بسم الله الرحمن الرحيم RESUME

Prof. Mohammad Saad A. Al-Homoud, Ph.D.

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Education:

1990-1994 Texas A&M University, College Station, TX, USA
Doctor of Philosophy (Ph.D.) Degree, May 1994.

1987-1989 Pennsylvania State University, University Park, PA, USA
Master of Science (M.S.) Degree in Architectural Engineering, December 1989.

King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia
Bachelor of Science (B.S.) Degree with Honors in Architectural Engineering, May 1986.

Professional Certification

2000-Present Certified Energy Manager (CEM) # 8165, The Association of Energy Engineers (AEE), Atlanta, GA, USA.

Experience:

1994-Present King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

5/2011-Present	Vice Rector, Academic Affairs
11/2014-3/2015	Dean (A), Academic Development
6/2012-2/2013	Dean (A), College of Engineering Sciences
9/2005-5/2011	Dean, Scientific Research
3/2008-5/2011	Director (Founding), Science and & Technology Unit
8/2007-5/2009	Director, Office of International Cooperation
3/2007-9/2008	Dean (A), Graduate Studies
1/2003-12/2005	Director (Founding), Program Assessment Center
6/2000-1/2003	Director (Founding), Office of Energy Management.
1/1998-1/2003	Coordinator, Architectural Engineering Co-op Program.
10/2009- Present	Professor of Architectural Engineering.
6/2001-10/2009	Associate Professor of Architectural Engineering.
1994-6/2001	Assistant Professor of Architectural Engineering.
1986-1994	<i>Graduate Assistant</i> , Architectural Engineering Department. 1987-1994 in scholarship. USA.

1994-Present **Taught the following courses:**

ARE 100	Introduction to Architectural Engineering	ARE 402	Senior Thesis
ARE 322	Building Mechanical Systems	ARE 530	Building Systems Maintenance
ARE 345	Principles of HVAC	ARE 531	HVAC Systems Design
ARE 351	Co-op Training	ARE 535	HVAC Systems Design
ARE 400	Systems Design in Buildings	ARE 537	Energy Conservation in Buildings
ARE 400	Senior Design Project	ARE 599	Graduate Seminar
ARE 401	Senior Thesis Proposal	ARE 610	Master Thesis

Summers 95-97 Saudi Aramco, Dhahran, Saudi Arabia

Three consecutive summer assignments that involved technical engineering review of new/renovated office building projects. Provided short course training to the architects and engineers of the Design Services Department of Saudi Aramco.

1991-1992	The Saudi Student House at Texas A&M University, College Station, TX, USA
1992	President of the Saudi Student House at Texas A&M University
1991	Educational Officer of the Saudi Student House

Summer 1985 Ballast Nedam Group N.V., Khamis Mushait, Saudi Arabia

Assistant Engineer in a big aircraft shelters construction project. Worked through various

departments in the company and prepared weekly technical report on the project.

1978-1981 National Computer Center, Central Department of Statistics, Riyadh, Saudi Arabia

Computer Operator for three years.

Career Objectives

To make significant contributions to the development and dissemination of knowledge in higher education and in the field of Architectural Engineering through teaching, research, consultation, continuing education training programs, publications in professional journals and conferences, and through presentations and public lectures.

Areas of Research and Consulting Interests

- o Energy Conservation & Management in Buildings
- o Building Energy Analysis
- o HVAC and Building Mechanical Systems
- Quality Assurance in Higher Education
- o Strategic Planning

Professional Consulting:

2008-2011 Consultant, Part time, Ministry of Higher Education: Saudi Centers of Research Excellence Project.
 1999, 2001 Consultant for Dar Al-Youm Publishing Co. in Dammam: Head quarter's office building project and printing press building project.

Other Professional Activities:

- Chaired and participated in the committees of several Master Theses at KFUPM and KFU
- Chaired several scientific sessions in national and regional symposia and workshops.
- Refereed a number of papers for publications in national Journals and Conferences.
- Invited juror of many senior projects of Arch. Eng. and Architecture students at KFUPM and KFU.
- Invited Speaker in many national and regional workshops and conferences.
- **Supervised** several co-op and senior projects at KFUPM.
- Coordinated/lectured in many professional development training short courses and workshops.
- Coordinator, KFUPM-KAUST GRP Program (King Abdullah University for Science & Technology, Global Research Program), 2007-2008.
- Member, KAUST 1st Discovery Program Selection Panel, Middle East Center, Bahrain, December, 2007

Honors and Awards:

- Recognized amongst the Most Cited Authors by Elsevier in Building & Environment Journal 2005-2008.
- Received KFUPM Distinguished Researcher Award in 2005.
- Received KFUPM *Distinguished Short Course Award* in 2001.
- Received KFUPM *Distinguished Teaching Award* in 1999.
- Promoted to the rank of Associate Professor at KFUPM with *Distinction* in 2001.
- Listed in several editions of international biographies, 2000, 2001.

Editorial Board Membership:

2005-5/2011 Member of the Editorial Board of the Arabian Journal for Science & Engineering (AJSE).

2008-5/2011 Member of the Editorial Board of the *AJSE-Mathematics*.

Funded Research Projects:

- Co- Investigator of the project: "Assessment of the Air Infiltration in Single-Family, Detached Saudi Houses for Energy Efficiency", 15-ENE4693-04, Funded by NSTIP, 2015-2017: A 2-year project with a total fund of S.R. 1.000.000.
- Consultant for the project: "Comprehensive Analysis of Energy Consumption Patterns of Building Stock in Riyadh", PN: RERE 02382, Funded by KA.CARE, 2015-2017: A 2-year project with a total fund of S.R. 5,000,000.
- Principal Investigator of the project: "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", Project funded by King Abdul-Aziz City for Science and Technology (KACST): A 3-years project with a total fund of S.R. 719,000. Started April 6, 2000. Completed.

 Co- Investigator of the project: "Thermal Conductivity Measurements of Common Insulating Materials under Different Operating Conditions", Project funded by The Saudi Basic Industries Corporation (SABIC): A 1-year project with a total fund of S.R. 63,000. Completed.

