Dr Muhammad Irfan

Professor

School of Civil & Environmental Engineering

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LinkedIn: https://www.linkedin.com/in/dr-muhammad-irfan-77682219/?originalSubdomain=pk



About

Dr. Dr Muhammad Irfan is working as Professor in the School of Civil & Environmental Engineering. Dr. Dr Muhammad Irfan has a PhD in Civil Engg. Dr. Dr Muhammad Irfan has published 91 research articles & conference papers having a citation count of 1199, carried out 7 projects and filed 0 intellectual property.

Qualifications

NIT, NUST Islamabad

PhD in Civil Engg	2007 - 2010
Purdue University , United States	
MS in Transportation	2005 - 2006
Purdue University , United States	
BS in Civil Engineering	1991 - 1994
Military College Of Engineering Risalpur , Pakistan	
Experience	
Professor	2022- Present
School of Civil & Environmental Engineering	
Professor	2020 - 2022
Military College of Engineering	
Defence Faculty	2014 - 2020
Military College of Engineering	
Defence Faculty	2010 - 2014
National Institute of Transportation (NIT-SCEE)	
Professor/ Principal & Dean School of Civil & Environmental Engineering (SCEE)/ NUST, SCEE/ NUST, H-12 Islamabad	2022 - 2023
Dean/(Professor)/ Chief Instructor MCE , MCE NUST Campus Risalpur	2019 - 2022
	0017 0010
Prof/ HoD Research MCE , MCE NUST Campus Risalpur	2017 - 2019
Assoc. Prof. HoD Const Engg & Mgmt Dept HoD Tn & Geotech Dept	2014 - 2017
MCE, Risalpur	2014 - 2017
Asst. Prof. HoD Transportation Dept	2011 - 2014
The state of the s	2011 2014

Awards

National Award of Best University Teacher

National Award of Best University Teacher by Higher Education Commission (HEC).

Best PhD Dissertation (Civil Engineering) Award

Best PhD Dissertation (Civil Engineering) Award - Purdue University, USA.

Best Teacher Military College of Engineering

Best Teacher Military College of Engineering – 2014-15.

Best Researcher Military College of Engineering

Best Researcher Military College of Engineering - 2015 and 2018

Member National Expert Group on Highway Engineering for CPEC

Member National Expert Group on Highway Engineering for CPEC – Group constituted by Ministry of Communication and Recommendation of NHA and approved by Prime Minister of Pakistan.

Professional Memberships

PEC Since 1995

ASCE Since 2006

IRF Since 2008

Research Projects

National Projects

Sustainability and Quality Assurance for Academic Governance and Redesign Engineering Studies

