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ACADEMIC LEADER, PROFESSOR OF TRANSPORTATION ENGINEERING, BUSINESS EXECUTIVE

STRATEGIC PLANNING | ACADEMIC RESEARCH & PROJECT MANAGEMENT | EXECUTIVE LEADERSHIP | OPERATIONAL EXCELLENCE

Visionary Educational Leader and Business Executive with high emotional intelligence and a rare mix of strategic, academic, business and leadership acumen with success in directing the performance, growth, and excellence of well-established organizations. Over 37 years of cumulative experience in academia, including 10+ years in C-level and executive leadership roles, serving as a COO, CFO, Dean of Academic Development, and the Chairman of the Civil & Environmental Engineering Department at the King Fahd University of Petroleum & Minerals.

Seasoned strategist with a track record of creating and maintaining a performance-driven culture for both staff and students, optimizing standards of excellence through strategic planning, restructuring, and development of highly effective programs and systems. Established and presided over various advising committees, Boards and councils, providing facilitation and advice on a wide range of industrial and academic matters. Vast career as a veteran educator, taught a wide range of graduate and undergraduate courses, driving students' success through effective curriculum and innovative programming.

Certified Consultant Engineer with a proven history of managing large industrial and academic research projects, leveraging technical consulting and guidance to ensure optimal project planning and successful execution. Respected mentor and team builder, instrumental in developing and directing highly-skilled management teams while empowering and guiding them to achieve organizational goals.

AREAS OF EXPERTISE

- Transportation Engineering
- System Restructuring/Development
- Program Development/Management
- Faculty Mentoring & Development
- Facility Administration
- Management Team Leadership
- Leading Large, Diverse Research Team
- Strategic & Management Consulting
- Accreditation & Compliance
- Industrial & Research Projects
- Student Success & Retention
- Process Improvement

SUMMARY OF QUALIFICATIONS

- ✓ **General Supervisor for Services (COO & CFO)** at King Fahd University of Petroleum & Minerals (KFUPM) – (2018-Present)
- ✓ **Professor of Transportation Engineering** at King Fahd University of Petroleum & Minerals (KFUPM) – (2013 – Present)
- ✓ **Deputy Chairman of the Board** of the "Business Park Complex Company" of Dhahran Techno-Valley Company, KFUPM (2019-Present).
- ✓ **Deputy Chairman of the Board** of the "Dhahran Valley Company for Business Services", of Dhahran Techno-Valley Company, KFUPM (2019-Present).
- ✓ **Certified Consultant Engineer** by the Saudi Council of Engineers specialized in the optimization of urban traffic flow, traffic impact assessment, traffic safety, and Intelligent Transportation Systems (ITS).
- ✓ **Dean of Academic Development and Chair of the Civil & Environmental Engineering Department** at KFUPM (2010-2018).
- ✓ **Member of the "Saudi Society for Traffic Safety"** (2016- present)
- ✓ Former **Board Member of the "Saudi Society for Traffic safety"** (2012- 2016).
- ✓ Former **Member of the "National Committee for Traffic Safety"** in King Abdulaziz City for Science and Technology "KACST" (1992-2012).
- ✓ Former **Chairman of the "Traffic Safety Committee"** at KFUPM (1999-2009).
- ✓ **Manager and Co-Investigator for 28 engineering and research projects** and a part-time Consultant for several consulting engineering firms in Saudi Arabia.
- ✓ **Published 68 papers** in refereed journals and conferences.
- ✓ Served as a **Chairman and a Committee Member in 29 Ph.D. dissertations and M.Sc. theses.**
- ✓ Awarded **Certificate of Distinction for Distinguished Research Team Member**, KFUPM 2013.

- ✓ Attained the **College of Applied Engineering Distinguished Teaching Award**, KFUPM 2006, the **College of Engineering Sciences Distinguished Teaching Award**, KFUPM 2004, and the **College of Engineering Sciences Service Award**, KFUPM 2003.
- ✓ Awarded four **Appreciation plaques from the Saudi Society for Traffic Safety "SALAMH"** for participating in the scientific committees of the First, Second, Third, and Forth Traffic Safety Forums, Dammam University, 2010, 2012, 2015 and 2017.
- ✓ Received the **Distinguished Research Project Leadership Award** of KFUPM in 2000, and the HRH Prince Bander Bin Sultan Bin Abdulaziz Reward for academic excellence in 1989.