Special Funded Projects:

- Manager, Project on: the Assessment of Higher Education in Hail Region, funded by the High Commission for the Development of Hail Region (September-March, 2005), (SR 340,000). Completed.
- Project on: Developing Strategic Plan for Higher Education in the Kingdom, funded by the Ministry of Higher Education (August 2005- August 2008), (SR 43 million). Completed.
 - o Leader, of the Quality & Scientific Team;
 - o Leader, of the Research & Innovation Team;
 - o *Member* of the *Technical Steering Committee*.
- Member, Project on: Reviewing and Assessing Academic Programs of the Arab Open University (AOU), Saudi Arabia, funded by The AOU (April-July, 2005), (SR 200,000). Completed.
- *Member, the Teaching & Learning Group,* Project on: Developing Strategic Plan for KFUPM, funded by *KFUPM (September, 2004- June 2005)*, (SR 700,000). **Completed**.
- *Member*, Project on: Developing Performance Measures and Indicators for KFUPM, 2003/2004. Completed.
- Leader, the E-Business Group, and Member, the Steering Committee of the Project on: Developing National
 Information Technology (IT) Plan for the Kingdom of Saudi Arabia, funded by KFUPM for the Royal Court:
 An extensive 5-month project, (August-December 2001), (SR 700,000). Completed.

Master Theses Supervision			
Role/Student Name	Thesis Title	Year	
Chairman			
1. Mousa Mudhaffar Khan (ARE)	"Assessment of Safety Measures in the Design of Residential Buildings in Saudi Arabia"	1999/2000	
2. Khurshid Alam Siddiqui (ARE)	"The Impact of Building Rezoning and Change of Use on Thermal Comfort and Energy Consumption"	2000/2001	
3. Imran Iqbal (ARE)	"The Impact of HVAC System Selection and Operation on Energy Conservation in Office Buildings in Hot and Humid Climate of Saudi Arabia"	2004/2005	
4. Mohammad Saif (ARE)	"Energy-Efficient Envelope Design to Achieve Thermal Comfort for School Buildings in Saudi Arabia"	2006/2008	
5. Mohammad Najid (ARE)	"The Impact of HVAC System Selection and Operation on Energy Use in an Office Building in Hot-Humid Climate"	2008/ 2009	
Member			
6. Raza Ahmed Khan (ARE)	"Assessment of HVAC Systems Design and Operation for Indoor Air Quality in Saudi Arabia	1999/2000	
7. Abdul Aziz M. Al-Zahrani (ARE)	"Assessment of Maintenance Management Audit in Large Organizations in the Kingdom"	2000/2001	
8. AbdulKarim Al-Khotani (King Faisal University) Ext. Examiner	"Practicality and Economics of Thermal Insulation Retrofitting for Existing Residential Buildings"	2001	
9. Mohammed Fasiuddin (ARE)	"HVAC System Operation Strategies for Energy Conservation & Thermal Comfort in Commercial Buildings in Saudi Arabia"	2003- 2005	
10. Saleh Al-Saadi (ARE)	"Envelope Design for Thermal Comfort and Reduced Energy Consumption in Residential Buildings"	2004- 2006	
11. Muneer Al-Qadhi (ME)	"Development of Overall Thermal Transfer Value Equation for Commercial Buildings in Saudi Arabia"	2006/2008	
12. Ali Mudhi (ARE)	"Factors Affecting the Implementation of Saudi Building Code"	2008/2009	
13. Waheed Khan (ARE)	"Assessing Envelope Thermal Performance Using Infrared Techniques"	2010/ 2011	
14. Mohammad Fasiuddin (ARE)	"Efficient Window Design in Hot Climates"	2012/2013	
15. Ahmed Abdaljaleel Kattlo (ARE)	" Acceptable Indoor Environmental Quality at Reduced Energy Consumption for Sustainable Schools in Hot Climate"	2015/2016 In-Progress	

Conferences, Symposia and Workshops Organization:

- Chairman, the Organizing Committee of the: "KFUPM 50th Anniversary", 2011-1013.
- Chairman, the Organizing Committee of the: "2nd Annual Research Day", held on May, 2011, KFUPM, Dhahran, Saudi Arabia.
- Chairman, the Organizing Committee of the: "1st Annual Research Day", held on May, 2010, KFUPM, Dhahran, Saudi Arabia.
- Member, the Organizing Committee of the: "1st Forum on Research Directions", held March 11-12, 2008, Dhahran, Saudi Arabia.
- Chairman, the Scientific Committee of the: "2nd Conference on the Planning and Development of Education and Scientific Research in the Arab World", February 24-27, 2008, Dhahran, Saudi Arabia.
- Chairman, the Scientific Committee of the: "Project on Developing Strategic Plan for the Higher Education System in Saudi Arabia", September 2005-September 2006.
- Member, the Scientific Committee of the: "2nd International Conference on Engineering Education & Training ICEET2", April 9-11, 2007, Kuwait.
- Facilitator, Faculty Workshop on: "Developing Program Objectives and Outcomes" held on September 19, 2006 for KFUPM Faculty, Dhahran, Saudi Arabia.
- Coordinator/Facilitator, Faculty Workshop on: "Outcome-Based Program Assessment" held on September 28, 2004 for KFUPM Faculty, Dhahran, Saudi Arabia.
- Member of the Organizing Committee of the Workshop on: "Assessment and Accreditation in Higher Education" held on Jan 4, 2004 at KFUPM, Dhahran, Saudi Arabia.
- **Member** of the Organizing Committee of the Discussion Forum on: "Research at KFUPM: Challenges and Opportunities" held on May 20, 2003 at KFUPM, Dhahran, Saudi Arabia.
- Chairman of the Organizing Committee of the 1st Symposium on: "Energy Conservation & Management in Buildings" held from February 5-6, 2002 at KFUPM, Dhahran, Saudi Arabia.
- Member of the Finance and Registration Committee of the 6th Saudi Engineering Conference, held from December 14-17, 2002, at KFUPM, Dhahran, Saudi Arabia.
- **Member** of the Organizing Committee of the Workshop On: "*Teaching Courses Incorporating Projects: Facing the Challenge*" held at KFUPM on November 1, 1998.