2023

Funding Agency: ERASMUS Amount: PKR 18,892,479.00 Status: Approved_inprocess

Improvement of Mix Design Technology for Pakistan

2013

Funding Agency: National Highway Authority

Amount: PKR 5,460,000.00 Status: Completed

International Projects

Industry Projects

National Projects	
Geotechnical Consultancy Project for "Field Density Tests at German Embassy, Islamabad. Client: DVK Construction Pvt Ltd Amount: PKR 208,500.00 Status: Completed	2023
Geotechnical Consultancy for Design of Foundation for Upgradation of NCRD Complex, Phase-III, at Chak Shahzad, Islamabad Client: Pakistan Public Works Department (PWD) Amount: PKR 646,000.00 Status: Completed	2024
Geotechnical Consultancy Project for "Geotechnical Investigation for Newly Proposed 132 KV Grid Station at Cabinet Division Employees Cooperative Housing Society, Islamabad" Client: Islamabad Electric Supply Company (IESCO), Pakistan Amount: PKR 688,010.00 Status: Completed	2023
Geotechnical Consultancy Project for "Geotechnical Investigation for Construction of BOQs (Male) (Adjacent to Under Construction Male BOQ building)" Client: Project Management Office (PMO) NUST, Pakistan Amount: PKR 411,200.00 Status: Completed	2023
Geotechnical Consultancy for Design of Foundation for Transmission Tower at 132 KV, CHAKSAWARI, MIRPUR Client: Islamabad Electric Supply Company (IESCO), Pakistan Amount: PKR 800,000.00 Status: Completed	2023
International Projects	
Research Articles	
Effects of synergistic combined Bakelite and Nano clay modification on asphalt mixture performance properties Naqueeb Ullah Khattak Dr Muhammad Irfan Menglim Hoy Asmat Khan Road Materials and Pavement Design, Pages 1-17 Impact Factor: 3.400 Quartile: 1 Citations: 3 DOI: 10.1080/14680629.2024.2446427	2025
Scientific and Technical Approach for Climate Change Mitigation and Disaster Management Dr Muhammad Irfan The Sappers Journal, Pages 4-16 Impact Factor: N/A DOI: The Sappers Journal 2024	2024
Real-time monitoring of asphalt pavement structure fatigue response based on tri-axis accelerometer. Xingwang Wang Hainian Wang Chonghui Wang Ponan Feng Muhammad Irfan Junfeng Gao Zhen Leng Chen Zhang International Journal of Pavement Engineering, Volume: 25, Issue: 01, Pages: 14 Impact Factor: 3.8 Quartile: 2 Citations: 6 DOI: 10.1080/10298436.2024.2308158	2024
Complex Linear Diophantine Fuzzy Sets over AG-Groupoids with Applications in Civil Engineering Hao Guan Faisal Yousafzai Muhammad Danish Zia Murad-ul-Islam Khan Muhammad Irfan Kostaq Hila Symmetry, Volume 15(1), Article Number 74 Impact Factor: 2.7 Quartile: 2 Citations: 9 DOI: 10.3390/sym15010074	2022
Experimental investigation of nano materials applicability in Hot Mix Asphalt (HMA) Sarfraz Ahmed Muhammad Irfan Awais Zahid Construction and Building Materials, Volume 350, Article Number 128882 Impact Factor: 7.693 Quartile: 1 Citations: 13 DOI: https://doi.org/10.1016/j.conbuildmat.2022.128882	2022

Alternative Approach for Predicting the Phase Angle Characteristics of Asphalt Concrete Mixtures Based on Recurrent Neural Networks Yasir Ali Fiza Hussain Muhammad Irfan	2021
Journal of Materials in Civil Engineering, Volume 33, Issue 9, Article Number 04021215	
Impact Factor: 3.651 Quartile: 2 Citations: 6	
DOI: 10.1061/(ASCE) MT.1943-5533.0003855	
An eXtreme Gradient Boosting model for predicting dynamic modulus of asphalt concrete mixtures Fizza Hussain Yasir Ali Muhammad Irfan Abdul Salam Buller	2021
Construction and Building Materials , Volume 295, Article Number 123642	
Impact Factor: 7.693 Quartile: 1 Citations: 46	
DOI: https://doi.org/10.1016/j.conbuildmat.2021.123642	
Quantifying the Differential Phase Angle Behaviour of Asphalt Concrete Mixtures Using Artificial Neural Networks	2021
Fizza Hussain Yasir Ali Muhammad Irfan	
International Journal of Pavement Research and Technology, Pages 1-19	
Impact Factor: 0 Citations: 8	
DOI: https://doi.org/10.1007/s42947-021-00042-0	
A data-driven model for phase angle behaviour of asphalt concrete mixtures based on convolutional neural network	2021
Fizza Hussain Yasir Ali Muhammad Irfan Murtaza Ashraf Shafeeq Ahmed	
Construction and Building Materials, Volume 269, Article Number 121235	
Impact Factor: 7.43 Quartile: 1 Citations: 22	
DOI: https://doi.org/10.1016/j.conbuildmat.2020.121235	
Effect of factors of organizational structure influencing nonphysical waste in road projects of developing countries	2020
Dr Muhammad Irfan Muhammad Sohail Anwar Malik Syyed Sami Ul Haq Kaka Khel	
Engineering, Construction and Architectural Management, Volume 27, No. 10, Pages 3135-3153	
Impact Factor: 3.531 Quartile: 2 Citations: 8	
DOI: 10.1108/ECAM-06-2019-0327	
Determinants of labor productivity for building projects in Pakistan	2020
Muhammad Irfan Hafiz Zahoor Ahmed Muhammad Abbas Yasir Ali	
Journal of Construction Engineering, Management & Innovation, Volume 3, Issue 2, Pages 85-100	
Impact Factor: N/A	
DOI: https://doi.org/10.31462/jcemi.2020.02085100	
Influence of Coarse-Aggregate Angularity on Asphalt Mixture Macroperformance: Skid Resistance, High-Temperature, and Compaction Performance	2020
Junfeng Gao Hainian Wang Yin Bu Zhanping You Xiang Zhang Muhammad Irfan Junfeng Gao Hainian Wang Yin Bu Zhanping You Xiang Zhang Journal of Materials in Civil Engineering, Volume 32(5), Article Number 04020095	
Impact Factor: 3.266 Quartile: 2 Citations: 41	
DOI: DOI: 10.1061/(ASCE)MT.1943-5533.0003125	
Sustainable Urban Transportation – Demand and Supply Management Policies Using Econometric Model	2019
Muhammad Irfan	
The Sappers Journal, Pages 6-10	
Impact Factor: N/A	
DOI: sappers-journal-2019	
A binary logistic model for predicting the tertiary stage of permanent deformation of conventional asphalt concrete mixtures	2019
Yasir Ali Muhammad Irfan Abdul Salam Buller Hammad Anis Khan Hafiz M. F. Gul	
Construction and Building Materials, Volume 227, Article Number UNSP 116608	
Impact Factor: 4.419 Quartile: 1	
DOI: 10.1016/j.conbuildmat.2019.07334	
Traffic open time prediction of fog seal with sand using image processing technology	2019
Mohd Rosli Mohd Hasan Xiang Zhang Hainian Wang Junfeng Gao Muhammad Irfan	
Construction and Building Materials, Volume 209, Pages 9-19	

