

## **JAMAL A. AL-MUDAIHEEM, PHD**

♦ Address P.O.Box 42300, Riyadh 11541, Saudi Arabia ♦ Mobile +966 555 480022 ♦ Email: jamal@mts.com.sa

### **PERSONAL PROFILE**

A visionary, incisive and highly dynamic EXECUTIVE with vast board experience coupled with extensive top-level Strategic Planning, Business Development, Organizational Leadership, and Financial Skills honed developing businesses and directing sales, projects, marketing strategy and mergers & acquisitions locally and internationally. Results oriented leader and a team builder with excellent interpersonal communication skills.

Specialties: Proven ability to highlight and analyze an organization's key performance indicators, identify potential opportunities, and execute with impact initiatives to enhance competitiveness and increase market share. Strong leadership and experience in business development, strategic planning and execution, acquisition and integration, new business start-ups, Proven Track Record in Turning Businesses Around through Creatively Initiating change.

A proactive leader with a passion to deliver, extensive commercial acumen, and the natural ability to identify and capitalize upon opportunities to maximize performance, boost sales and optimize company profits

An innovative, resourceful and results-orientated professional, with extensive interpersonal and communication skills with proven ability to motivate teams to beat deadlines, surpass targets and consistently deliver outstanding results

### **QUALIFICATIONS & PERSONAL DETAILS**

*D.O.B: 22<sup>nd</sup> January 1958      Interest: Keep Fit, Swim, Travel, Business Books      Nationality: Saudi Arabian*

- ♦ **B.Sc. in Civil Engineering 1980,**  
Cum laude First from King Saud University, Riyadh, With First Class Honors
- ♦ **M.S. in Civil Engineering /Asphalt Pavement 1983**  
Cum laude First from the University of Michigan, Ann Arbor, Michigan, USA
- ♦ **Ph.D. in 1986**  
Cum laude First from the University of Michigan, Ann Arbor, Michigan, USA

### **PROFESSIONAL TRAINING / DIPLOMAS**

- ♦ **Finance for the Non-financial Executive 1998**  
Whinney Murray & Co (short course), Riyadh, SA
- ♦ **Strategic Issues in Mergers and Acquisitions 2007**  
INSEAD Executive Education, Fontainebleau, France
- ♦ **High Board Performance, Beirut 2010**  
IMD Program

### **SKILLS**

- ♦ Leading the Process of Setting out the Operational Vision, Mission Statement, and working with the Regions to Formulate and Cascade that Vision into Actionable Strategies.
- ♦ Extensive board level expertise, skills and experience
- ♦ Extensive top-level planning and organizational skills
- ♦ Excellent project management and risk management skills
- ♦ Excellent financial management, purchasing and budgeting skills
- ♦ Proven change, influencing, and merger and acquisition skills
- ♦ Extensive top-level strategic, sales, marketing and business development skills and expertise

- ♦ Excellent leadership, interpersonal and communication skills
- ♦ Extensive management, training and motivational skills
- ♦ Identify Optimum Organizational Structure, Locate and Recruit External Talent, Develop and Promote Internal Talent, and Create a Motivating and Rewarding Culture, Within a Healthy Multinational and Professionally Competitive Environment, Through a Comprehensive HR Development Journey.
- ♦ Excellent top-level networking, PR, and negotiation skills
- ♦ Proven commercial acumen and ability to identify and capitalize upon business opportunities
- ♦ Excellent rapport with clients, management and staff across all cultures
- ♦ Bilingual: Fluent in English and Arabic

#### KEY COMPETENCIES

- ♦ Ability to improve quality, performance and results via key top-level management strategies
- ♦ Natural ability to engage at all levels, delegate and motivate management and large teams to deliver
- ♦ Calm leadership in pressurized or sensitive situations
- ♦ Leading by example, making effective decisions even when difficult
- ♦ Natural ability to connect at all levels and forge strong client relations
- ♦ Natural determination, drive, flair to take on challenging roles
- ♦ Creative and lateral thinking
- ♦ Professionalism and integrity at all times

#### CAREER & ACHIEVEMENTS

**May 2013 - Present: Member of Institutional Advisory Board, King Saud University**

**Vision:** Enriching the University's trends toward global leadership and excellence in building knowledge-based community.