Professional Development Workshops/Meetings

- Workshop on: "ABET IDEAL Workshop", ABET, Dhahran, Mach 13-17, 2016.
- Workshop on: "Strategic Planning for Academic Leaders", Center for Academic Leadership, Al-Khobar, Mach 13, 2014.
- Workshop on: "Rethinking Academic Leadership", Institute of Public Administration, Al-Khobar, December 12, 2013.
- Workshop on: "Faculty Recruitment and Retention", Center for Academic Leadership, Al-Khobar, March 6, 2013.
- Workshop on: "Research Team Leadership", UK Foundation of Leadership in HE, Al-Khobar, Nov. 15-16, 2009.
- Workshop on: "Strategies for Success in Grant Proposal Writing", DSR, KFUPM, May 11-12, 2009.
- Workshop on: "Developing Academic Leadership", DAD, KFUPM, May 5-6, 2009.
- Workshop on: "Innovation and Technology Licensing", KFUPM, April 21, 2009.
- Workshop on: "Measuring Research Performance", DSR, KFUPM, March 8-9, 2009.
- Workshop on: "Change Management", DAD, KFUPM, January 25, 2009.
- Workshop on: "Research Management", SRI International, Dammam, KSA, December 10-12, 2007.
- Workshop on: "Academic Leadership", DAD, KFUPM, December 1-2, 2005.
- Workshop on: "Student Study Skills", DAD, KFUPM, July 9-13, 2005.
- 2nd Workshop on: "Strategic Planning", DAD, KFUPM, April 17-20, 2005.
- Series of Workshops on: "Effective Teaching & Learning Skills", DAD, KFUPM, September 4-7, 2004.
- Workshop on: "Providing Effective Feedback", DAD, KFUPM, August 30, 2004.
- Workshop on: "Continuous Program Improvement and ABET EC2000", KAAU, Jeddah, May1-2, 2004.
- 1st workshop on: "Strategic Planning", DAD, KFUPM, April 13-14, 2004.
- 2nd ABET International Faculty Workshop on: "Continuous Program Improvement", Dec. 9-11, 2003, Singapore.
- Workshop on: "Outcome-Based Program and Course Assessment", DAD, KFUPM, December 8, 2003.
- Workshop on: "Critical Thinking", DAD, KFUPM, September 7-10, 2003.

Professional Development Short Courses and Workshops

Coordinator:

1995, 96, 97 Energy Engineering & Management in Buildings
 1997 Energy Engineering & Conservation in Buildings

(3 times-KFUPM, Dhahran, KSA) (Saudi ARAMCO, Dhahran, KSA)

1998, 2000	Computer-Aided Building Energy Analysis	(2 times-KFUPM, Dhahran, KSA)	20
1999, 2000	Facilities Management	(2 times-KFUPM, Dhahran, KSA)	46
2000, 2001, 2003,	, .	(5 times KFUPM, Dhahran, KSA)	107
2004, 2005	(Won the KFUPM 2001 Distinguished Short Course Award)		
2001	Facilities Operation & Maintenance	(Nov- 10-14, 2001)	21
2002, 2004, 2005	Fundamentals of Facilities Management	(4 times-KFUPM, Dhahran, KSA)	64
2002	Fundamentals of Cooling Load Calculations (Dec. 19, 2002)	(KFUPM, Dhahran, KSA)	4
2004	Workshop on Outcome-Based Assessment (Sept. 28, 2004)	(KFUPM, Dhahran, KSA)	40
	(For KFUPM faculty members)		
Instructor:			
2001	Thermal Insulation in Residential Buildings	(Research Institute, Makkah, KSA)	20
2002	Thermal Insulation in Residential Buildings	(Research Institute, Yanbu, KSA)	40
2002	Thermal Insulation in Residential Buildings	(Research Institute, Jeddah, KSA)	70
1995	Energy Conservation & Air Quality in Buildings	(KFUPM, Dhahran, KSA)	12
June 1999	Fire Protection in Buildings	(K. Faisal Univ., Dammam, KSA)	25
April 2004	Drafting Training Program for the SWCC	(KFUPM for the SWCC)	20
		Total number of trainees	479
Participant:		Total number of tramees	1,,,
Dec. 21-25, 96	Buildings Operation & Maintenance	(Eng. Committee, Khobar, KSA)	
Mar. 24-30, 96	Energy Efficiency, Policy & the Environment	(British Council, Brighton, UK)	
Mar. 6-10, 2000	A Comprehensive 5-Day Training for Energy Managers	(AEE, Seattle, Wa, USA)	
,	, , ,		
Sep. 15, 2001	Foundations of Facilities Management	(Inst. for Int. Research, Dubai, UAE)	

Faculty Development Workshops

Conducted a number of development workshops/presentations on "Program Outcome-Based Assessment" for the following Saudi Universities:

- King Fahd University of Petroleum & Minerals, Dhahran, KSA.
- King Saud University, Riyadh, KSA.
- Qasim University, Qasim, KSA.
- King Khalid University, Abha, KSA.

Professional Affiliations:

- Member of the American Society of Heating, Refrigerating & Air-Conditioning Engineers (ASHRAE) (AEE)
- **Member** of the Association of Energy Engineers

List of Publications:

Publications in Refereed Journals:

- 1. Al-Homoud, M. S. and I. Iqbal,. "Thermal Comfort Assessment in an Office Building in Hot-Humid Climate". Submitted for Publication.
- 2. Abdou, A., I. Budaiwi, and M. S. Al-Homoud, 2013. "Envelope Thermal Design for Mosques", Building Simulation, Vol. 18, No. 9 (February), pp. 52-56, 2013.
- 3. Al-Homoud, M. S., 2009. "Thermal Design Optimization of Buildings with Intermittent Occupancy", Accepted for Publication, Journal of Building Physics, Vol. 33, No. 1 (July), pp. 65-82.
- 4. Al-Homoud, M. S., A. Abdou, and I. Budaiwi, 2009. "Assessment of Monitored Energy Use and Thermal Comfort Conditions in Mosques in Ht-humid Climates", Energy and Buildings, Vol. 41 (2009), pp. 607-614.
- 5. Budaiwi, I, M. S. Al-Homoud, and A. Abdou, 2009. "Implementation of a Multi-phase Approach for Investigating and Remedy of a Thermal Comfort Problem in an Office Building", Indoor and Built Environment Journal, Vol. 18, No. 9 (February), pp. 52-56, 2009.
- 6. Iqbal, Imran and M. S. Al-Homoud, 2007. "Parametric Analysis of Alternative Energy Conservation Measures in an Office Building in Hot and Humid Climate". Building and Environment, Vol. 42, No. 5 (May 2007), pp. 2166-2177.
- 7. Al-Homoud, M. S., 2005. "A Systematic Approach for the Thermal Design Optimization of Building Envelopes", Journal of Building Physics, Vol. 29, No. 2 (October 2005), pp. 95-119.
- 8. Al-Homoud, M. S., A. A. Abdou, and I. M. Budaiwi, 2005. "Mosque Energy Performance, Part II: Monitoring of End Energy Uses in a Hot-Humid Climate". King Abdul-Aziz University Journal of Engineering and Sciences, Vol. 16 no. 1, pp. 185-202 (2005 A.D./1426 A.H.)
- 9. Abdou, A. A., M. S. Al-Homoud, and I. M. Budaiwi, 2005. "Mosque Energy Performance, Part I: Audit and Use Trends Based on the Analysis of Electric Energy Utility Billing Data". King Abdul-Aziz University Journal of Engineering and Sciences, Vol. 16, No. 1, pp. 165-184 (2005 A.D./1426 A.H.)
- 10. Al-Homoud, M. S., 2005. "Performance Characteristics and Practical Applications of Common Building Thermal Insulation Materials". Building and Environment, Vol. 40, No. 3 (2005), pp. 351-364.

- 11. Al-Homoud, M. S., A. A. Abdou, and M. Khan, 2004. "Safety Design Practices in Residential Buildings in Saudi Arabia". *The International Journal of Building Research*, Vol. 32, No. 6 (November-December), pp. 538-543.
- 12. Al-Homoud, M. S. and M. Khan, 2004. "Assessing Safety Measures in Residential Buildings in Saudi Arabia". *The International Journal of Building Research*, Vol. 32, No.4 (July-August), pp. 300-305.
- **13. Al-Homoud, M. S.**, **2004**. "The Effectiveness of Thermal Insulation in Different Types of Buildings in Hot Climates", *Journal of Thermal Envelope and Building Science* (Currently: *Journal of Building Physics*, Vol. 27, No. 3 (January), pp. 235-247.
- **14.** Al-Homoud, M. S., 2003. "Graphical Degree-Day Data for Simplified Energy Calculations for Saudi Cities", *Architecture and Planning Journal*, Volume 14, No. 2 (July **2003**), pp. 203-207.
- **15.** Budaiwi, I. M., A. A. Abdou, and **M. S. Al-Homoud**, "Variations of Thermal Conductivity of Insulation Materials under Different Operating Temperatures: Impact on Envelope Induced Cooling Load". *Journal of Architectural Engineering*, Vol. 8, No. 4 (2002), pp. 125-132.
- 16. Al-Homoud, M. S. and Budaiwi, I. M., "Sick Building Syndrome: Causes and Remedies," *King Abdul-Aziz University Journal of Engineering and Sciences*, Volume 13, No. 1(2001), pp. 49-80. (In Arabic)
- Budaiwi, I. M. and Al-Homoud, M. S., "Effect of Ventilation Strategies on Air Contaminant Concentrations and Energy Consumption in Buildings," *International Journal of Energy Research*, Vol. 25 (2001), pp. 1073-1089
- Al-Homoud, M. S., "Total Productive Energy Management," *Energy Engineering Journal*, Vol. 97 (2000), No. 5, pp. 21-38.
- **19. Al-Homoud**, **M. S.**, "Computer-Aided Building Energy Analysis Techniques," *Building and Environment*. Vol. 36 (2000), No. 4, pp. 421-433.
- **20. Al-Homoud**, **M. S.**, "Variable-Base Heating and Cooling Degree-Day Data for 24 Saudi Arabian Cities," *ASHRAE Transactions*, Vol. 104 (1998), Part 2, pp. 320-330.
- 21. Al-Homoud, M. S., "Optimum Thermal Design of Air Conditioned Residential Buildings," *Building and Environment*. Vol. 32 (1997), No. 3, pp. 203-210.
- 22. Al-Homoud, M. S., "Optimum Thermal Design of Office Buildings," *International Journal of Energy Research*, Vol. 21 (1997), No. 10, pp. 941-957.

Conference Publications/Presentations:

- 23. Al-Homoud, M. S., "The Role of Self-Assessment in the Quality Assurance of Academic Programs". Workshop on: Prince Abdullah Initiative on Higher Education held on January 30-February 1, 2005, KAAU, Jeddah, KSA.
- 24. Said, S. A. and M. S. Al-Homoud, 2004 "Increasing Student Motivation", Proceedings of the *Discussion Form on: Faculty and Student Motivation*, May 23, 2004, DAD, KFUPM, Dhahran, Saudi Arabia.
- **25. Al-Homoud, M. S.**, "Characteristics and Applications of Local Building Thermal Insulating Materials". *Symposium on Thermal Insulation*, April 19-21, **2004**, Riyadh, KSA.
- 26. Al-Homoud, M. S. and M. Khan, "Are Safety Measures Addressed in the Design of Our Residential Buildings". Proceedings of the *Symposium on Safety in Projects*, December 15-17, 2003, the Saudi Council of Engineers, Al-Khobar, KSA.
- 27. Al-Homoud, M. S., "Impact of Insulation on the Thermal Performance of Buildings". *Al-Azhar Engineering* 7th *International Conference* held on April 7-10, 2003, Cairo, Egypt.
- 28. Al-Homoud, M. S., A. A. Abdou, and M. Khan, "Practices of Safety Design of Saudi Residential Buildings". Proceedings of the 6th Saudi Engineering Conference, Vol. 1, pp. 155-168, December 14-17, 2002, KFUPM, Dhahran, KSA.
- 29. Abdou, A. A., M. S. Al-Homoud, and I. M. Budaiwi, "A Systematic Approach for Energy Audit in Mosques". Proceedings of the 2nd International Conference on Energy Research and Development, Volume 1, pp. 77-86, May 8-10, 2002, Kuwait University, Kuwait.
- 30. Budaiwi, I. M., A. A. Abdou, and M. S. Al-Homoud, "Variations of Thermal Conductivity of Insulation Materials under Different Operating Temperatures: Impact on Envelope Induced Cooling Load". Proceedings of the 1st Symposium on Energy Conservation & Management in Buildings, pp. 159-173, February 5-6, 2002, Dhahran, KSA.
- **31.** Siddiqui, K. A. and **M. S. Al-Homoud**, "The Impact of Building Change of Use on Peak HVAC System requirements and Energy Consumption". *Proceedings of the 1st Symposium on Energy Conservation & Management in Buildings*, pp. 301-314, February 5-6, **2002**, Dhahran, KSA.
- 32. Khan, R. A. Budaiwi, I. M. and Al-Homoud, M. S., "Assessment of Indoor Air Quality in Saudi Commercial Buildings". 11th Annual meeting of the Saudi Umran Society, April 1-3, 2001, Dammam, KSA.
- 33. Al-Homoud, M. S. and S. A. Said "Academic Program Assessment and Accreditation: KFUPM Experience". Proceedings of the 5th Conference on Quality in Higher Education, Volume 3, pp. 972-989, April 11-13, 2005, Bahrain.
- **34. Al-Homoud**, **M. S.**, "Total Productive Energy Management," *Symposium on Energy Conservation*, June 3-4, 2001, Saudi Aramco, Dhahran, KSA. (*Presentation*)

- 35. Al-Homoud, M. S., "The Role of Self-Assessment in the Quality Assurance in Higher Education". Proceedings of 1st National Conference for Quality in Higher Education, pp. 97-109, March 5-6, 2007, NCAAA, Yamamah College, Riyadh, Saudi Arabia.
- **36. Al-Homoud**, **M. S.**, "Architectural Engineering Program at KFUPM and the Development Needs of the Kingdom", *Symposium on Gulf Engineer and the Challenges of the New Millennium*, February 22-24, **2000**, pp. 143-154, Riyadh, KSA. (In Arabic).
- 37. Al-Homoud, M. S., "Building Energy Analysis: Why and How?", *Proceedings of the Symposium on Energy Management in Industry*, October 24, 1999. Chamber of Commerce and Industry, Dammam, KSA.
- **38.** Al-Homoud, M. S., "The Need for Building Energy Analysis", *Proceedings of the 5th Saudi Engineering Conference*, Vol. 1 (1999), pp. 87-97, March 1-4, Um-Al-Qura University, Makkah, KSA.
- **39.** Al-Homoud, M. S., "Thermal Design Optimization of Mosques in Saudi Arabia", *Proceedings of the International Symposium on Mosque Architecture*, Vol. 6 (1999), pp. 15-30, Jan 31- Feb. 3, King Saud University, Riyadh, KSA.
- **40. Al-Homoud**, **M. S.**, "An Optimization Model for the Thermal Design of Building Envelopes". Proceedings of *IASTED International Conference on Modeling and Simulation*, Aug. 12-14, **1998**, Honolulu. Hawaii, USA.
- Al-Homoud, M. S., "The Formulation of an Optimization Model for the Thermal Design of Building Envelopes". Proceedings of the 15th National Computer Conference, Nov. 17-19, 1997, pp. 483-498, KFUPM, Dhahran. KSA.
- **42.** Budaiwi, I. M. and **Al-Homoud, M. S.**, "Sources of Indoor Air Pollutants and Remedial Means". *Conference on Development and Environmental Impact*, Sept 20-23, **1997**, Riyadh, KSA. (In Arabic)
- 43. Al-Homoud, M. S., Degelman, L. and Boyer, L., "The Framework of an Optimization Model for the Thermal Design of Building Envelopes". Proceedings of the 9th Symposium on Improving Building Systems in Hot and Humid Climates, May 19-20, 1994, Arlington, Texas, U.S.A., pp. 100-108.

Other Publication Contribution:

- Cleveland, Cutler J. and Christopher Morris, Editors," Dictionary of Energy", 2006. Contributed a window essay on the definition of "R-value", pp. 383, Elsevier Publishing Co., London, U.K.
- Several articles/publications in local journals and newspapers for the purpose of knowledge dissemination.

Invited Key-Note Speeches/Presentations:

- "Creating Quality Culture in Higher Education Institutions: KFUPM Experience", *Invited Presentation*, Symposium on: "Enhancement of the Quality of Higher Education Institutions", National Bureau for Academic Accreditation and Quality, Kuwait, November 16, 2015.
- "Quality in Higher Education Institutions", *Invited Presentation*, "Fifth National Conference on Quality", Saudi Commission for Standards and Metrology, Riyadh, 16-18, October, 2015.
- "Academic Assessment and Accreditation", Invited Presentation, 3rd meeting of the Deans of Saudi Community Colleges, King Saud University, Riyadh, KSA, April 7, 2010.
- "Fundamentals of Academic Assessment and Accreditation", *Invited Presentation*, Girls College of Arts, University of Dammam, Dammam, KSA, January 25, 2010.
- **5.** "KFUPM Programs and Strategic Initiatives in Research and Innovation", *Key-Note Presentation*, Advanced Technologies Forum, KACST, Riyadh, April 26-28, **2009**.
- **6.** "KFUPM Experience in Research and Development", *Invited Presentation*, 16th Meeting of the GCC Engineering Dean's Council, KFUPM, Dhahran, April 18, 2009.
- "Lessons Learned: Experience in Academic Assessment and Accreditation", *Invited Presentation*, Workshop on Quality and Awareness Week, College of Business Administration, *King Saud University, Riyadh*, KSA, April 4, 2009.
- "KFUPM Experience in Academic Assessment and Accreditation", *Invited Presentation*, Workshop on Development of Academic Programs, *Deanship of Quality, King Saud University, Riyadh*, KSA, February 1, 2009.
- **9.** "Scientific Research: Current Status and KFUPM Experience", *Invited Key-Note Speech*, Symposium on: "Scientific Research and Development", *Bahrain University*, *Manama*, Bahrain, December 24-25, **2008**.
- 10. "Continuous Program and Course Assessment and its Role in Quality Assurance in Higher Education", *Invited Presentation*, The 1st Meeting for Quality Assurance Units at Saudi Universities, *Imam Mohammad Bin Saud University, Riyadh*, KSA, October 25-28, 2008.
- "General Education Requirements for Science and Engineering Disciplines", *Invited Presentation*, Discussion
 Forum on the Role of General Studies Courses in Broadening Students' Perspectives, *KFUPM*, *Dhahran*, KSA,
 October 19, 2008.
- **12.** "The Status of Scientific Research in the Gulf Universities and KFUPM Experience", *Invited Presentation*, Symposium on: "Research in the Gulf Universities: Current Status and Ambitions", *UmmulQura University, Makkah*, KSA, May 25-27, **2008**.
- **13.** "Assessment of General Education Requirements at KFUPM", *Invited Presentation*, Discussion Forum GER Requirements, *KFUPM*, *Dhahran*, KSA, November 18, **2007**.

