# Dr. Ahmed Mokhtar

B. Arch, M. Eng., PhD., MBA, LEED® AP, Estidama PQP

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### **PROFESSIONAL EXPERIENCE**

Aug.00-Curr American University of Sharjah, College of Architecture, Art and Design, UAE

Professor (Department of Architecture)
Associate Professor (till Aug. 2015)
Assistant Professor (till Aug. 2004)
Associate Dean (Aug. 2011- Aug. 2016)

<u>Director of Graduate Programs (Aug. 2011- Oct. 2014)</u> <u>Director of the Foundations Program (Aug. 2011- Aug. 2013)</u>

**Chair of the Self-Study Steering Committee for USA Accreditation** (2006-2009)

President of the Faculty Senate (2005-2006)

(Details are shown in the administration, teaching, service, and scholarly work sections)

Spring 11 Hydar, Abu Dhabi, UAE

#### Consultant

- Developed with the team the architectural and sustainability standards for mosque designs in Abu Dhabi (a contract with Urban Planning Council).

Fall 09 AEDAS, Abu Dhabi, UAE

#### **Cultural Consultant**

- Reviewed the architectural design of Cleveland Clinic Abu Dhabi from the cultural point of view.

Summer 08 Atkins, Dubai, UAE

#### **Architectural Technical Advisor**

- Lead a group of junior architects in the design development of the wings buildings of the Icon Hotel Compound in Dubai.

Aug.98-Aug.00 Illinois Institute of Technology, Department of Civil and Architectural Engineering, Chicago, USA

# Assistant Professor of Architectural Engineering Director of the Architectural Engineering Program

(Details are shown in the administration, teaching, service, and scholarly work sections)

Jun.93- Jun.98 Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada

#### **Research Assistant**

#### Part-time Lecturer / Teaching Fellow

(Details are shown in the teaching, service, and scholarly work sections)

Dec.91-Mar.93 Arab Consulting Engineers, Cairo, Egypt

#### **Architect / Design Coordinator**

- Defined project requirements through meetings with clients.
- Coordinated design among several design disciplines.
- Lead a team of architects to design several buildings.

- Established a system to manage the production of design drawings throughout many design disciplines using a CAD software (included is a project with six disciplines, twenty draft persons, and 800 drawings).
- Designed and developed the detailed drawings of several buildings.

#### Feb.92-Dec.92

#### **Free Lance Part-time Lecturer**

- Teaching AutoCAD to architects and engineers in several design offices.
- Jul.89-Nov 91 Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada

#### **Research Assistant**

- Developed a mathematical model for calculating energy savings in buildings due to daylight and solar energy.
- Designed and programmed software for the mathematical model using the BASIC language.
- Designed an instrument for measuring daylight and analyzed the collected data.
- Jan.88-Aug.88 Architectural Bureau for Consultation, Cairo, Egypt

#### **Architect**

- Developed the detailed drawings of a high rise residential building and a recreational building.
- Sep.87-Jan.88 Nabil Mokhtar. Arch., Cairo, Egypt

#### **Architect and Contractor**

- Worked with clients, developed design ideas and presented them, negotiated financial arrangements, and recruited and supervised construction workers.

#### **EDUCATION**

Sep.09-Sep.11 City University London, CASS Business School, Dubai Campus, DIFC, UAE.

#### **Executive Master of Business Administration – with Distinction**

Jun.93-Jun.98. Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada.

#### Ph.D. (Building Engineering)

- Field of specialization "Application of Information Technology in the Construction Industry".
- Title of thesis: "An Information Model for Managing Design Changes in a Collaborative Multi-disciplinary Design Environment".
- Courses in Database Design, Management of Information Systems, Computer-Aided Planning, Engineering Economics, Construction Processes, and Indoor Air Quality.
- Sep.88-Sep.91 Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada.

## **Master's in Building Engineering**

- Title of thesis: "A Dynamic Model for Daylight Impact on Energy Savings in Direct Gain Passive Solar Buildings."
- Courses in Computer Aided Building Design, Building Science, Building Environment, Building Illumination, Mechanical Systems in Buildings, Project Management, Construction Planning and Control.
- Sep.82-Jul.87 Cairo University, Faculty of Engineering, Cairo, Egypt.