Impact Factor: 4.419 Quartile: 1 Citations: 26 DOI: https://doi.org/10.1016/j.conbuildmat.2019.03.070	
Rutting and Fatigue Properties of Cellulose Fiber-Added Stone Mastic Asphalt Concrete Mixtures Muhammad Irfan Yasir Ali Shahid Iqbal Hainian Wang Yasir Ali Sarfraz Ahmed Shahid Iqbal Hainian Wang Advances in Materials Science and Engineering, Volume 2019, Article ID 5604197, 8 pages Impact Factor: 1.271 Quartile: 4 Citations: 28 DOI: https://doi.org/10.1155/2019/5604197	2019
Performance Test on Styrene-Butadiene-Styrene (SBS) Modified Asphalt Based on the Different Evaluation Methods Hainian Wang Junfeng Gao Muhammad Irfan Chen Zhang Zhanping You Applied Sciences, Volume: 9, Issue:3, Article Number: 467 Impact Factor: 2.474 Quartile: 2 Citations: 48 DOI: DOI: 10.3390/app9030467	2019
The impact of data noise on permanent deformation behaviour of asphalt concrete mixtures Yasir Ali Muhammad Irfan Etikaf Hussain International Journal of Pavement Engineering, - Impact Factor: 2.298 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1080/10298436.2018.1549324	2018
Predicting the permanent deformation behaviour of the plant produced asphalt concrete mixtures: A first order regression approach arshad hussain Hassan Bin Tahir Muhammad Irfan Yasir Ali Etikaf Hussain Construction and Building Materials, Volume 189, Pages 629-639 Impact Factor: 4.046 Quartile: 1 Citations: 7 DOI: 10.1016/j.conbuildmat.2018.08.164	2018
High-Temperature Performance and Workability of Crumb Rubber–Modified Warm-Mix Asphalt Hanian Wang Jinkun Xiao Zhanping You Xu Yang Muhammad Irfan Xiaoyan Li Journal of Testing and Evaluation, Volume 48, Issue 4, online published in 2018 Impact Factor: 0.711 Quartile: 4 Citations: 10 DOI: DOI: 10.1520/JTE20170384	2018
Highway Asset Management Framework for Longevity of Infrastructure – A Case Study for China-Pakistan Economic Corridor Yasir Mehmood Anwaar Ahmed Hainian Wang Muhammad Irfan Yasir Mehmood Anwaar Ahmed Hainian Wang American Journal of Civil Engineering, Volume 6, No. 6, Pages 185-194 Impact Factor: 0 DOI: 10.11648/j.ajce.20180606.12	2018
Rutting Evaluation of Asphalt Mixtures Using Static, Dynamic, and Repeated Creep Load Tests Muhammad Irfan Y. Ali Shahid Iqbal Sarfraz Ahmad I. Hafeez Arabian Journal for Science and Engineering, Volume 43, Pages 5143–5155 Impact Factor: 1.518 Quartile: 3 Citations: 26 DOI: https://doi.org/10.1007/s13369-017-2982-4	2018
Modelling and characterising the fatigue behaviour of asphaltic concrete mixtures Muhammad Aniq Gul Muhammad Irfan Sarfraz Ahmed Yasir Ali Shahab Khanzada Construction and Building Materials, Volume 184, Pages 723-732 Impact Factor: 4.046 Quartile: 1 Citations: 12 DOI: DOI:10.1016/j.conbuildmat.2018.07.022	2018
Effects of coarse aggregate angularity on the microstructure of asphalt mixture Junfeng Gao Hainian Wang Yin Bu Zhanping You Mohd Rosli Mohd Hasan Muhammad Irfan Construction and Building Materials, Volume 183, Pages 472-484 Impact Factor: 4.046 Quartile: 1 Citations: 91 DOI: https://doi.org/10.1016/j.conbuildmat.2018.06.170	2018
Effect of binder grade on performance parameters of asphaltic concrete paving mixtures Muhammad Irfan Yasir Ali Muhammad Junaid Sarfraz Ahmed International Journal of Pavement Research and Technology, Volume 11, Issue 5, Pages 435-444 Impact Factor: 0 Citations: 17	2018