**Mission:** Enhance the University's abilities in strategic thinking through global visions and national experiences.

**Goal:**

- Participating in the formation of the University's strategic objectives, priorities, attitudes, and courses of work in order to achieve the expected goals in the areas of education, science research, community service, and to benefit from international experiences.
- Benefit from the knowledge, thought, and experiences of the members of the Council in employing new influential performance to support the University's areas of excellence and its openness to the science of the future.
- Strengthening the position and the presence of the University at the international level through presenting its achievements in scientific research and innovation.
- Offer advice and consultation to the University on topics and proposals presented to the council.
- Contributing to the formation of strategic alliances between the University and the community productive and serving institutions, in addition to the international institutions and international industrial companies.

**Oct 2009 - Present: Member of Board of Directors, MASDAR BUILDING MATERIAL (Formerly; Al Muhaidib Building Materials):**

A leading Saudi based conglomerate operating in the building materials market through its four main subsidiaries MBM, ITCO, MTS, MHW has

successfully captured a significant share of market boasting key competitive advantages by leveraging its long-established and trusted brand as well as diverse products portfolio.

**Aug 2008 – 28/5/2015: Member of the Board of Directors, Al-Hassan Ghazi Ibrahim Shaker Group of Companies, A Listed Joint Stock Company in the Kingdom.**

Shaker Group established in 1950 with the objective of importing and wholesaling Air Conditioning Products and Home Appliances. The Group was amongst the first in the Kingdom to enter the air conditioner import and wholesale business and was successful in securing exclusive importation and distribution rights of several major international brands. Shaker Group introduced Air Conditioning Products manufactured by LG in 1994 and by 2000 was successful in gaining market leadership. In order to further improve on its government and corporate sector business as well as to improve its profitability and efficiency by reducing working capital requirements, the Company has entered into a joint venture agreement with LG in 2006 to establish manufacturing facilities in the Kingdom of Saudi Arabia for Air Conditioning Products to be sold under the LG brand. The objective of this joint venture factory would be to cater to not only local requirements but also integrate itself with the supply chain and distribution of LG in order to meet the requirements of regional markets by exporting to GCC, Iraq and other neighboring countries.

**June 1991 – Dec 2018: Managing Director, Architectural Hardware Co.**

The company specializes in providing offering that is not restricted to supplies, but includes advisory services during project design phase and supply of door hardware and accessories for a very broad range of customers including Government Ministries, Hospitals, Airports, Distributors, Retail Contractors, Multinational Corporations, Hotels, Educational Establishments, Shopping Malls and Housing. Large projects department.

**Jun 1991 – Dec 2014: Managing Director, Al Muhaidib Building Materials Supplies Co.**

A limited liability company, engaged in the trading of all types of Ironmongery imported from all over the globe. It is the largest retail and wholesale company in the Kingdom of Saudi Arabia with more than 48 outlets and 4 main warehouses. The company carries different agreements with more than 100 International manufacturers (from North America, Europe, Japan, and Far East) to complete its portfolio and to be more responsive to clients. It also runs retail operations in Dubai, Qatar and Egypt.

**Mar 2004 – Dec 2014: Managing Director, Al Muhaidib Technical Supplies Group (MTSG).**

The Group comprises one trading and two manufacturing units in the Fasteners industry. These are the most successful total acquisition arrangements I have ever made. The group is approved fastener supplier for Aramco, Sabic and other major Project and contract. It offers a product range of over 20,000 varieties of Bolts, Nuts, Washers and Screws. The two manufacturing facilities are in Saudi Arabia to meet wide range of specially orders with a short lead time with internationally material specifications. It is the fastest growing company in the Group and developed into one of the leading specialized products supplier in the region.

**July 2007 - Dec 2014: Managing Director, Saudi Bea.**

A joint venture manufacturing company with an Italian company that is specialized in fasteners and fixing. The company is an approved supplier for Aramco. MTS acquired this company to provide an opportunity for backward integration into manufacturing.

**Jan 2010 - Dec 2014: Managing Director, A.W. Al Kutbi & Bros Company Limited.**

This has been another successful acquisition arrangement I have completed. The company is approved fastener supplier for Aramco, Sabic

***Jamal A. Al-Mudaiheem***

and other major Project and contract. It offers a product range of over 20,000 varieties of Bolts, Nuts, Washers and Screws. It is located in the Western province in Saudi Arabia.