#### **Bachelor of Architecture**

## **OTHER EDUCATION**

#### Accreditation/Quality-related:

- **Team Chairs and Evaluators Workshop,** Middle States Commission on Higher Education, Philadelphia, USA, October 5-6, 2015.
- **New Chairs & Evaluators Workshop,** Middle States Commission on Higher Education, Philadelphia, USA, October 4, 2007.
- **Self-Study Institute,** Middle States Commission on Higher Education, Philadelphia, USA, October 29-30, 2006
- Introduction to ISO 9000, Continuing education course, Concordia University, Canada, 1996.

#### Teaching-related

- **Technology Enriched Instruction,** Faculty Workshop, American University of Sharjah, 15 November, 2014.
- Online Teaching and Learning, Workshop organized by UNESCO, Sharjah, UAE, March. 9-13, 2003.
- A learning centered approach to engineering education for the 21st century, Workshop organized by the American University of Sharjah, UAE, Sep. 5-19, 2000.
- **Excellence in Civil Engineering Education**, Workshop organized by the American Society of Civil Engineers, Fayetteville, Arkansas, USA,. July 9-14, 2000
- Scholarly Writing, One day workshop, Illinois Institute of Technology, Chicago, Sept 14, 1999.
- What do the best teachers do?, One day seminar, Midwest University, Chicago, August 24, 1998.

#### **IT-related**

- Basic Simulation/Analysis Training on IES-VE, British University in Dubai, 11-12 October, 2014
- **Revit Families,** Diatec, Dublin, Ireland, 10-11 April, 2014.
- **Revit Architecture 2014 Advanced,** Diatec, Dublin, Ireland, 7-9 April, 2014.
- **International workshop on Energy Simulation of Buildings for LEED**, Center for IT in Building Science, Hyderabad, India, May 6 9, 2010.
- Introduction to Autodesk Revit, American University of Sharjah, UAE, May 20-25, 2009.
- Autodesk Architecture Desktop, 40 hour course, Omnix Training Center, Dubai, UAE, June 2004.

## Management-related

- Conflict Management, American University of Sharjah, 27 March, 2014.
- **Communication Skills,** American University of Sharjah, 13 February, 2014.
- **Customer Service Training,** American University of Sharjah, October 22, 2013.
- Successful Negotiation, Workshop at Dubai International Financial Center, April 23, 2010.
- Safety on Construction Sites, UAE Society of Engineers, Dubai, UAE, March 28, 30, April 1, 2009.
- Safety on Construction Sites, 3 day workshop, Concordia University, Canada, 1994.
- **Developing a Business Plan,** 3 week workshop, YMCA, Montreal Canada,1991.

#### **AFFILIATIONS**

- LEED® Accredited Professional by the U.S. Green Building Council.
- Estidama Pearl Qualified Professional by Abu Dhabi Urban Planning Council.
- Founding member of the Architectural Engineering Institute (in the USA).
- Member of the American Society of Civil Engineers (ex).
- Member of the Engineers and Architects Syndicate of Egypt.
- Member of the Society of Building Science Educators.

## INFORMATION TECHNOLOGY SKILLS

<u>CAD:</u> Certified Instructor for AutoCAD, Teaching knowledge on, Revit, Sketchup, IES VE.

<u>Video Editing:</u> Knowledge of AVID and Windows Movie Maker.

<u>Database:</u> Knowledge of database design and SQL manipulation (MS Access).

Programming: Visual Basic and Object-oriented programming.

General: Experienced and familiar with Word, PowerPoint, Excel, CorelDraw, Blackboard, and

many others.