DOI: https://doi.org/10.1016/j.ijprt.2017.11.006

Post Implementation Evaluation of Lahore-Sheikhupura- Faisalabad Dual Carriageway - A Built Operate Transfer (BOT) Project Anwaar Ahmed Sandeerah Choudhary Anwaar Ahmed Sandeerah Choudhary Muhammad Irfan International Journal of Transportation Engineering and Technology, Volume 4, Issue 3, Pages 59-64 Impact Factor: 0	2018
Policy Implications of Work-Trip Mode Choice Using Econometric Modeling Muhammad Irfan Ahmed N. Khurshid Aemal Khattak Dr. Muhammad Bilal Khurshid Yasir Ali Journal of Transportation Engineering Part A: Systems, Volume 144(8), Article Number 04018035 Impact Factor: 0.641 Quartile: 4 Citations: 14	2018
Rheological Behavior and Sensitivity of Wood-Derived Bio-Oil Modified Asphalt Binders Junfeng Gao Zhanping You Muhammad Irfan Hainian Wang Mohd Rosli Mohd Hasan Yong Lei Applied Sciences, Volume 8(6), Article Number 919 Impact Factor: 2.217 Quartile: 3 Citations: 86 DOI: https://doi.org/10.3390/app8060919	2018
Revisiting the Relationship of Dynamic and Resilient Modulus Test for Asphaltic Concrete Mixtures Yasir Ali Muhammad Zeeshan Imran Hafeez Shafeeq Ahmed Muhammad Irfan Construction and Building Materials, Volume 170, Pages 698-707 Impact Factor: 4.046 Quartile: 1 Citations: 21 DOI: https://doi.org/10.1016/j.conbuildmat.2018.03.098	2018
Performance Evaluation of Crumb Rubber Modified Asphalt Mixtures Based on Laboratory and Field Investigations Saffraz Ahmed Muhammad Irfan Yasir Ali Imran Hafeez Arabian Journal for Science and Engineering, Volume 43, Issue 4, Pages 1795-1806 Impact Factor: 1.518 Quartile: 3 Citations: 48 DOI: https://doi.org/10.1007/s13369-017-2729-2	2018
Permanent deformation prediction of asphalt concrete mixtures - A synthesis to explore a rational approach Yasir Ali Muhammad Irfan Sarfraz Ahmed Shafeeq Ahmed Construction and Building Materials, Volume 153, Pages 588-597 Impact Factor: 3.485 Quartile: 1 Citations: 33 DOI: https://doi.org/10.1016/j.conbuildmat.2017.07.105	2017
Performance Evaluation of Elvaloy as a Fuel-Resistant Polymer in Asphaltic Concrete Airfield Pavements Muhammad Irfan Madeeha Saeed Sarfraz Ahmed Y. Ali Journal of Materials in Civil Engineering, Volume 29, Issue 10, Article Number 04017163 Impact Factor: 1.763 Quartile: 2 Citations: 29 DOI: https://doi.org/10.1061/(ASCE)MT.1943-5533.0002018	2017
Empirical Correlation of Permanent Deformation Tests for Evaluating the Rutting Response of Conventional Asphaltic Concrete Mixtures Muhammad Irfan Yasir Ali Sarfraz Ahmed Shafeeq Ahmed Journal of Materials in Civil Engineering, Volume 29, Issue 8, Article Number 04017059 Impact Factor: 1.763 Quartile: 2 Citations: 31 DOI: https://doi.org/10.1061/(ASCE)MT.1943-5533.0001888	2017
Community Based Flood Risk Reduction: A Study of 2010 Floods in Pakistan Muhammad Iqbal Javed Akhter Muhammad Irfan Naeem Shahzad Rehan Ullah American Journal of Social Science Research, Volume 3, No. 6, Pages 35-42 Impact Factor: - DOI: NA	2017
Characterization of Various Plant-Produced Asphalt Concrete Mixtures Using Dynamic Modulus Test Sarfraz Ahmed Yasir Ali Muhammad Irfan Asad S. Waraich Advances in Materials Science and Engineering, Volume 2016, Article ID 5618427, 12 pages Impact Factor: 1.299 Quartile: 3 Citations: 27 DOI: http://dx.doi.org/10.1155/2016/5618427	2016