**Jan 1999 - Dec 2014: Vice Chairman of the Board of Directors, BRC Di Rossetti.**

A Limited Liability Company, operating in the high class door handles industry and located in Casto, Brescia, Italy.

**June 2000 – Dec 2014: Vice Chairman of the Board of Directors, Rossetti East.**

A Limited Liability Company, operating in the door locks and handles industry and located in Arad, Romania.

**Oct 2009 – Dec 2014: Member of Board of Directors, Al Omar Group**

The group comprises several companies specialized in the building and construction materials, fabrication of high quality Building Materials, Precast expertise in the precast concrete industry and Real Estate in Iraq. The purpose is to focus on the key projects and provide the right arm to the group. It is widely known, and has proven its achievements by providing customized solutions and high quality products.

**Jan 1999 – Dec 2012: Chairman of the Board of Directors, Al-Muhaidib Hardware International Co.**

A Limited Liability Company located in Birmingham, England. The company offers a comprehensive range of door hardware engineered to the closest tolerances, hand finished and design to meet the highest standard to projects all over the world.

**Jan 2009 – Dec 2011: Member of the Executive Committee, Hoshan Group of Companies.**

Hoshan Group has grown to be a vibrant organization in the ever changing era of Office Automation, Information Technology and Communication in the 21st Century. Today it operates in five major fields in the said industries with more than 1200 dedicated work force spread across in Saudi Arabia and UAE.

**Nov 2006 – April 2010: Member of the Executive Committee and the Board of Directors UNIVEST (Dyrup & Sipco)**

This is a result of a successful merge between Dyrup and Sipco companies. Dyrup has strength in decorative paint, whereas SIPCO is strong in industrial paint and protective coating; as such, the two companies have complementary businesses.

**Simultaneous to my role as MD in MHW & MTS, I was:**

- Member of the Board of Directors (In a 5 Member BOD); Meet Periodically to Review Performance, Approve Plans and Overall Strategic Priorities and Investments, and Agree Commercial, Financial, and Human Resource Policies of UNIVEST (A Multi-Million Dollar Paint Business Owned by Two Conglomerates).
- Member of the Executive Committee Playing an Executive Role in Providing Leadership, Direction, Mentoring and Guiding the UNIVEST General Management and Functional Leadership Team in Identifying Performance and Business Opportunities, and Helping them in Managing their Business to Achieve Objectives and Strategic Priorities Approved by the Board of Directors.
- Streamlined, Guided, and Focused Resources and Processes that Helped Turn around the Business from a Disastrous Financial Situation to a Profitable Position within Only Two years, Having Significantly Reduced the Debt-To-Equity Ratio from 90/10 to 70/30 by Q3 2009. This included a deep focus, scrutiny, and understanding of the Financial Statements of the company and recommending action plans and restructuring to resolve serious strategic issues the company was confronting.

***Jamal A. Al-Mudaiheem***

**Sep 2007 - Dec 2010: Managing Director, Metal Industries and Technical Supplies Company.**

A highly specialized producer of fasteners and fixings specializing in fabrications and structural supplies, this company is an approved supplier for Aramco and several other well recognized institutions in the Kingdom and the GCC such as SABIC. MTS acquired this company to provide an opportunity for backward integration into manufacturing. The company has been integrated in MTS in early 2010.

**Jan 2004 – Dec 2010: Managing Director, Al Muhaidib Sanitary ware and Tiles Company.**

The company is specialized in the business of sanitary products, Ceramics, and Tiles imported from all over the World. It was among the most successful total acquisitions arrangement I have made. The company becomes number three in sizes in the Kingdom. The successful operation was copied in Qatar in the beginning of year 2005.

**Jan 2005 – Dec 2008: Managing Director, Home Plus (HP).**

One of Al Muhaidib Group of Companies which was incorporated in January 2005, HP is engaged in home improvement retail/commercial marketing and distribution business. The Company serves both retail and commercial business customers. Retail customers primarily consist of do-it-yourself type or buying for personal and family use. Commercial customers include large builders and whole-sellers. HP currently has 2 stores. The stores typically carry approximately 40,000 types of products under the following categories: Lawn & Garden, Outdoor living, Power Tools, Hand Tools, Door Accessories, Sanitary Ware and Accessories, Tiles and Ceramics, Plumbing, Building materials, Paint products, Kitchenettes, Timber and Steel Doors, Aluminum Windows and Doors, Furniture, and all related Finishing products.