# **DETAILS OF EXPERIENCES**

# **ADMINISTRATIVE EXPERIENCE**

American University of Sharjah, School of Architecture, Art and Design, UAE

#### Associate Dean (Aug. 2011- Aug. 2016).

- Participated actively as member of the Academic Operations Council along with other Associate Deans and the Vice Provost to address a variety of academic regulation issues.
- Participated actively as member of the University Undergraduate Curriculum Committee that supervises updating and introducing new courses and programs across the university.
- Participated actively as member of the College Administrative Council along with the Dean and the Head of Departments and other administrators to address a variety of issues to run the college.
- Managed scheduling of courses in the college and developed a process to provide instant data for decision making purposes.
- Managed students' enrollment in different courses in the college.
- Developed a new advising process with a key advisor for each major. Facilitated students' advising and degree audit process using demonstration tools available to students and advisors.
- Provided orientation for new students.
- Managed the competition for advancing Foundations students to second year. Improved the process through automation of the collected data to assure an error free process.
- Managed grade appeal and judged academic integrity cases.
- Managed the assignment of teaching assistants to faculty within the available budget.
- Analyzed college data to support decisions on budget, faculty, and facility needs.
- Supported the university in managing enrollment in the college.
- Updated continuously the college section of the university catalog.
- Supervised and supported the process of updating and developing new courses and curricula, and minors in the college.
- Created and supported a college student body to participate in the college self-governance.
- Managed various facilities in the college to make sure that they fit the required activities. This also covered the assurance of safety and security.
- Updated college operational manual to document important regulations and policies.
- Supervised and evaluated two staff members.

#### Director of Graduate Studies (Aug. 2011- Oct. 2014).

 Participated actively as member of AUS Graduate Programs Committee covering all aspects of graduate studies at AUS.

- Promoted and worked with colleagues to successfully change the curriculum for the Master of Urban Planning.
- Assigned graduate assistantship to graduate students in the college.
- Solved a variety of graduate students' issues.

## Director of the Foundations Program (Aug. 2011-Aug. 2013).

- Directed the program, which included about 180 students and 12 faculty.
- Managed to increase the capacity and reduce the number of students per section within the same facility through better management of course offerings.
- Worked with faculty to improve teaching and provide consistency among the many sections of the Foundations Program courses.
- Developed teaching evaluation criteria for the Foundations Program faculty and evaluated their teaching.
- Advised students on their courses and on their selected major.

Illinois Institute of Technology, Department of Civil and Architectural Engineering, Chicago, USA

#### Director of the Architecture Engineering Program (Aug. 1998-Aug. 2000).

- Developed the new curriculum for the Bachelor's degree in AE.
- Developed a program for a Certificate degree in AE.
- Developed a program for a Master's degree in AE.
- Member in the committee to hire new faculty members in AE.
- Developed proposals for fund raising for the AE program.
- Negotiating the furnishing and equipment for the construction material lab.

#### **SERVICE EXPERIENCE**

American University of Sharjah, UAE.

#### **AUS Faculty Senate**

Actively involved in a variety of faculty related issues in my *capacity* as:

- Member of the Senate Executive Committee (2009-2011)
- President of the Faculty Senate (2005-2006).
- Vice-President of the Faculty Senate (2004-2005).
- Secretary of the Faculty Senate (2003-2004).
- Chair of the Senate committee on Budget and Administrative Affairs (2004-2005).
- Chair of the Senate committee on Fringe Benefits (2003-2004).
- Member of the Senate Welfare committee (2000 2002).
- Member of a Senate committee on several faculty grievances.
- Responsible for managing of the Senate budget including the use of the university banner system.

#### Actively involved in a variety of *faculty-administration issues* such as:

- Length of faculty contracts.
- Grievance policy.
- New faculty ranks.
- Faculty evaluation process and criteria.
- Students' evaluation system.
- Health care insurance.
- Fringe benefits system.
- External consulting and external research grants.
- Policy on research involving human participants.
- Academic calendar.

- Interviewing candidates for Deanship, Vice Chancellor, and IT Director positions.
- Meetings and discussions with members of the Board of Trustees.

#### **Chair of Committees**

- Chair of the Self-Study Steering Committee for Middle States Accreditation in USA. (This is the committee responsible for the reaccreditation of the university by MSCHE)
- Chair of the Architecture department curriculum committee responsible for redeveloping the architecture curriculum to fit US accreditation requirements (NAAB)
- Co-Chair of the 2006 conference of the Arab Society for Computer Aided Architecture Design.
- Chair of the department faculty personnel committee for both faculty rolling contract and promotion.
- Chair of the department building technology task group.
- Chair of the school service ad hoc Committee
- Chair of the school committee for work load calculation.
- Chair of the school committee to find ways to generate revenue for the school.
- Chair of the school committee to develop a workshop about culture understanding.