ACADEMIC LEADERSHIP

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)

Dhahran, Saudi Arabia

GENERAL SUPERVISOR FOR SERVICES (CHIEF OPERATING OFFICER & CHIEF FINANCIAL OFFICER) 2018G (1439H) – Present

Leverage vast strategic, academic and leadership acumen leading a highly-skilled, senior-level management team to steer the facility-wide operations focusing on planning, delivering and promoting a positive environment for all employees and students aligned with the institution’s mission, vision, values, and requirements. Maintain full oversight of overall activities, programs, and operations of the institution, including construction projects, maintenance activities, medical services, security, transportation, and all financial matters for the institution. Report directly to His Excellency the President of the University.

The direct reports include Director-General of Project, Director General of Maintenance, Director General of Financial Affairs, Director General of Housing & Office Services, Director General of Administrative Affairs, Director General of Environment, Health, and Safety, Director General of Medical Center, Director-General of Security, Director General of Cultural & Recreation Facilities, Director General of Food Services, Director General of Materials, Director of Service Follow-up Unit and Director, University Property Department.

Key Contributions:

- Strategized and managed the institution's finances in alignment with organizational strategy ensuring effective utilization of financial resources through robust financial modeling.
- Directed and maintained all property assets, provided strategic direction and developed people’s capability to evolve and sustain the institution for the future.
- Advanced the University's digital future and oversaw risk identification, management, compliance, and health & safety.
- Embedded sustainability into the practice, strategies, and policies of the University.

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)

Dhahran, Saudi Arabia

DEAN OF ACADEMIC DEVELOPMENT

2015G (1436H) – 2018

Led the academic development initiatives advising the university on teaching effectiveness by enabling best current pedagogical and evaluation practices. Spearheaded, promoted and enabled the advanced, proven instructional technologies while helping the university to ensure the effectiveness and efficiency of the academic process and regulations. Introduced a Global Education initiative, in which, lectures at KFUPM are connected with other lectures around the world in real-time.

Chaired the Assessment Steering Committee for the National Institutional Reaccreditation of KFUPM. The committee’s main function was to manage the dynamic assessment process and provide the general guidance to nine Self- Study committees formed as per the National Center for Academic Accreditation and Assessment (NCAAA) requirement (2015-2017). Served as a member of the KFUPM “University Board”, and a member of “Deanship of Academic Development International Advisory Council”. Contributed to the discussion panels of KFUPM strategic plans.

Key Contributions:

- Drove process improvements by restructuring Deanship, revamping and establishing new processes for each center. Established a new study unit "Academic Studies Unit focusing on educational programming and student development.
- Formed a new advisory board for the Dean of Academic Development (DAD).
- Led the University to become institutionally accredited by the National Center for Academic Accreditation and Evaluation (NCAAA) for seven years in 2017. Reaccreditation of ABET and AACSB programs was extended for another period.
- Planned and directed the implementation of 7 regular online course development projects of courses related to different academic departments and colleges.
- Oversaw the execution of 8 video online course development projects pertaining to different academic departments and colleges and 1 video online course project regarding active learning techniques for faculty members.

- Devised and led the successful transformation of the KFUPM Bookstore into a resource center for students.
- Spearheaded the acquisition, deployment, and operation of a new online instructor and course evaluation system, which also used for conducting online surveys in the University.
- Established the Educational Effectiveness and Efficiency Center to manage a broad range of planning activities focusing on improving the effectiveness and efficiency of the educational practices at KFUPM, including:
 - Advising, initiating, and administrating the revision and development of the academic policies and procedures at KFUPM, to align them with the best practices in the policy documentation.
 - Proposing a mechanism for regular analysis and review of the faculty teaching.
 - Planning and recommending a structure for regular analysis and review of the class enrollment and course offering.
 - Reviewing the Deanship and its centers' missions and activities.
- Formulated the DAD's newsletter, developed the DAD's Fellowship Program, introduced Global Learning Initiatives, and directed the execution of the English language project funded by the Ministry of Education.