**Jan 1999 – Dec 2007: Member of the Board of Directors, Binalia.**

A Limited Liability Company founded in 1924 in Arad, Romania, and has a long tradition in the field of manufacturing fittings for furniture, doors, and windows.

**May 1997 – Dec 2005: Member of the Board of Directors, United Wood Product.**

The company was established in 1988 and has subsequently developed into one of the leading timber products manufacturing companies in the Kingdom of Saudi Arabia providing high class products and first class service to its customers.

**May 1997 - Dec 2005: Member of the Board of Directors Al-Muhaidib Metal Industrial Co.**

The company was established in 1982 and comprising four plants specialized in Metal Works, Aluminum Fabrication, Steel Doors, and Ornamentals. It is among the leading steel products manufacturing companies in the Kingdom of Saudi Arabia providing high class products and first class service to its customers.

**Jun 1997 –Dec 2000: Managing Director, Forte Industrial Co.**

A private Industrial Plant for the Production of Door Hardware in the Kingdom of Saudi Arabia. The project was 50% funded by The Saudi Industrial Development Fund SIDF, and 25% Bank loans. A successful merger operation had been completed in 2000 with a reputable Italian manufacturer, and the entire plant was moved to

**JOB ROLE:**

- ♦ Managing and motivating management of several companies to achieve targets set by the Boards to the highest standards
- ♦ Strategic vision and development to optimize performance
- ♦ Business development planning and execution
- ♦ Marketing strategies, mergers & acquisitions skills, proven change and influencing.
- ♦ Financial planning and top-level P & L management

- ♦ Managing several International investments the MBS group has in several countries.
- ♦ Representing the AMG investments in some companies (as Board of Directors Member) such as Shaker Group, Al Hoshan Group and some other International Group of companies.
- ♦ Forging board level relationships and partnerships
- ♦ Devising strategy to optimize performance, sales and profits

**KEY ACHIEVEMENTS:**

- ♦ Handpicked to lead a large technical supply company to the next level
- ♦ Devised best structure & successfully identified/implemented growth strategies to dramatically increase revenue
- ♦ Doubled overall profit and achieved double-digit revenue and profit margin increases within the first three years
- ♦ Following this huge success devised strategy with the board for yet further rapid expansion
- ♦ Achieved further rapid organic growth by aggressively penetrating market with more retail & project sales outlets
- ♦ Personally identified, led negotiations and acquired three companies to add synergy, value & ultimately more profit
- ♦ Achieved ISO certification & industry recognition as a leader in terms of organization, process, image & revenue
- ♦ Networked at board level to forge highly lucrative partnerships and international relations
- ♦ Key adviser to the board on a major business model shift from complete ownership to active role investments
- ♦ Handpicked to lead a major project on institutionalizing group management framework and governance
- ♦ Directed operations with subsidiary group CEOs, MDs and general managers to quickly achieve project goals
- ♦ Project managed the successful group transition from a limited liability structure to close joint stock status
- ♦ Delivered numerous major projects consistently in line with governance structure, legislation and best practices
- ♦ Successfully achieved all targets on business development, growth and profitability

**ACADIMEC RECORD**

- |   |                             |
|---|-----------------------------|
| ♦ <b>Associate Professor, Civil Engineering Department</b><br>King Saud University, Riyadh, Saudi Arabia. | <b>Nov 1990 to Aug 1997</b> |
| ♦ <b>Part Time Consultant, the Ministry of Communications</b><br>Riyadh, Saudi Arabia.                    | <b>Mar 1991 to Mar 1992</b> |
| ♦ <b>Assistant Professor, Civil Engineering Department</b><br>King Saud University, Riyadh, Saudi Arabia. | <b>Oct 1986 to Nov 1990</b> |
| ♦ <b>Teaching Assistant, Civil Engineering Department</b><br>King Saud University, Riyadh, Saudi Arabia.  | <b>Jul 1980 to Aug 1981</b> |
| ♦ <b>Training Engineer</b><br>Ohbayashi-Gumi Ltd, Tokyo Japan.  | <b>July to Sept 1979</b>    |

**Activities, Assignments and Key Achievements**

***1) Development and Organization***

\* Design and implementation of organizational structures and charts, organizational and official procedures for the companies.