- **14.** "Outcome-Based Program Assessment", *Invited Workshop*, Quality Awareness Week, *Qasim University*, *Al-Qasim*, KSA, May, **2007**.
- **15.** "The Role of Assessment in the Quality of Higher Education", *Invited Key-Note Speech*, 1st National Conference on Quality in Higher Education, *NCAAA*, *Yamamah College*, *Riyadh*, KSA, March 6, **2007**.
- **16.** "Outcome-Based Assessment of Engineering Education", *Invited Key-Note Speech*, International Conference on Engineering Education, *Qasim University*, *Al-Qasim*, KSA, March 26, **2006**.
- 17. "Program Assessment and Accreditation: KFUPM Experience", *Invited Presentation*, *King Faisal University*, *Al-Ahsa*, KSA, December 20, 2005.
- **18.** "New Trends in Academic Assessment and Accreditation", *Invited Presentation*, *King Saud University*, *Riyadh*, KSA, May 30, 2005.
- 19. "Program Self-Assessment: Lessons Learned from KFUPM Experience", *Invited Presentation*, *King Saud University*, *Riyadh*, KSA, May 30, 2005.
- 20. "KFUPM Experience in Academic Assessment and Accreditation", *Invited Presentation*, *King Khalid University*, *Abha*, KSA, March 15, 2005.
- **21.** "Developing Students' Research Skills", *Invited Presentation*, 2nd Educational Meeting, Directorate of Girls Education, Dammam, KSA, February 19, 2005.
- **22.** "KFUPM Experience in Program Self-Assessment", *Invited Presentation*, *Workshop* on: The Role and Responsibilities of Assessment Centers in Higher Education Institutions, December 21, **2004**, NCAAA, Riyadh, Saudi Arabia.
- **23.** "An Overview of Outcome-Based Program Assessment", *Presentation*, *Workshop* on "Assessment *and Accreditation in Higher Education*" January 4, **2004** at KFUPM, Dhahran, Saudi Arabia.
- 24. "Architecture of Energy Efficient Buildings in Hot-Humid Climates", *Invited Key-Note Speech*, Workshop on Energy Efficient Building Design in Hot Climates, June 11-12, 2001, Sultan Qaboos University, Muscat, Oman.

Technical Reports

- 1. Al-Homoud, M. S., "Thermal Design Optimization of Energy Conserving Building Envelopes," *Ph.D. Dissertation*, Texas A&M University, College Station, TX, USA, May 1994.
- Al-Homoud, M. S., I. M. Budaiwi, A. A. Abdou, and S. A. Khaiyat, 1998. "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", KACST Funded Research Project, Proposal Report, 1998.
- Budaiwi, I. M., M. S. Al-Homoud, and A. A. Abdou, 1999. "Thermal Conductivity Measurements of Common Insulating Materials under Different Operating Conditions", SABIC Funded Research Project, Proposal Report, 1999.
- **4.** Budaiwi, I. M., **M. S. Al-Homoud**, and A. A. Abdou, **2002**. "Thermal Conductivity Measurements of Common Insulating Materials under Different Operating Conditions", *SABIC Funded Research Project #FT/2000-10*, *Final Report*.
- 5. Al-Homoud, M. S., I. M. Budaiwi, A. A. Abdou, and S. A. Khaiyat, 2001. "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", *KACST Funded Research Project #AT-18-13*, 1st Annual Progress Report, 2001.
- **6. Al-Homoud, M. S.**, I. M. Budaiwi, A. A. Abdou, and S. A. Khaiyat, **2002**. "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", *KACST Funded Research Project #AT-18-13*, **2**nd **Annual Progress Report**, 2002.
- Al-Homoud, M. S., I. M. Budaiwi and A.A. Abdou, 2003. "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", KACST Funded Research Project #AT-18-13, 3rd Annual Progress Report, 2003.
- **8. Al-Homoud**, **M. S.**, I. M. Budaiwi and A.A. Abdou, 2005. "Thermal Design and Air-Conditioning Operation Strategies of Mosques in Hot-Humid Climates of the Kingdom", *KACST Funded Research Project #AT-18-13*, *Final Report*, 2005.
- Al-AbdulGadir, A., J. Al-Ghamdi, M. Nagadi, S. Al-Semari, M. S. Al-Homoud, and S. Sait. 2001. "National Information Technology Plan (NITP) for the Kingdom of Saudi Arabia". KFUPM Funded Project, Final Report, 2001.