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)

Dhahran, Saudi Arabia

CHAIRMAN OF THE CIVIL & ENVIRONMENTAL ENGINEERING DEPARTMENT – PROFESSOR OF TRANSPORTATION 2010 – 2015G (1431-1436H)

Delivered academic leadership and direction to the Civil & Environmental Engineering Department, including overseeing research projects, planning resources, managing faculty, and developing effective programs, demonstrating a commitment to advancing the participation of diverse and underrepresented groups and supporting diverse perspectives.

Key Contributions:

- Significantly grew the number of Undergraduate and graduate students for the Department.
- Hired and built a faculty of highly competent international staff along with recruitment and mentorship of additional Lab technicians and lab engineers.
- Enhanced the CEE department position in the QS ranking during the term and led the Department to pass international and national accreditations.
- Directed the formation of the Industrial Advisory Board of the Department.
- Oversaw and guided the restructuring of the Undergraduate and Graduate Programs to meet the needs of the emerging engineering industries.
- Led the development of the CEE Reaction Floor (Heavy Structural Lab).
- Spearheaded the upgrade of all lab equipment and renovated numerous labs to be a safer area for the students to conduct their lab classes and research works.

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)

Dhahran, Saudi Arabia

ACTING CHAIRMAN FOR DEPARTMENTS OF CHEMICAL ENGINEERING & PETROLEUM ENGINEERING

Summers 2011 – 2014

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)

Dhahran, Saudi Arabia

FACULTY – CIVIL AND ENVIRONMENTAL ENGINEERING DEPARTMENT

1985G (1405H) – Present

CONSULTANCY EXPERIENCE

- **Project Consultant, KFUPM-RI** Project Number CEW2482, July 2017 - "Environmental Impact Assessment of the Pristine and Pulse Programs: Terrestrial Environment", Beacon Development Company, KAUST. **Budget:** SR 3.5 Million
- **Part-time Consultant for MUSTANG-HDP** (Engineering Consulting & Design Firm, Al-Khobar, Saudi Arabia). Participated in the Jazan Refinery Traffic Study, Apr 2014-Jul 2015.
- **Member of the committee formed by the Ministry of Education** for "Assessing the Civil Engineering Program at Prince Mohammad Bin Fahd University in Al-Khobar, Saudi Arabia, 2014-2015.
- **Part-time Consultant for Zuhair Fayeze Partnership** (Consulting Engineering Firm, Jeddah, Saudi Arabia). Participated in a National Project for the Ministry of Municipal and Rural Affairs of Saudi Arabia, Jan 2010-Jan 2011.

- **Part-time Consultant for the Faisal Jameel Al-Hejailan & Partners Consultancy Company** (Engineering Consultancy & Design Office, Al-Khobar, Saudi Arabia). Participated in Transportation and Traffic Impact for Manifa Causeway and Tanajib Area, Saudi Arabia, Jan 2009-Jan 2010.
- **Scientific Advisor for KACST Project No. م ج 12- 6**, "Identifying Adequate Techniques for Improving Traffic Management during Pilgrimage", Al-Ahmadi et al., Riyadh, Saudi Arabia, 10/1428-10/1429 (Nov 2007-Oct 2008).
- **Part-time Consultant for the Radicon-Gulf Consult** (Consulting Engineering Firm, Al-Khobar, Saudi Arabia). Participated in "MANIFA Causeway Construction Traffic Study, Saudi Aramco Project", Nov 2007-Oct 2008.
- **Part-time Consultant for the Saudi Consultancy and Design Office (SCADO)**, Al-Khobar, Saudi Arabia). Participated in the improvement of major Intersection in Dammam for Dammam Municipality, May 2006-May 2007.
- **Co-Investigator, Consultancy Service for "Al-Thurayyah Engineering College"**, RI/KFUPM, Project # CEMS 2236, Jun 2005-May 2006.
- **Part-time Consultant for R.G.P.K. Association** (Consulting Engineers, Al-Khobar, Saudi Arabia). Contributed to the traffic study for the proposed Industrial Park West (IPW) in Jubail Industrial City, Jubail, Saudi Arabia, Jan 2004-July 2004.