#### **Member of Committees**

- Member of an Evaluation Team to accredit Ming Chuan University,
   Taiwan. (Part of the Middle States Commission in Higher Education in USA)
- Member of an Evaluation Team to accredit the American University in Beirut, Lebanon. (Part of the Middle States Commission in Higher Education in USA)
- Member of an Evaluation Team to accredit John Cabot University, Italy.
   (Part of the Middle States Commission in Higher Education in USA)
- Member of the university committee on New Chancellor Selection.
- Member of the university committee on New Provost Selection.
- Member of the Steering committee to develop the Strategic Planning for the American University of Sharjah.
- Member of the university committee on Energy Conservation and Environmental Friendliness.
- Member of school IT committee.
- Member of the ad-hoc committee for establishing a technical lab in the new architecture building.
- Member of a dean-initiated task force to develop a process to implement the use of PC laptops in the department.
- Member in an ad-hoc committee formed by the chair of architecture to define the IT essential support for students' laptops.
- Member of a chair-initiated task force to integrate IT in the curriculum.
- Member of the new-architecture-building liaison committee.
- Member of the school election committee.
- Member of the school technical equipment committee.

## Other experiences

- Assigned by the Vice Chancellor for Academic Affairs to restructure and update the Faculty Handbook.
- Administered the internship program for Architecture and Interior design students (2003-2005).

- Evaluated the proposed curriculum for the new Architecture Engineering program to be established at Qatar University. One of three international experts to make this evaluation (2004).
- Member of the Architecture Committee of the UAE Society of Engineers (2000 2003).
- Negotiated contract and worked as a link between the school and Autodesk to establish an authorized training center.
- Supervised an AUS students' trip for Omra in Saudi Arabia. (2001).
- Wrote scripts for two promotional videos about the American University of Sharjah and the American Business Council.

Illinois Institute of Technology, Department of Civil and Architectural Engineering, Chicago, USA

- Member of the committee to apply ABET 2000 for the Engineering programs.
- Member of the Undergraduate Studies committee.
- Member of the IIT Research council.

Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada.

- Member of the university appraisal committee for the Building Engineering Program.
- Member of the committee to arrange for the Third Canadian Conference for Computing in Civil and Building Engineering.

# **TEACHING EXPERIENCE**

American University of Sharjah, School of Architecture, Art and Design, UAE.

Developing and Teaching undergraduate courses:

- Environmental Control Systems (MEP systems in buildings with emphasis on sustainability issues).
- Building Science (Fundamentals of achieving energy efficiency and sustainable buildings design).
- Architecture Design Studio.
- Design of High-Rise Residential Buildings.
- Rough Construction Process.
- Finish Construction Process.
- Materials and Methods of Interior Design.
- Contract Documents.
- Advanced Computer-Aided Design.
- Computer-Aided Drawings.
- Descriptive Drawing

#### Student Project Awards:

- Estidama Special Mention Award for Estidama Fareej Contest (December 2009).
   Students: Maram Balash and Preeti Mogali
- **British Petroleum Green Award** for the project Green Mosque Design (January 2010). Students: Sarah Khawaja, Wasib Mahmoud, Naji Muneer and Saeed Kherzi.

Illinois Institute of Technology, Department of Civil and Architectural Engineering, Chicago, USA.

Developing and Teaching undergraduate and graduate courses:

- Building Systems Integration I.
- Building Systems Integration II (Studio-based).
- Building Science.
- Physical Performance of Buildings.
- Information Technology in Buildings Design and Construction.

Concordia University, Faculty of Engineering and Computer Science, Montreal, Canada.

Part time lecturer and teaching fellow

- Building Illumination.
- Descriptive Geometry.
- Engineering Drawings.

