (Descriptive & Inferential Statistical Tool).
- Nvivo Software (Qualitative Data Analysis Tool).
- MATLAB Software (Simulation & Programming).
- PCB Making (Designing & Sketching).
- Risk Assessments Development (Industrial).
- Visual Studio Software (Software and GUI Development).
- MySQL Programming (Database Development & Management).
- Programming Skills in C++ and Assembly language.
- ▶ Computer Communications Networks (CCN)
- Interpersonal and Communication Skills.
- Management and Leadership Skills.
- Public Speaking Expertise.
- Technical Report Writing Skills.

Industrial Research Collaboration

- Research Collaboration with PETRONAS Oil and Gas Company (August 2014-February 2018).
- Research Collaboration with Occupational Safety and Health Consultancy (OSHTC), Pakistan (June 2014 -Present)
- Research Collaboration with Saudi Aramco, Dammam, Kingdom of Saudi Arabia (August 2014 February 2018).
- Research Collaboration with Oil and Gas Development Corporation Limited, Pakistan (August 2014-February 2018).

Community Services and Welfare

- International delegate for experience sharing with indigenous community of Carey Island located to the south of Port Klang and north of Banting town of Malaysia in February 2017. (International)
- Participated in community welfare work for old citizens of Jalan Ding Ding at Penang Island in May 2017. Program was organized by Malaysian Peace Foundation. (International)
- Project Coordinator for Project Sekolah Datin Onn Jafer Batu Pahat Malaysia. (International)
- Faculty Representative for International students of Universiti Tun Hussein Onn Malaysia.
- **Facilitator** of International Conferences and Seminars.
- Media Manager (Sports), Hamdard University (2006-2009).
- Organizer for fixtures, practices and social events at Universiti Tun Hussein Onn Malaysia.

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