TEACHING & LECTURESHIP

Taught (up to date) eight undergraduate courses and seven graduate courses, which included:

- **Graduate Courses:** CE 571 Urban Transportation Planning and Modeling - CE 575 Airport Planning and Design - CE 576 Highway Geometric Design - CE 582 Traffic Flow Theory - CE 606 Independent Research - CE 673 Optimization of Urban Traffic Flow - CE 675 Advanced Traffic Engineering - CE 677 Traffic Control and Operation - CE 701 Directed Research
- **Undergraduate Courses:** CE 201 Statics - CE 260 Surveying I - CE 261 Surveying I (new curriculum) - CE 341 Transportation Engineering - CE 343 Transportation Engineering Laboratory - CE 444 Traffic Engineering and Road Safety - CE 464 Project Surveying - ME 201 Dynamics.

As a Lecturer, delivered a wide range of short courses and workshops, which included:

- ◆ **"The Relationship between Traffic Crashes and Driver's Age and the Role of Driving Schools"**, Third Traffic Safety Forum & Expo, Dammam, Saudi Arabia, Nov 2015.
- ◆ Invited GCC Speaker, **"Challenges of Drivers Licensing in Saudi Arabia"**, The 24th World ITMA Congress, Qatar, Nov 2015.
- ◆ **"Traffic Safety in KFUPM: Pioneering Initiatives and Constant Ambition"**, Second Safety Forum for Safety in University, KFUPM, Feb 2014.
- ◆ **"Traffic Management in Major Cities: Prospects and Obstacles"**, Second Traffic Safety Forum, University of Dammam, 2013.
- ◆ **"Role of Road Planning in Reducing Traffic Accidents"**, with 32 participants. Participated as Scientific Supervisor and Lecturer, organized by Naif Arab University for Security Sciences in collaboration with the Ministry of Interior of UAE, Abu Dhabi, U.A.E., May 2011.
- ◆ **"Road and Current Technology"**, 1st Panel Discussion on "Current Traffic Status and the National Strategy for Traffic Safety", KACST, Riyadh, Sep 27, 2011.
- ◆ **"Graduated Driver Licensing Applications in the Kingdom of Saudi Arabia for Young Drivers and Chauffeurs"**, Lecture for KFUPM faculty and students, Nov 2004.
- ◆ **"Transportation Engineering: Industrial Projects"**, Lecture for CE faculty and graduate students at KFUPM, Apr 2001.
- ◆ **"Inspection and Supervision Activities for Road Pavement Construction and Maintenance"**, Closed short course offered to 15 employees of Saudi Aramco, Research Institute, KFUPM, Apr 2001.
- ◆ **"Beware of Road Surprises"**, Public Lecture during Traffic Week Activities, KFUPM, Apr 2000.
- ◆ **"Control of Emergency Vehicles"**, Naif Arab Academy for Security Science, Riyadh, 1998.
- ◆ **"What is Transportation Engineering"**, Lecture for CE freshman students, KFUPM, Oct 1997.
- ◆ **"Graduate Program in Transportation Engineering"**, Lecture in the CE Open Day activities, KFUPM, Oct 1997.
- ◆ **"Defensive Driving"**, 11 hours over 2 weeks for 40 participants. The course was organized by the Office of the Dean of Educational Services, KFUPM, Jun 1997.

- ◆ "Toward a Better Traffic Management System in the Kingdom of Saudi Arabia", 4th Saudi Engineering Conference, Jeddah, Nov 1995.
- ◆ "IVHS: High-Tech Solution for Safe and Efficient Driving Environment", National Traffic Safety Conference, Twaik Palace, Riyadh, Mar 1994.
- ◆ "Personal Computer Applications in Transportation Engineering". A five-day course offered to 20 engineers, KFUPM.
- ◆ "Highway Safety Engineering", a five-day course offered to 12 engineers from different Gulf States, KFUPM, Apr 1992.
- ◆ "Transportation Planning and Traffic Engineering", Course was organized upon a special request from the Dammam Municipality, (two weeks), Feb 1992.