## ***Jamal A. Al-Mudaiheem***

\* Introduction of computer systems into activities and departments of the entire companies and linking with the basic information network that led to a quick and punctual availability of information and subsequently to save and analyze such information to help top management taking appropriate, correct and timely decisions at the right time.

\* Computerization and Unification of Accounts Systems for financial and audits activities.

### ***2) Production***

\* Supervision on the development and execution of production Procedures, maintenance, production safety in the manufacturing Companies led to improving the production, and reducing of Manpower to the minimum.

\* Supervision on developing procedures of quality control at production stages to achieve high production levels and quality of produced material which requires high accuracy led to a decline in the rejection during production.

\* Broadening the production base in different factories and try to inter linking them to reduce the production costs, hence increasing the Profits.

\* Utilization of various production lines to produce latest products with slight addition in production cost led to a huge reduction in cost, sometimes exceeding 70%.

### ***3) Marketing and Sales***

\* Overwhelming on various agencies in the limited capacities of sole agent for strategic items.

\* Geographical expansion in the Kingdom and controlled marketing system save the relating companies' interests as well as secure and save the interests of big clients.

\* An increase in the annual sales with growing excellent percentage is the result of discovering new markets in the Gulf countries, Yemen, Syria and Egypt. This led to an increase in the sales and exports with high percentage (some companies reached to 100 %.).

\* Formation of European companies managed and operated by highly qualified and experienced Calibers. Continuous consultation and coordination with experienced European companies and highly qualified personnel for the marketing of the productions in the Middle East along with the products of the companies for whom we are agents in the area, which have led to a considerable increase in the turn over.

### ***4) Purchases, Sales and Warehouses***

\* Establishment and inter linking of active central management for purchases, sales and warehouses with an increase in qualified manpower.

\* Establishment of active and controlled computerization system for sales, warehouses, and purchases, as well as for stores supervision. This has led to a better control on stocks, reducing risks of over stocking to the minimum and increasing number of turnover per annum, while maintaining easy coordination and safe transferring of goods between the branches throughout the Kingdom.

\* Centralization of warehouses and upgrading of transportation network and logistics guaranteed the safe movement of goods between branches and cities on permanent basis. This led to a decrease in inventory investment and fast movement, hence minimizing risk elements without negative effects on the sales.

\* Broadening the products base, renovation of supply resources guaranteed our existence in the market in securing our huge share hence meeting the strong competition.

### **5) Mergers and Acquisitions:**

Mergers, acquisitions and take overs have been part of the business world for centuries. In today's dynamic economic environment, companies are often faced with decisions concerning these actions - after all, the job of management is to maximize shareholder value. Through mergers and acquisitions, a company can (at least in theory) develop a competitive advantage and ultimately increase shareholder value. Being a "strategic acquirer", we often have a highly developed sense of "where we are going," which is one of the reasons why we are actively acquiring companies in the first place. This means that we fully understand how the new company fits into our growth strategies. What we are doing reflects the trusts of the conversation around our management's vision of the future, how the company fits into broader industry trends, how its business model will evolve and scale, details on sales and marketing tactics, and how the company will deal with a major downturn in the industry or economy. There are certain benefits that can be derived from merging and acquiring (M&A) a company. First off, M&A require a lot less energy and time in getting a company set up as opposed to building a company from the ground up, Secondly, it is very expensive to build a company from the ground up so M&A would be less expensive than starting a new company, Thirdly, there are transfers of talents and resources when a company is acquired by another.

#### **PROFESSIONAL ASSOCIATIONS**

- ◆ Transportation Research Board, U.S.A.
- ◆ American Concrete Institute Associate member in ACI Committee 209, Creep and Shrinkage, and Committee 363, High Strength Concrete, U.S.A.
- ◆ Australian Road Research Board, Australia.
- ◆ American Society of Civil Engineers, U.S.A.