Investigation of factors affecting dynamic modulus and phase angle of various asphalt concrete mixtures Yasir Ali S. Khanzada Tariq Mahmood Yasir Ali Muhammad Irfan Sarfraz Ahmed S. Khanzada Tariq Mahmood Materials and Structures, Volume 49, Issue 3, Pages 857-868 Impact Factor: 2.607 Quartile: 1 Citations: 58 DOI: DOI:10.1617/s11527-015-0544-3	2016
Sensitivity analysis of dynamic response and fatigue behaviour of various asphalt concrete mixtures Sarfraz Ahmed Muhammad irfan Yasir Ali Shahab Khanzada Tariq Mahmood Fatigue and Fracture of Engineering Materials and Structures, Volume 38, Issue 10, Pages 1181-1193 Impact Factor: 1.838 Quartile: 1 Citations: 27 DOI: https://doi.org/10.1111/ffe.12297	2015
A framework for assessing the consequences of deferred or hastened highway asset interventions Dr. Muhammad Bilal Khurshid Muhammad Irfan Anwaar Ahmed Samuel Labi Structure and Infrastructure Engineering, Volume 11, Issue 3, Pages 282-296 Impact Factor: 1.202 Quartile: 2 Citations: 10	2015
DOI: DOI:10.1080/15732479.2013.875046	
Framework for airfield pavements management - an approach based on cost-effectiveness analysis Muhammad Irfan Muhammad Bilal Khurshid Dr Shahid Iqbal Abid Khan European Transport Research Review, Volume 7, Article Number 13 Impact Factor: 0.672 Quartile: 4 Citations: 18	2015
DOI: 10.1007/s12544-015-0165-5	
Marginal Pavement Damage Cost Estimation Using Field Data: Issues and Opportunities Anwaar Ahmed Dr. Muhammad Bilal Khurshid Muhammad Irfan Samuel Labi IRF Examiner, Volume 4, Pages 6-12	2014
Impact Factor: N/A DOI: IRF-Examiner-2014-pp-6-12	
Performance Evaluation of Asphaltic Mixtures Using Bakelite Muhammad Irfan Muhammad Babar Khan Anwaar Ahmed Adnan Yousaf Arshad Hussain Life Science Journal, Vol.11(7s), Pages 481-488, 2014	2014
Impact Factor: 0 DOI: http://www.dx.doi.org/10.7537/marslsj1107s14.103	
Multidimensional Benefit–Cost Evaluation of Asphaltic Concrete Overlays of Rigid Pavements Muhammad Bilal Khurshid Muhammad Irfan Samuel Labi Anwaar Ahmed Structure and Infrastructure Engineering, Volume 10, Issue 6, Pages 792-810 Impact Factor: 1.454 Quartile: 2 Citations: 21 DOI: https://doi.org/10.1080/15732479.2013.767842	2014
Utilization of Waste Polyethylene in Asphalt Mixes in Pakistan Bilal Khurshid Sarfraz Ahmed Muhammad Jawed Iqbal Muhammad Irfan Sarhad University International Journal of Basic and Applied Sciences, Volume 2, Issue 1, Pages 1-8	2014
Impact Factor: N/A DOI: 000	
Determining the Contribution of Different Structural Layers of Asphalt Pavement System to Rutting Using Transverse Profile Analysis Sabahat Hussan Majid Kamal Muhammad Babar Khan Sabahat Hussan Majid Kamal Muhammad Babar Khan Muhammad Irfan American Journal of Civil Engineering and Architecture, Volume 1, No. 6, Pages 174-180	2013
Impact Factor: 0 DOI: DOI: 10.12691/ajcea-1-6-7	
An Analytical Framework for Optimizing the Highway and Civil Infrastructure Interventions Dr. Muhammad Bilal Khurshid Muhammad Irfan Sarfraz Ahmed Shahid Iqbal Sarhad University International Journal of Basic and Applied Sciences, Volume 1, Issue No. 1, Pages 158-166 Impact Factor: N/A	2013
DOI: https://journal.suit.edu.pk/index.php/suijbas/issue/archive	
Factorial Design Approach to Investigate the Effect of Different Factors on the Resilient Modulus of bituminous Paving Mixes Muhammad Babar Khan Afaq Khattak Sarfraz Ahmed Muhammad Babar Khan Afaq Khattak Muhammad Irfan	2012