Boards, Councils, Committees & Community Service

Boards & Councils Member KFUPM University Board 2005-Co-Chairman KFUPM-Saudi Aramco Collaboration Board 2011-Member Oversight Committee of the College of Petroleum & Geosciences 2015-Member Dhahran Techno-Valley Company (DTVC) Board 2010-2015 Chairman Scientific Research Council 2005-2011 2007-2008 Chairman Graduate Council **Deputy Chairman** Board of Directors, Center of Research Excellence in Renewable Energy 2008-2011

Deputy Chairman	Board of Directors, Center of Research Excellence in Petrochemicals	2008- 2011
Deputy Chairman	Board of Directors, Center of Research Excellence in Nanotechnology	2008- 2011
Deputy Chairman	Board of Directors, Center of Research Excellence in Corrosion	2009- 2011
Member	Board of Directors, MIT-KFUPM Center of Research Excellence	2008-
Member	College of Environmental Design (CED) Advisory Committee	1997-1999

University Committees

Chairman	University Academic Committee	2011-
Chairman	University Academic Textbooks Committee	2011-
Chairman	University Assessment and Accreditation Committee	2012-
Chairman	Supervisory Committee on Student Exchange Program	2012-
Chairman	Supervisory Committee on University Labs	2013-
Chairman	Preparatory Committee for the Univ. International Advisory Board (IAB)	2011-
Deputy Chairman	Training and Scholarship Committee	2011-
Deputy Chairman	Lecturers and Graduate Assistants Committee	2011-
Chairman	Supervisory Committee of Public Educational Programs and Activities	2015-
Chairman	Supervisory Committee of University Labs	2016-
Member	KFUPM Higher Communications Panel	2011-
Member	University Risk Management Committee	2015-
Chairman	Organizing Committee of the KFUPM 50 th Anniversary	2011-2013
Chairman	Supervisory Committee on the Establishment of the College of Petroleum	2015-2016
Chairman	Supervisory Committee of the Development of Hafr Al-Batin Colleges	2011-2015
Chairman	KFUPM Supervisory Committee of the Establishment of Hafr Al-Batin Univ.	2014- 2015
Chairman	University Research Committee	2005-2011
Chairman	University Conference Committee	2005-2011
Chairman	University Arabic Books & Research Committee	2005-2011
Chairman	Scientific Committee, National Science & Technology Plan (NSTP) Projects	2008- 2011
Chairman	Quotation Analysis Committee, NSTP Projects	2009- 2011
Deputy Chairman	Scientific Committee, Centers of Research Excellence Projects	2008-2011
Deputy Chairman	Organizing Committee, Arab Nanotechnology Conference	2010
Member	University Research Advisory Committee	2006-2008
Member	University Research Programs Supervisory Committee	2008
Member	Training and Scholarship Committee	2007- 2008
Member	Lecturers and Graduate Assistant Committee	2007-2008
Member	Academic Committee	2007 - 2008
Member	Planning Committee	2006, 10,11
Member	Faculty Affairs Committee	2007- 2008
Member	Open Access Initiative Steering Committee	2008
Member	KFUPM Image Building Team	2008-2009
Member	ERP Leadership Team Committee	2006-2008
Member	E-Business System Management Committee	2006-2008
Chairman	Deanship of Academic Development Strategic Plan Development Committee	2004/2005
Chairman	Task Force on Reviewing the University General Education Requirements	2004/2005
Deputy Chairman	University Entrance Exam Committee (Riyadh Center)	2004
Chairman	Assessment Committee	2003-2005
Member	Committee on Reviewing the Guidelines for Distinguished Teaching Award	2003/2004
Member	Graduate Council	2005-06,09
Deputy Chairman	University Research Committee	2002-2004
Member	Academic Development Committee	2003-2004
Member	Outcome Exam Committee	2003-2004
Withhot	Chairman of the Outcome Exam Guidelines Development Committee	2003
Chairman	Org. Committee, the 1st Symposium on: "Energy Cons. & Mgmt. in Buildings"	2000-2002
Member	Faculty Promotion Committees	2000, 02, 04
Chairman	University HVAC Systems O&M Contractor Evaluation & Selection Committ	, ,
Member	Steering Committee of the National IT Plan Project, Leader of the E-Business Group	
Deputy Chairman	Student Affairs Committee	1996/97
Member	Admission & Academic Standing Committee	97-99, 00,01
Member	University Entrance Exams Committee	98-02,2005
Member	Workshop on "Teaching Courses Incorporating Projects", Org. Committee	1998
Member	Committee on reviewing and updating the Graduate Bulletin	1999
	Editorial Board Member, KFUPM Research Highlights Magazine	1999-2001
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Member	Committee on Reviewing and Updating Course and Instructor Evaluation	1999-2000
Member	Continuing Education Committee	1999, 2002
Member	Student Academic Integrity Committee	2000
College Comm		
Chairman	CED Student Affairs Committee	1998/99
Member	CED Student Affairs Committee	2000
Chairman, M	CED Student Advising Committee	1995, 97
Chairman	CED Distinguished Teaching & Advising Awards Committee	1995
Chairman	CED Distinguished Teaching & Advising Award Committee	2001, 2002
Chairman Member	CED Continuing Education Committee CED Research Committee	1999-2002 1995, 96
Member	CED Continuing Education Committee	1995, 96, 97
Member	CED Exhibition Committee	1995
Member	Saudi Modern House Exhibit 96 and 99 Committees	1996, 1999
Coordinator	CED Safety Coordinator	1997
Member	CED Open Day Organizing Committee	1999
Member	CED Annual Review Committee	2000/01
Member	Committee on Formulating Guidelines for Faculty Professional Practice	2002
Departmental	Committees	
Member	Architectural Engineering (ARE) Department Council	1994-
Chairman	Committee on Reviewing and Updating ARE Undergraduate Curriculum	1995-98
Chairman	Committee on Reviewing and Updating ARE Graduate Curriculum	1996-01
Chairman	Committee on Developing Diploma Program in Facilities Eng. & Managemen	
Member	ARE Lab. Development Committee	1996-98
Member	ARE Textbook Committee	1996-99, 02
Chairman	ARE Textbook Committee	2000-01
Member	ABET evaluation preparation committee	2000/01
Chairman	Committee on Assessing and Updating Guidelines for the ARE Co-op Program	n 20
Committees ou	atside KFUPM	
Member	Supervisory Committee, Saudi Centers of Research Excellence (SCoRE) Ministry of Higher Education (MoHE)	2007- Now
Member	Committee on Preparing the Criteria and Guidelines for Research Incentive A <i>Riyadh</i> .	wards, <i>MOHE</i> , 2009
Member	Committee on Reviewing the Guidelines for Academic Assessment and Accre	ditation, the
	National Commission on Academic Assessment and Accreditation, Riyadh.	2005
Member	Committee to Formulate Regulations for University Museums, <i>Ministry of Hig Education</i> , <i>Riyadh</i> .	gher 2003-2004
Chairman	General Aptitude Test Committee (Muhail Asir Center) – Four Times, <i>National</i>	al Center for
	Testing and Assessment in Higher Education, Riyadh.	2003-2004
Member	General Aptitude Test Committee (Dhahran Center) – National Center for Test	-
Mombon	Assessment in Higher Education, Riyadh.	2005
Member	Jury for the <i>Royal Commission of Jubail and Yanbou</i> Headquarters' office but	2003
Member	project competition, Riyadh February 22-24, 2003. Committee on Al-Sabbania Land Dispute, <i>Dammam Municipality, Dammam</i> .	2003 1997
Other Commit	tons	
	er of several adhoc committees on the Department, College and University levels.	1995-Present
Conferences	, Symposia and Workshops Participation/Attendance	
November, 2015	Symposium on: "Quality Assurance in Higher Education Institutions", National Academ	ic Accreditation
	Bureau, Kuwait.	ic Accreditation
October, 2015	"5 th National Quality Conference", SASO, Riyadh, KSA.	
Sep. ۲۳-27, 2015	World Future Energy Summit, Abu Dhabi, UAE.	
Dec 3-5, 2014 April 26-28, 2009	World Engineering Education Forum, Dubai, UAE. Advanced Technologies Forum, KACST, Riyadh, KSA.	
Dec. 24-25, 2008	Symposium on: "Scientific Research and Development", Bahrain University, Manar Symposium on: "Research in the Gulf Universities". ImmulOurs University, Makket	
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Symposium on: "Research in the Gulf Universities", UmmulQura University, Makkah, KSA. 1st Meeting on: "Quality in Saudi Universities", Imam University, Riyadh, KSA.