#### **PRESENTATIONS**

1. Jamal A Al mudaiheem, "Bedouins in Riyadh: An Analysis of Socio-Economic and Road Accident Characteristics", in "The Strategies and Programs of Regional and Rural Development in the Kingdom of Saudi Arabia", King Saud University, 11-15 April 1987.
2. Invited speaker in "School Transport Symposium", held by the Ministry of Communications, Saudi Arabia, 20-22 October, 1987.
3. Jamal A. Al mudaiheem, "Towards a comprehensive Pavement Maintenance Management System for Riyadh," 3rd IRF Meeting in Riyadh, 13-18 Feb. 1988.
4. Jamal A. Al mudaiheem, "Design of Pavement Structures" Symposium of the Planning and Design by Ministry of Communications held in the General Administration Institute, Riyadh, 27-29 May, 1989.

#### **PUBLICATIONS**

1. Jamal Al mudaiheem, "Drying Shrinkage of Portland Cement Paste and Concrete," Ph.D. Thesis, The University of Michigan, Ann Arbor, Sept. 1986.
2. Will Hansen, and Jamal A. Al mudaiheem, "Pore Structure of Hydrated Portland Cement Measured by Nitrogen Sorption and Mercury Intrusion Porosimetry, Proceeding of Materials Research Society, Volume 85, December 1986, 105-114.
3. Jamal A. Al mudaiheem, and Will Hansen, "Effect of Specimen Size and Shape on Drying Shrinkage of Concrete," American Concrete Institute, Materials Journal, vol. 84, No.2, March- April 1987, 130-135.
4. Koushki P. A., Jamal A. Al mudaiheem, and F.A Balghunaim, "Bedouins in Riyadh: An Analysis of Socio-Economic and Road Accident Characteristics in "The Strategies and Programs of Regional and Rural Development in the Kingdom of Saudi Arabia," Symposium held at King Saud University, 11-15 April, 1987.



5. Will Hansen, and Jamal A. Al-Mudaiheem, "Ultimate Drying Shrinkage of Concrete - Influence of Major Parameters," *American Concrete Institute, Materials Journal*, Vol. 84, No.3, May-June 1987, 217-223.
6. Al-Bani M.O., S. Al-Salman, Jamal A. Al-Mudaiheem, and P.A.Koushki, "Mass Transit in Riyadh: Advantages and Disadvantages," in " School Transport Symposium" held by The Ministry of Communications, Riyadh, Saudi Arabia, 20-22 October, 1987.
7. Balghunaim, F.A., Jamal A. Al-Mudaiheem, A.S. Suhaibani, P.A.Koushki, S.T. Al-Saud, and M.A. Al-Jowaiser, "Towards a Comprehensive Pavement Maintenance Management System for Riyadh, " Third IRF Middle East Regional Meeting, Riyadh 13-18 February, 1988.
8. Anani, B. A., A.S. Al-Suhaibani, Jamal A .Al-Mudaiheem, "Improving Traffic Operations at King Saud University during Peak Hours", Final Research Report No.5/1409, Research Center at College of Engineering, KSU, Dec. 1988.
9. Jamal A. Al-Mudaiheem, "Affect of Drying- Rewetting on Elastic Modulus of Portland Cement Paste and Mortar", *Journal of King Saud University*, Volume 1, Engineering Science 1 and 2, Kingdom of Saudi Arabia, March, 1989, 53-65.
10. Jamal A. Al-Mudaiheem, "Dynamic Modulus of Portland Cement Paste and Mortar as Affected by Ambient Relative Humidity" *Magazine of Concrete Research*, 41, No.146, March, 1989,19-25.
11. Al-Suhaibani, A.S., Jamal A. Al-Mudaiheem, and P.A. Koushki, "Road Traffic Accidents in Saudi Arabia: An Evaluation of Recent Remedial Measures", 11th IRF World Meeting in Seoul, South Korea, volume 5, April 1989, 61-64.
12. Jamal A. Al-Mudaiheem, "Design of Pavement Structures" Symposium of the Planning and Design by Ministry of Communications, Riyadh, Saudi Arabia, Volume 1, 27-29 May, 1989 1-44.
13. Jamal A. Al-Mudaiheem, and W. Hansen, "Prediction of Concrete Drying Shrinkage from Short-Term Measurements" *American Concrete Institute, Materials Journal*, Vol. 86, No.4 July-August 1989, 401-408.
14. Al-Sugair, F.H., and Jamal A. Al-Mudaiheem, "Further Modification of the Ross Equation to Predict the Ultimate Drying Shrinkage of Concrete" *American Concrete Institute, Materials Journal*, Vol. 87, No.3 May-June 1990, 237-240.
15. Al-Sugair, F.H., and Jamal A. Al-Mudaiheem, "The Statistical Distribution of the Drying Shrinkage of Concrete Using Monte Carlo Simulation", *Magazine of Concrete Research*, Vol. 42, No. 151, June 1990, 97-103.
16. Jamal A. Al-Mudaiheem, "Evaluation of Dune Sand-Asphalt Mixes Containing Different Amounts of Crusher Waste Dust", *The Transportation Research Board, TRR 1269. Asphalt Mix Materials and Mixtures*, 1990, 176-184.
17. Al-Sugair, F.H., and Jamal A. Al-Mudaiheem, "Statistical Uncertainty in the Resilient Modulus of Asphaltic Concrete Mixes", Presented at the 1st International Symposium on Uncertainty in Modeling and Analysis of Structures, Maryland, U.S.A., 3-5 Dec. 1990.
18. Jamal A. Al-Mudaiheem, "Prediction of Drying Shrinkage of Portland Cement Paste: Influence of Shrinkage Mechanisms", *Journal of King Saud University*, Vol. 3, Engineering Sciences No.1, 1991, 69-88.
19. Jamal A. Al-Mudaiheem, and Faisal H. Al-Sugair, "Effect of Loading Magnitude on the Measured Resilient Modulus of Asphaltic concrete Mixes," *The Transportation Research Board, TRR No. 1317*, Jan. 1991, 139-144.