DOI: https://doi.org/10.1080/15732479.2013.767842	
Establishing optimal project-level strategies for pavement maintenance and rehabilitation - A framework and case study Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Qiang Bai Thomos L Morin	2012
Engineering Optimization , Volume 44, Issue 5, Pages 565-589	
Impact Factor: 0.962 Quartile: 2 Citations: 42 DOI: doi.org/10.1080/0305215X.2011.588226	
Scale and Condition Economies in asset Preservation Cost Functions – A Case Study Involving Flexible Pavement Treatments Muhammad Irfan Dr. Muhammad Bilal Khurshid Anwaar Ahmed Samuel Labi	2012
Journal of Transportation Engineering, Volume 138(2), Pages 218-228	
Impact Factor: 0.863 Quartile: 2 Citations: 18	
DOI: 10.1061/(ASCE)TE.1943-5436 .0000323	
An analysis of the cost-effectiveness of rigid pavement rehabilitation treatments	2011
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Structure and Infractructure Engineering, Volume 7, Incure 9, Page 715, 727	
Structure and Infrastructure Engineering, Volume:7, Issue:9, Page:715-727 Impact Factor: 0.966 Quartile: 2 Citations: 16	
DOI: doi.org/10.1080/15732470902836566	
Optimal Performance Threshold Determination for Highway Asset Interventions: Analytical Framework and Application	2011
Muhammad Bilal Khurshid Muhammad Irfan Samuel Labi	
Journal of Transportation Engineering, Volume 137(2), Pages 128-139	
Impact Factor: 0.62 Quartile: 3 Citations: 34	
DOI: https://doi.org/10.1061/(ASCE)TE.1943-5436.0000198	
Planning Stage Estimation of Highway Project Duration on the Basis of Anticipated Project Cost, Project Type, and Contract Type Panagiotis Anastasopoulos Samuel Labi Fred Moavenzadeh Muhammad Irfan Dr. Muhammad Bilal Khurshid	2011
International Journal of Project Management, Volume 29, Issue 1, Pages 78-92	
Impact Factor: 1.532 Quartile: 2 Citations: 61 DOI: https://doi.org/10.1016/j.ijproman.2010.01.001	
A Synthesis of Overweight Truck Permitting	2010
Muhammad Irfan Muhammad Bilal Khurshid Anwaar Ahmed Samuel Labi Kumares Sinha JTRP Technical Reports , Pages 1-16	
Impact Factor: N/A	
DOI: 10.5703/1288284314260	
Evaluating the cost effectiveness of flexible rehabilitation treatments using different performance criteria	2009
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi William Flora	
Journal of Transportation Engineering, Volume 135, Issue 10, Pages 753-763	
Impact Factor: 0.496 Quartile: 3 Citations: 66 DOI: 10.1061/(ASCE)TE.1943-5436.0000041	
Determining the service life of thin hot-mix asphalt overlay by means of different performance indicators	2009
Samuel Labi Muhammad Irfan Muhammad Bilal Khurshid	
Transportation Research Record, Volume 2108, Issue 1, Pages 37-45	
Impact Factor: 0.298 Quartile: 4 Citations: 41 DOI: https://doi.org/10.3141/2108-04	
Comparison of methods for evaluating pavement interventions: Evaluation and case study	2009
Muhammad Bilal Khurshid Samuel Labi Muhammad Irfan Transportation Research Record , Issue:2108, Page:25-36	
Impact Factor: 0.298 Quartile: 4 Citations: 44 DOI: doi org/10.3141/2108-03	