1st National Conference on: "Quality in Higher Education", Yamamah College, Riyadh, KSA.

May 25-26, 2008 October 25-27, 2008

March 5-6, 2007

1st International Conference on: "Engineering Education", Qasim University, Qasim. March 25-27, 2006 5th Conference on: "Quality in Higher Education", University of Bahrain, Bahrain. April 11-13, 2005 Jan 30-Feb 1, 2005 Workshop on: "Prince Abdullah Document on Higher Education", KAAU, Jeddah, KSA. Dec 21, 2004 Workshop on: "The Role of Assessment Centers in Higher Education", NCAAA, Riyadh, KSA. Dec 4-6, 2004 Workshop on: "Self-Assessment, Arab Union Universities", Amman, Jordan April 25, 2004 Workshop on: "Licensure and Accreditation in Higher Education", NCAAA, Riyadh, KSA April 19-21, 2004 Symposium on: "Thermal Insulation in the Gulf", Riyadh, KSA Workshop on: "Assessment and Accreditation in Higher Education", DAD, KFUPM, Dhahran January 4, 2004 Dec. 15-17, 2003 Symposium on: "Safety in Projects", Al-Khobar, Saudi Arabia Oct. 22-23, 2003 "Quality in Higher Education Conference"-2003, American University in Dubai, UAE Dec. 14-17, 2002 6th Saudi Engineering Conference, KFUPM, Dhahran, Saudi Arabia Symposium on: "Urban Development in Arid Regions", Riyadh, KSA Nov. 02-04, 2002 2nd International Conference on "Energy Research and Development", Kuwait University, Kuwait. 1st Symposium on "Energy Conservation & Management in Buildings", KFUPM, Dhahran, KSA. May 8-10, 2002 Feb. 5-6, 2002 7th Annual Facilities Maintenance and Management Conference, World Trade Center, Dubai, UAE. Sep. 15-17, 2001 June 11-12, 2001 Workshop on: "Energy Efficient Building Design in Hot Climates", Sultan Qaboos Univ., Oman. June 3-4, 2001 Symposium on: "Energy Conservation", Saudi Aramco, Dhahran, Saudi Arabia. May 1-2, 2001 11th Annual Meeting of the Saudi Umran Society, Chamber of Commerce, Dammam, Saudi Arabia. Feb. 19-22, 2001 International "Solar Energy Conference", Sharjah University, Sharjah, UAE. Nov. 12-14, 2000 Symposium on: "Scientific Research in the Gulf: Reality, Challenges and Ambitions", Riyadh, KSA. Symposium on: "Gulf Engineer and the Challenges of the New Millennium", Riyadh, KSA Feb. 22-24, 2000 Oct. 24, 1999 Symposium on: "Energy Management in Industry", Chamber of Commerce, Dammam, KSA. Mar. 1-4 1999 5th Saudi Engineering Conference, Um Al-Qura University, Makkah, Saudi Arabia. Jan. 1-Feb 3, 99 International Symposium on: "Mosque Architecture", King Saud University, Riyadh, KSA. Symposium on: "Skyscrapers", Saudi Umran Society, Riyadh, Saudi Arabia. Nov. 28, 1998 June 20-24, 1998 ASHRAE Annual Meeting, Toronto, Canada. Feb. 22-25, 1998 Symposium on: "Higher Education in Saudi Arabia, Future Looks", Riyadh, Saudi Arabia. Dec. 15-17, 1997 2nd National Conference on "Environmental Health", King Fahd Hospital, Jeddah, Saudi Arabia Symposium on: "Local Architecture in Architectural Education". KSU, Riyadh, Saudi Arabia Nov. 26-27, 1997 Nov. 17-19, 1997 15th National Computer Conference, KFUPM, Dhahran, Saudi Arabia. Sep., 20-23, 1997 Conference on: "Development and Environmental Impact", Riyadh, Saudi Arabia. Nov. 5-8, 1995 4th Saudi Engineering Conference, KAU, Jeddah, Saudi Arabia 2nd Symposium on *Energy Conservation & Utilization*, KFUPM, Dhahran, Saudi Arabia Nov. 27-30, 1994 9th Symposium on Improv. Building Sys. Performance in Hot-Humid Climates, Arlington, TX, USA May 19-20, 1994