#### **SCHOLARLY WORK**

## Defended and Published Thesis / Project

- Mokhtar, A., (2011), "Sustainable Financing Model for Affordable Housing in Egypt,"

  <u>Business Mastery Project</u>, Cass Business School, City University London, 52 pages.
- Mokhtar, A., (1998), "An Information Model for Managing Design Changes in a Collaborative Multi-disciplinary Design Environment," Ph.D. Thesis, Department of Buildings, Civil, and Environmental Engineering, Concordia University, Montreal, Canada, 255 pages.
- Mokhtar, A., (1991) "A Dynamic Model for Daylight Impact on Energy Savings in Direct Gain Passive Solar Buildings," Master Thesis, Department of Buildings, Civil, and Environmental Engineering, Concordia University, Montreal, Canada, 237 pages.

#### Peer Reviewed Journal Papers

- Mokhtar, A., (2011), "Designing Mosques for Safety," Lonaard Magazine, Vol.1, No.3, May, pp.66-74 (ISSN# 2045 8150)
- Mokhtar, A., (2010), "Architectural design standards for Muslims prayer facilities in airports," International Journal of Sustainable Development and Planning, Vol. 5, No. 2, June, pp.205-212 (ISSN# 1743-7601)
- Mokhtar, A., (2006), "Educational Architecture-Oriented Software Linking Conceptual Design and Solar Intensity," <u>Journal of Architectural Engineering</u>, ASCE, Vol.12, No.2, June, pp.100-105 (ISSN# 1076-0431)
- Mokhtar, A., (2003), "Challenges of Designing Ablution Spaces in Mosques," <u>Journal of Architectural Engineering</u>, ASCE, Vol.9, No.2, June, pp.55-61 (ISSN# 1076-0431)
- Mokhtar, A, (2002), "Coordinating and Customizing Design Information through the Internet", Journal of Engineering, Construction and Architectural Management, Blackwell-Science ltd., Volume 9, Issue 3, June, pp. 222-231 (ISSN# 0969-9988)
- Mokhtar, A, (2000), "Architectural Engineering Curriculum at Illinois Institute of Technology", Journal of Architectural Engineering, ASCE, Vol.6, No.3, September, pp.91-94 (ISSN# 1076-043)
- Mokhtar, A., Bédard, C., Fazio, P., (2000), "Collaborative Planning and Scheduling of Interrelated Design Changes" Journal of Architectural Engineering, ASCE, Vol.6, No.2, June, pp.66-75 (ISSN# 1076-043)
- Mokhtar, A., Bédard, C., Fazio, P., (1998), "Information Model for Managing Design Changes in a Collaborative Environment," <u>Journal of Computing in Civil Engineering</u>, ASCE, Vol.12, No.2, April, pp.82-92 (ISSN# 0887-3801)

#### **Peer Reviewed Conference Papers**

- Mokhtar, A., (2017) "Addressing Severe Crowding in Entry to Prayer Areas at Shopping Malls in the Gulf Region," Proceedings of the Architectural Engineering National Conference 2017, Resilience of the Integrated Building, Oklahoma City, Oklahoma, 11-13 April pp. 115-125
- Mokhtar, A., (2016) "A Sustainable Development Approach for Affordable Housing in Egypt," Sustainable Built Environment (SBE) regional conference Expanding Boundaries: Systems Thinking for the Built Environment, Zurich, Switzerland, 15-17 June, pp. 298-303 (ISBN# 978-3-7281-3774-6) (doi: 10.3218/3774-6)
- Tibi, G., Mokhtar, A., (2015) "Glass Selection for High-Rise Buildings in the United Arab Emirates Considering Orientation and Window-to-Wall Ratio," 7th International