EDUCATION & PROFESSIONAL DEVELOPMENT

Ph.D., Civil Engineering (Transportation Option) – Michigan State University, USA

- ◆ *Ph.D. Thesis: "Assessment of Applicability of TRANSYT-7F Optimization Model to the Traffic Conditions in the Cities of Al-Khobar and Dammam, Saudi Arabia" – Specialization: Optimization of urban traffic flow, traffic impact assessment, traffic safety, and Intelligent Transportation Systems (ITS)*

M.Sc. in Civil Engineering (Transportation Option) – King Fahd University of Petroleum and Minerals

- ◆ *Master Thesis: "Estimating Parking Demand for Mosques"*

B.Sc., Civil Engineering – King Fahd University of Petroleum & Minerals

Certified Consultant Engineer (CE SCE) by the Saudi Council of Engineers

Attended Numerous Training focused on Higher Education, Traffic Operations & Safety

Attended several National and International Seminars, Conferences and Forums on Education and Transportation Issues

ACADEMIC ADVISING

Ph.D. Dissertations:

- **As Chairman:**
 - "Application of Dynamic Lane Grouping and Artificial Intelligence Techniques in Predicting the Optimum Lane Groups at Isolated Signalized Intersections", Khaled Jamal Assi, Feb 2017.
 - "Mode Choice Modeling and Modal Traffic Forecasting over King Fahd Causeway using Computational Intelligence Techniques", Uneb Gazder, Jun 2014.
 - "Evaluation of Variable Message Signs Impact on Congested Freeways", Yazan Farid Issa, Apr 2013.
 - "Application of Artificial Intelligence Models in Traffic Flow Prediction and Time-of-Day Breakpoints Determination", Syed Masiur Rahman, May 2010.
- **As Co-Chairman:**
 - "Modeling of Traffic Operation at Priority Intersections Using Gab Acceptance Theory", Abdelmalek Abu-Sheikh, Sep 1997.
 - "Effect of Signal Coordination on Intersection Safety", Khalaf A. Al-Ofi, June 1994.
- **As Member:**
 - "Evaluation of Polymer Modified Asphalt Exposed to Desert Environment", Khaleel Jawad Al-Adham, Dec 2017.
 - "Decision Support System for Risk and Water Quality Management in Water Distribution Network", Amin Abo-Monasar, Jun 2014.
 - "Modeling of Pavement Condition and Maintenance Priority Ranking for Road Network", Rezqallah Ramadhan, July 1997.
 - "Effect of Modal Perception on Intercity Mode-Choice Behavior in Saudi Arabia", Mohammad A. Al-Sughaiyer, Oct 1994.

○ **As External Examiner:**

- External examiner of Mrs. Woroud Al Othman, University of Bahrain, entitled "Modeling Traffic Control Management System for Over-Saturated Signalized Traffic Intersections in Kuwait Using Artificial Intelligent Technique", January 2019.

MS Thesis:

○ **As Chairman:**

- "Modeling and Predicting Traffic Crash Severity Using Artificial Intelligence Techniques ", Umer Mansour, December 2019.
- "Application of Dynamic Lane Grouping with Movement-based Signal phasing Schemes at Isolated Signalized Intersection", Hekmatullah Habibi, May 2016.
- "The Effect of Local School Traffic on Congestion of Urban Network", Khalid Asi, Nov 2013.
- "Calibration and Validation of PARAMICS Microscopic Simulation Models for the Local Traffic Conditions in Saudi Arabia", Imran Reza, Oct 2013.
- "The Characteristics of Expatriate Chauffeurs and Evaluation of Driving Schools in Saudi Arabia", Ibrahim Yousif Al-Sghan, Dec 2011.
- "Evaluating Adequacy of Traffic Optimization Models under Local Traffic Conditions", Maen Abdullatif Abo Olba, July 2007.
- "Characteristic Study of Catastrophic Tire Failure in Eastern Province of Saudi Arabia", Sayed Anwar Basha, Nov 2002.
- "Validation of Rear-end Conflict Prediction in Al-Khobar City", Shoukat Iyaz, Mar 1997.