20. Balghunaim, F.A., Jamal A. Al-Mudaiheem and H.A. Al- Solieman, "Utilization of Crusher Waste to Upgrade Dune Sand Asphalt Mixes", Submitted to Journal of Engineering, KSU.
21. Jamal A. Al-Mudaiheem, and A.S. AL-Suhaibani, "Properties of Asphalt Concrete Mixes Made with Cement Coated Aggregates" Accepted for publication in the Transportation Research Board.
22. Jamal A. Al-Mudaiheem, A.S. AL-Suhaibani, "Effect of Fillers on the Mechanical Properties of Asphalt Concrete Mixes," Published in the proceedings of Symposium on "Effect of Aggregates and Mineral Fillers on Asphalt Mixture Performance," held by ASTM, 1991, U.S.A.
23. Al-Sugair, F.H. and Jamal A. Al-Mudaiheem "Effect of Super plasticizers on the Dynamic Modulus of Concrete Under Different Drying Conditions", Proceedings of the Fourth Arab Structural Engineering Conference, Cairo University, Cairo, Egypt, No. 18-21, 1991.
24. Al-Sugair, F.H. and Jamal A. Al-Mudaiheem, "Effect of Super plasticizers on the Dynamic Modulus of Concrete under Different Drying Conditions", submitted to Cement and Concrete Composites for publication.
25. Jamal A. Al-Mudaiheem, and Al-Sugair F.H., "Concrete Dynamic Modulus: Influence of Drying and Rewetting, "Magazine of Concrete Research, Vol 44, No.158, Jan 1992, pp15-20.
26. Jamal A. Al-Mudaiheem, "An Improved Model to Predict Ultimate Drying Shrinkage of Concrete", Magazine of Concrete Research, Vol 144, No.159, June 1992, pp 81-85.
27. Jamal A. Al-Mudaiheem, "Nitrogen Disruption and Mercury Intrusion Porosimetry of Hydrated Portland Cement Pastes", The Arabian Journal for Science and Engineering, Vol 17, No. 2A, April 1992.
28. Al-Sugair, F.H., and Jamal A. Al-Mudaiheem, "Drying Shrinkage of High-Strength Concrete", Proceedings of APSEC'92, University Teknologi Malaysia, Malaysia, Sep. 14-16, 1992.
29. Al-Sugair, F.H., and Jamal A. Al-Mudaiheem, "Variations in the Measured Resilient Modulus of Asphalt Mixes, " Volume 4 Issue 4 - November 1992, Journal of Materials in Civil Engineering, ASCE, U.S.A..