ARPN Journal of Science and Technology, Volume 2, No. 11, Pages 1055-1062

Impact Factor: - | Citations: 21

Conference Proceedings

Keynote Speaker: Leveraging AI in Water Resources Planning, Engineering & Management Dr Muhammad Irfan	2025
3rd WAPDA Conference "Application of Artificial Intelligence for Water Resources Planning and Management", res.country(177,) Citations: N/A DOI: Nil	
Keynote Speaker: Highway Asset Management for Longevity of Infrastructure	2025
Dr Muhammad Irfan International Workshop on Quality Assurance and PMS for Highway Construction Maintenance, res.country(177,) Citations: N/A POL https://econ.guet.edu.gk/in-the-goetlight/international workshop on guelity assurance and pms for highway construction maintenance/	
DOI: https://scee.nust.edu.pk/in-the-spotlight/international-workshop-on-quality-assurance-and-pms-for-highway-construction-maintenance/	
Post Implementation Evaluation of Lahore-Sheikhupura- Faisalabad Dual Carriageway - A Built Operate Transfer (BOT) Project	2018
Muhammad Irfan Anwaar Ahmed Sandeerah Choudhary 2018 World Congress on Traffic and Transportation Engineering, res.country(48,) Citations: N/A	
DOI: 10.11648/j.ijtet.20180403.12	
Effect of Compaction on Quality of Asphalt Concrete Pavements	2017
Muhammad Irfan Muhammad Adeel Bilal Khurshid Malik Kamran Shakir 3rd Multi-Disciplinary Student Research Conference (MDSRC), res.country(177,)	
Citations: N/A	
DOI: 3rd Multi-Disciplinary Student Research Conference	
Integrating Structural Evaluation of Highways in overall Pavement Management System using Non- Destructive Testing	2017
Muhammad Irfan Yasir Mehmood Sarfraz Ahmed	
5th IRF Middle East Regional Congress & Exhibition, res.country(2,)	
Citations: N/A DOI: Nil	
Can Asphaltic Concrete Permanent Deformation Test Methods be used as Surrogate to Each Other? Muhammad Irfan Yasir Ali Dr Sarfraz Ahmed	2017
Transportation Research Board 96th Annual Meeting, res.country(233,)	
Citations: N/A DOI: Nil	
Developing a Framework for an Efficacious Highway Asset Management System in Pakistan Muhammad Irfan Dr.Sarfraz Ahmed Samuel Labi	2016
8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), res.country(197,) Citations: N/A	
DOI: 10.3850/978-981-11-0449-7-234-cd	
Keynote Speaker: Challenges and Opportunities in Developing Sustainable Urban Transportation Dr Muhammad Irfan	2015
International Seminar on Sustainable Urban Transportation System. National University of Sciences and Technology, res.country(177,)	
Citations: N/A DOI: Nil	
Sustainable Urban Transportation – Demand and Supply Management Policies Using Econometric Model	2015
Muhammad Irfan	
International Seminar on Sustainable Urban Transportation System., res.country(177,)	
Citations: N/A DOI: Nil	
Analyzing the Effect of Congestion Pricing on Work-Trip Mode Choice Using Econometric Modeling	2015
Muhammad Irfan Ahmed Nader Khurshid Bilal Khurshid Anwaar Ahmed Aemal Khattak 94th Annual Meeting of the Transportation Research Board (TRB), res.country(233,)	
Citations: N/A DOI: Nil	
Performance Evaluation of Asphaltic Airfield Pavements Using Elvaloy as a Fuel Resistant Polymer	2014
Muhammad Irfan Madeeha Saeed Intekhab Ahmed Qureshi Dr.Sarfraz Ahmed	-01-7

Comparative analysis of conventional and waste polyethylene modified bituminous mixes: A new