○ **As Member:**

- The Effectiveness of Applying Dynamic Land Assignment at all Approaches of signalized Intersection, Muath Najjar, 2015.
- "Characteristics of Young Drivers Involved in the Road Accidents in Dammam Metropolitan Area", Salem Mohammed Babtain, Nov 2013.
- "Performance Modeling of Saudi Aramco Roads Network", Hisham Abdulghani Kattan, Dec 2010.
- "Causes of Female Teacher Work Trip Accidents in the Kingdom of Saudi Arabia", Zeeshan Raza Abdy, Mar 2003.
- "Relationship between Non-compliance Behavior at Signalized Intersection and Drivers Characteristics", F. Siddiqui, 1997.
- "Proposed Methodology for Designing the Signal Change Interval", M. Khan, Jun 1997.
- "Effect of Captive Riders in Intercity Mode-Choice Modeling", Syed Mohiuddin Afroz, Jan 1995.

○ **As External Examiner:**

- External examiner in Thesis Examining Committee of Mrs. Hiba Eyesha Abou-Kassem, United Arab Emirates University, entitled "A Hierarchical Modeling Approach for Assessing the Impact Factors of the Measures of Mobility and Safety at Intersections", Jan 2017.
- External examiner in Thesis Examining Committee of Mrs. Fatima Hameed Qambar Ebrahim, University of Bahrain, entitled "Safety Evaluation of Transportation of Raw Sewage by Trucks", Jan 2017.
- External examiner in Thesis Examining Committee of Mrs. Dalal Yousif Al-Kooheji, University of Bahrain, entitled "Mass Transit System for Bahrain: A Microscopic Planning and Microscopic Management View", Jan 2015.

LEADERSHIP ACTIVITIES/PROFESSIONAL AFFILIATIONS

○ **National Committees:**

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|---|--------|------------|
| ○ Scientific Committees of the First, Second, Third, and Fourth Forum on Traffic Safety formed by Saudi Society for Traffic Safety (SALAMH) | Member | 2010–2017 |
| ○ National Committee for Traffic Safety formed by King Abdulaziz City for Science and Technology (KACST): | Member | 1992- 2012 |

(The committee provided grants for national traffic safety projects and oversaw the national traffic safety awareness programs.)

- Executive Committee of the National Strategy for Traffic Safety formed by KACST Member 2009–2011
- Scientific Committee of the 2nd National Traffic Safety Conference Member 2003–2004
- Eastern Province Traffic Awareness Committee formed by HRH the Governor of the Eastern Province Member 1999–2000

- **Board and Councils:**
 - Board of the “Business Park Complex Company”, KFUPM Vice Chairman 2019-Present
 - Board of “Dhahran Valley Company for Business Services”, KFUPM Vice Chairman 2019-Present
 - “The University Board” of King Fahd University of Petroleum & Minerals Member 2015-2018
 - “International Advisory Council for the Deanship of Academic Development”, KFUPM Member 2017-2018
 - Board of the “Saudi Society for Traffic Safety” (SALAMH) Member 2012-2016

- **Affiliation:**
 - SAUDI COUNCIL OF ENGINEERS (Certified Consultant Engineer) Member 2016-Present
 - Saudi Society for Traffic Safety (SALAMH) Member 2012-Present

- **University Standing Committees:**
 - The Higher Promotions Committee Member 2019-Present
 - Vice Rectors Committee Member 2019-Present
 - Audit, Risk and Governance Committee for the Business Park Complex Company, KFUPM Member 2019-Present
 - The President’s Communication Panel Member 2018-Present
 - The E-Transaction & Transformation Committee Member 2018-Present
 - The Bids Examination Committee Chair 2018-Present
 - The Committee on Convocation, Honors & Public Events Chair 2018-Present
 - Organization Excellence Committee Member 2018-Present
 - The Risk Management Committee Member 2016-Present
 - Academic Committee Member 2015-2018
 - Academic Development Committee Chairman 2015-2018
 - Faculty Affairs Committee Member 2015-2018
 - Academic Assessment & Accreditation Committee Member 2015-2018
 - Traffic Safety Committee: Chairman, 1999-2009
The committee oversaw all transportation planning, road design, and traffic operation issues on the KFUPM campus. Member 1996-1999
 - Campus Planning & Development Committee Member 2004-2008
 - Housing Alteration Committee Member 2002-2004
 - Health, Safety and Security Committee Member 1992-1996
 - Housing Committee Member 1992-1993
 - Library Committee Member 1990-1991