#### **RESEARCH PROJECTS GRANTED**

1. Improving Traffic Operation at King Saud University, Sponsored by the Research Center of College of Engineering, King Saud University, 1988.
2. Distribution of Shrinkage Induced Strains in Reinforced Concrete Prisms Subjected to Various Drying Conditions, Sponsored by the Research Center of College of Engineering, King Saud University, 1990.
3. Adaptation of A Reliability-Based Code for the Design of Flexible Pavement in the Kingdom of Saudi Arabia, Sponsored by King AbdulAziz City for Science and Technology (KACST)1990.

#### **MASTER THESES SUPERVISED (Principal Advisor)**

1. "Characterization of Dune Sand-Asphalt Mixes Containing Crusher Screening", by Eng. Hamad A. Al-Solieman, KSU, June, 1989.
2. "A Laboratory Evaluation of Moisture-Induced Damage to Asphalt Concrete Mixes used in Riyadh Streets", by Eng.Riyadh K.Al-Mokayad, KSU, May, 1990.

3. "Characterization of Filler used in Asphalt Concrete Mixes in Riyadh Area", by Eng. Abdulrahman D. Al-Dukhayal, KSU May, 1991.
4. "Analytical Study of Evaluation of Falling Weight Deflectometer (FWD) for Characterization of Flexible Pavements with Cement and Emulsion Treated Bases", by Eng. Faisal S. Al-Fraiji, KSU, June 1991.
5. "A Study on the Effect of Filler on the Mechanical Properties of Asphalt Concrete Mixes", by Eng. Fahad K. Al-Fozan, KSU June 1991.

<b>MASTER THESES REFERRED</b>
-------------------------------

1. "Exposure to CO<sub>2</sub> of Vehicle Occupants in the Streets of Riyadh", by Eng. Said Al-Naizi, KSU, Feb 1988.
2. "Evaluation of Structural Deterioration of Asphalt Pavements Caused by Utilities Cut Patching", by Eng. Ibrahim A. Al-Kharashi, KSU, June 1989.
3. "Characterization of Dune Sand-Asphalt Mixes Containing Crusher Screening", by Eng. Hamad A. Al-Soliman, KSU June 1989.
4. "Analysis of the Operation of Saudi Public Transportation in Riyadh", by Eng. Youssef A. Al-Nuaim, KSU, July 1989.
5. "Determination of Major Mix-Design Factors Influencing Pavement Rutting in the Central Region of the Kingdom of Saudi Arabia", by Eng. Abdulrahman S. Al-Hazaa, KSU, July 1989.
6. "A Laboratory Evaluation of Moisture-Induced Damage to Asphalt Concrete Mixes used in Riyadh Streets", by Eng. Riyadh K. Al-Mokayad, KSU, May, 1990.
7. "Reference Energy Mean Noise Emission Level for Vehicles in Riyadh, Saudi Arabia", by Eng. Tarek A. Al-Rokhamy, May, 1990.
8. "Driver Noncompliance with Intersection Control Measures and Evaluation of Related Factors", by Eng. Abdallah M. Al-Gadeer, June 1990.
9. "Assessing Demand-Related Improvement to Traffic Operation During Hajj Ifadhah", by Eng. Osama Al-Bani, June 1990.
10. "Characterization of Filler used in Asphalt Concrete Mixes in Riyadh Area", by Eng. Abdulrahman D. Al-Kukhayal, KSU May, 1991.
11. "Analytical Study of Evaluation of Falling Weight Deflectometer (FWD) for Characterization of Flexible Pavements with Cement and Emulsion Treated Bases", by Eng. Faisal S. Al-Fraiji, June 1991.
12. "A Study on the Effect of Filler on the Mechanical Properties of Asphalt concrete Mixes", by Eng. Fahad K. Al-Fozan, June 1991.
13. "Improving Temperature Susceptibility of Asphalt Mixes Used in Saudi Arabia", by Eng. Mohammad Hasan Alawi, King Abdulaziz University, Jeddah, May, 1991.
14. "Bitumen-Stabilized Sabkha as a Road Material", by Eng. Khalid Mohammed Alhajj, King Abdulaziz University, Jeddah, May, 1991.
15. "Distribution of shrinkage Induced Strains in Reinforced Concrete Prisms", by Eng. Saleh Al-Saleh, KSU, Jan 1992.
16. "Analysis of the Effect of Construction of Operation Control on Highway Flexible Pavement Performance", by Eng. Ahmad O. Al-Abdullatif, Feb 1992.

**REFERENCES**

*Available upon request*