dimension of effective environmental & waste management

Bilal Khurshid Dr. Sarfraz Ahmed Muhammad Irfan Lt Col Sajid Mehmood

2013

International Conference on Remote Sensing, Environment and Transportation Engineering (RSETE 2013), res.country(48,)	
Citations: N/A	
DOI : 10.2991/rsete.2013.84	
An Analytical Framework for Optimizing the Highway & Civil Infrastructure Interventions	2012
Brig Dr Muhammad Irfan Bilal Khurshid Dr.Sarfraz Ahmed Dr Shahid Iqbal	
2nd International Multidisciplinary Conference towards Better Pakistan, res.country(177,)	
Citations: N/A	
DOI: Nil	
Water Reclamation Strategies in Built Environmenta Framework and Case Study of University Campus	2012
Muhammad Irfan Saqib Naveed Cheema	
Construction Research Congress (CRC- 2012), res.country(233,)	
Citations: N/A	
DOI: 10.1061/9780784412329.202	
Quantifying the Consequences of Hastened or Deferred Interventions	2011
Muhammad Irfan Bilal Khurshid Anwaar Ahmed Samuel Labi	
90th Annual Meeting of the Transportation Research Board, res.country(233,)	
Citations: N/A	
DOI: Nil	
Establishing Optimal Pavement Life-cycle Profiles at Project Level – A Framework Involving Different	2010
Categories of Cost and Treatment Types	
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Qiang Bai	
89th Annual Meetings of the Transportation Research Board,, res.country(233,)	
Citations: N/A DOI: Nil	
DOI: NII	
Estimation of Planning-Level Asset Preservation Costs – A Case Study involving Flexible Pavement	2010
Treatments Muhammad Irfan Muhammad Bilal Khurshid Anwaar Ahmed Samuel Labi	
89th Annual Meeting of the Transportation Research Board, Washington D.C., USA, res.country(233,)	
Citations: N/A	
DOI: Nil	
Establishment of Optimal Performance Thresholds for Highway Asset Interventions:A Framework and	2010
Case Study	2010
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi	
89th Annual Meeting of the Transportation Research Board, res.country(233,)	
Citations: N/A	
DOI: Nil	
Parametric Estimation of Planning-Level Asset Preservation Costs – Case Study in Flexible Pavements	2009
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi	
5th Annual Interuniversity Symposium on Infrastructure Management (AISIM), res.country(233,)	
Citations: N/A	
DOI: NII	
Service Life of Thin HMA Overlay Using Different Performance Indicators	2009
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi	
88th Annual Meeting of the Transportation Research Board, res.country(233,)	
Citations: N/A	
DOI: Nil	
Econometric Analysis of Influence of Highway Project Size, Project Type, and Contract Type on	2009
Contract Duration	
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Panagiotis Anastasopoulos	
88th Annual Meetings of the Transportation Research Board, res.country(233,)	
Citations: N/A DOI: Nil	
Comparing the Methods for Evaluating Pavement Interventions – A Discussion and Case Study	2009
Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi	

88th Annual Meeting of the Transportation Research Board, res.country(233,)

Citations: N/A DOI: Nil A Framework for Establishing Optimal Performance Thresholds for Highway Asset Interventions 2009 MUhammad Irfan Muhammad Bilal Khurshid Samuel Labi 5th Annual Interuniversity Symposium on Infrastructure Management (AISIM), res.country(233,) Citations: N/A DOI: Nil Cost-Effectiveness of Rehabilitation Alternatives - The Case For Flexible Pavements 2008 Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Kumares Sinha 7th International Conference of Managing Pavement Assets (ICMPA), res.country(38,) Citations: N/A DOI: Nil Cost Effectiveness of Rigid Pavement Rehabilitation Treatments 2008 Muhammad Irfan Muhammad Bilal Khurshid Samuel Labi Kumares C. Sinha 7th International Conference on Managing Pavement Assets, res.country(38,) Citations: N/A DOI: Nil Effectiveness of AC Overlays of Rigid Highway Pavements Using LTPP SPS-6 Data 2008 Muhammad Irfan Samuel Labi Kumares Sinha Muhammad Bilal Khurshid 87th Annual Meeting of the Transportation Research Board, res.country(233,) Citations: N/A DOI: Nil **Book Chapters** Exploring synergies between Disaster Risk Reduction and Climate Change policies in Pakistan 2021 Naeem shehzad Muhammad Irfan Muhammad Javed Iqbal Akhter Khichi In: Handbook of Climate Change Management, Chapter 1, Pages 1-24 DOI: https://doi.org/10.1007/978-3-030-22759-3_211-1 **Trainings** HEC/ USAID Program -Advancing Leadership Capacities of Deans 2024 Partner: USAID - Higher Education System Strengthening Activity (HESSA) Duration: 27-Jan-2024 to 03-Feb-2024 PEC PROGRAM EVALUATORS (PEVs) TRAINING ON OUTCOME-BASED EDUCATION & BE 2022 PROGRAMS ACCREDITATION Partner: Pakistan Engineering Council Duration: 21-Mar-2022 to 07-Jul-2022 PTV VISSIM & VISUM SOFTWARE TRAINING 2016 Partner: PTV Singapore Duration: 26-Oct-2016 to 28-Oct-2016 ARC GIS TRAINING BY ESRI 2007 Partner: Purdue University Duration: 06-Aug-2007 to 09-Oct-2007

2007

APPLIED MANAGEMENT PRINCIPLES PROGRAM (MINI MBA) AT KRANNERT SCHOOL OF

MANAGEMENT PURDUE UNIVERSITY USA

Duration: 14-May-2007 to 25-May-2007

Partner: Purdue University