- **Several Departmental and College Level Committees**

HONORS & AWARDS

- **Distinction Award**, Distinguished research team member of the Research Institute, Project Title: “National inventory of anthropogenic emissions by sources and removal by sinks of greenhouse gases not controlled by the Montreal Protocol”, Project Number – CEW 2351. Client – Saudi Aramco, KFUPM, 2012-2013

- **Appreciation plaque from the Chairman of the Board of Trustees of the "RIYADH ECONOMIC FORUM – Towards Sustainable Economic Development"** for actively participating in the forum, December 2011.
- **Appreciation plaque from Abu Dhabi Police Academy (United Arab Emirates)** for acting as a scientific supervisor in the short course on "Role of Road Planning in Reducing Traffic Accidents", May 2011.
- **College of Applied Engineering Distinguished Teaching Award**, KFUPM, 2006-2007.
- Received a **certificate of thanks and appreciation from the Ministry of Interior/KACST** for participating in the scientific committee of the 2nd National Traffic Safety Conference, September 2004.
- **College of Engineering Sciences Distinguished Teaching Award**, KFUPM, 2004-2005.
- **College of Engineering Sciences Service Award**, KFUPM, June 2003.
- **Distinguish Performance** in KFUPM for twenty years, KFUPM Faculty Affairs Committee (1994-1995, 1997-2001, and 2003-2018).
- **"Distinguished Research Project Leadership Award"**, Research Institute, KFUPM, Saudi Arabia, 2000-2001.
- **Nominated three times for Distinguished Teaching Award** of KFUPM (1997-1998, 1999-2000 and 2005-2006).
- **His Royal Highness Prince Bander Bin Sultan Bin Abdulaziz Reward** for academic excellence, U.S.A., 1989.
- **Graduated with a cumulative GPA of 4.0 out of 4.0 in the Ph.D. program**, Michigan State University, U.S.A., 1989.
- **Graduated with a cumulative GPA of 4.0 out of 4.0 in the M.Sc. program**, King Fahd University of Petroleum & Minerals, Saudi Arabia, 1985.

RESEARCH

Publications:

- **Papers in Refereed Journals**

Ratrout, N. T. & Assi, K. J. Development and Evaluation of a Quick Method for Optimizing a Space and Signal Timing Plan for Isolated Signalized Intersections. **Accepted** for publication in *Transport* (2019).

Ratrout N.T., Khaled J. Assi, and Gazder, U. "Predicting Traffic Attracted to Schools in Early Planning Stages: A Comparative Study", *Arabian Journal for Science and Engineering (AJSE)*, 44(5), 4509-4516. (May 2019).

Gazder, U., and **Ratrout N.T.**, "Determining Factors Affecting Cross-Border Transport on King Fahd Causeway and Comparison with Urban Travel", *Case Studies on Transport Policy*, Volume 6, Issue 4, December 2018, Pages 737-742.

Assi, K., Nahiduzzama, K.M., **Ratrout, N.**, Aldosary, A, "Mode choice behavior of high school goers: Evaluating logistic regression and MLP neural networks", *Case Studies on Transport Policy*, Volume: 6, Issue: 2, Pages: 225-230, Published: June 2018.

Assi, K., and **Ratrout, N.T.**, "Proposed Quick Method for Applying Dynamic Lane Assignment at Signalized Intersections", *IATSS Research*, Volume: 42, Issue: 1, Pages: 1-7, Published: April 2018.

Ratrout, N.T., Gazder, U., and Assi, K, "Effect of Public Transportation in Reducing Passenger Car Trips to Schools in Al-Khobar - Dhahran Metropolitan Area, Saudi Arabia", *Transportation Letters: The International Journal of Transportation Research*, (ISSN: 1942-7875), Volume: 10, Issue: 1, Pages: 43-51, Published: 2018.

Alhajyaseen, W., Najjar, M. **Ratrout, N.T.**, Assi, K., "The Effectiveness of Applying Dynamic Lane Assignment at All Approaches of Signalized Intersection", *Case Studies on Transport Policy*, Volume: 5, Issue: 2, Pages: 224-232, Published: June 2017.

Ratrout, N.T., Chowdhury, S., Gazder, U., Rahman, S., "Characterization of Crash-Prone Drivers in Saudi Arabia – A Multivariate Analysis" *Case Studies on Transport Policy*, Volume: 5, Issue: 1, Pages: 134-142, Published: March 2017.

Gazder, U., Adnan, M., and **Ratrout, N.T.**, "Value of time for users of King Fahad Causeway - A Comparison of Conventional and Artificial Intelligence Methodologies", *Arabian Journal of Science and Engineering*, Volume: 42, Issue: 3, Pages: 985-997, Published: March 2017.

Alhajyaseen, W., **Ratrout, N.T.**, Assi, K., and Abu Hassan, A. "The Integration of Dynamic Lane Grouping Technique and Signal Timing Optimization for Improving the Mobility of Isolated Intersections", *Arabian Journal of Science and Engineering*, Volume: 42, Issue: 3, Pages: 1013-1024, Published: March 2017.

- Reza, I., **Ratroum, N.T.**, and Rahman, S.M., "Calibration protocol for PARAMICS microscopic traffic simulation model - application of neuro-fuzzy approach", *Canadian Journal of Civil Engineering*, Volume: 43, Issue: 4, Pages: 361-368, Published: April 2016.
- Ratroum, N.T.**, and Assi, K., "Parking Generation Models for Public and Private Schools: A Comparison Study", *ITE Journal*, Volume: 86, Issue: 3, p. 44-48, Published: March 2016
- Gazder, U., and **Ratroum, N.T.**, "A New Logit-Artificial Neural Network Ensemble for Mode Choice Modeling: A Case-Study for Border Transport", *Journal of Advanced Transportation*, Volume: 49 Issue: 8, Pages: 855-866, Published: December 2015.
- Ratroum, N.T.**, Rahman, S.M., and Reza, I. "Calibration of PARAMICS Model: Application of Artificial Intelligence-Based Approach", *Arabian Journal of Science and Engineering*, Volume 40, Issue 12, pp 3459-3468, Published: December 2015.
- Ratroum, N.T.**, Mutlak, H.A., Ofi, K.A., Issa, Y., and Saghan, I. "The Characteristics of Chauffeur and his Relation to the Traffic Safety in Saudi Arabia" *Journal of Security Research (Arabic)*, Vol 24, No.61, June 2015.
- El-Alfy, E., **Ratroum, N.T.**, and Gazder, U., "Impact of Stock Market Indices and Other Regional Exogenous Factors on Predictive Modeling of Border Traffic with Neural Network Models", *Arabian Journal for Science and Engineering*, Volume 40, Issue 2, pp 303-312, February 2015.
- Ratroum, N.T.**, and Gazder, U., "Effects of potential modes on mode choice behavior for travel between Saudi Arabia and Bahrain", *World Review of Intermodal Transportation Research*, Vol. 5, No. 2, 2014.
- Ratroum, N.T.**, Gazder, U., and Al-Madani, H., "A Review of Mode Choice Modeling Techniques for Intra-City and Border Transport", *World Review of Intermodal Transportation Research*, Vol. 5, No. 1, 2014.
- Ratroum, N.T.** and Issa, Y., "Effectiveness of Newly Introduced Variable Message Signs in Al-Khobar, Saudi Arabia", *Promet – Traffic & Transportation*, Vol. 26, 2014, No. 2, 169-177.
- Ratroum, N.T.**, Ofi, K. and Issa, Y., "The Safety of Road Transport by Truck and Buses between Cities in Saudi Arabia", *Journal of Security Research (Arabic)*, Vol. 32, No. 57, February 2014.
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