- Conference on Sustainability in Energy and Buildings, Lisbon, Portugal, 1-3 July, Energy Procedia, ELSEVIER, Vol. 83, pp. 197-206 (doi:10.1016/j.egypro.2015.12.210)
- Mokhtar, A., (2015) "Comparison of Energy Efficiency Strategies for Mosques in the United Arab Emirates", The 6<sup>th</sup> Biennial Professional Conference of the Architectural Engineering Institute, Milwaukee, Wisconsin, 24-27 March pp. 43-53 (ISBN# 978-0-7844-7907-0)( doi: 10.1061/9780784479070.005)
- Mokhtar, A., (2015), "Who should advance to the program? Analyzing selection criteria for Architecture students", 7th International Forum on Engineering Education
   Quality Assurance in Engineering Education, University of Sharjah, UAE, March 17-19.
- Tibi, G., Mokhtar, A., (2014) "Glass Selection for High-Rise Residential Buildings in the United Arab Emirates based on Life Cycle Cost Analysis," 6th International Conference on Sustainability in Energy and Buildings, SEB-14, Cardiff, Wales, UK, 25-27 June, Energy Procedia, ELSEVIER, Vol. 62, pp. 270-279 (doi:10.1016/j.egypro.2014.12.388)
- Mokhtar, A., (2012) "Defining an Architecture Design Strategy for Energy Performance A Systematic Approach for Students," International Conference for Sustainable Design, Engineering and Construction American Society of Civil Engineers, Fort worth, TX, USA, 07-09 Nov pp. 37-45 (ISBN# 9780784412688)
- Mokhtar, A., (2010), "Integrating aspects of cultural and environmental sensitivities into affordable housing in the Arab Gulf region," Eco-Architecture 2010: Third International Conference on Harmonization between Architecture and Nature, La Coruña, Spain, 12 14 April pp. 197-208 (Print ISBN# 978-1-84564-430-7; On-line ISSN# 1743-3541)
- Mokhtar, A., (2009), "Architectural design standards for Muslims prayer facilities in airports," Regional Airports 2009, Wessex Institute of Technology, The New Forest, UK, 28-30 September (Print ISBN# 978-1-84564-570-0, Online ISSN# 1755-8336) selected for journal publication.
- Mokhtar, A., (2009), "Design Standards for Muslim Prayer Facilities within Public Buildings," ARCC 2009 Leadership in Architectural Research, between academia and the profession, San Antonio, TX, 15-18 April pp.163-169 (ISBN# 978-1-935129-15-8)
- Mokhtar, A., (2007), "BIM as Learning Media for Building Construction," CAADRIA 2007 The Twelfth Conference of the Association for Computer Aided Architectural Design in Asia, Nanjing, China, 18-22 April pp.119-126 (ISBN# 10: 988-99101-4-4)
- Mokhtar, A., (2005), "Standardizing Ablution Spaces in Public Facilities in the UAE,"
  The Eighth Sharjah Urban Planning Symposium, April 3-5, Sharjah, UAE
- Mokhtar, A., (2005), "Building Information Modeling As A Structure Learning Tool For Architecture Students," Conference on Future Directions in Science, Mathematics, and Technical Education, May 23-26, Universiti Brunei Darussalam, Brunei.
- Mokhtar, A., (2005), *Using Building Information Modeling Software as an Educational Tool,"* Poster Presentation UIA 2005 ISTANBUL World Congress of Architecture, July 3 10, Istanbul, Turkey.
- Mokhtar, A., (2004), "Appreciating Sustainability through Building Science Education," Proceedings of the First Conference on Sustainable Architecture and Urban Development, Cairo, Egypt, February 24-26, Published by the Department of Architecture, Cairo University, Egypt.
- Mokhtar, A., Khan, M., (2004), "Education Oriented Visualization Model for Buildings Cross Ventilation," ACM SIGGRAPH Graphite 2004 Conference International Conference on Computer Graphics and Interactive Techniques in Australasia and Southeast Asia, Singapore, June 15-18
- Mokhtar, A., (2003), "Computer-Assisted Learning of Energy Implication of Architectural Design," Proceedings of Building Integration Solutions, Architectural Engineering 2003 Conference, ASCE, Austin, Texas, 17-20 September.
- Mokhtar, A., (2003) "Defense Objective of Energy Codes," 8<sup>th</sup> Environmental and Sustainable Engineering Specialty Conference of the Canadian Society of Civil Engineers, Moncton, New-Brunswick, Canada, June 4-7.

- Mokhtar, A., (2003), "The Use of IT in Learning the Relationship Between Buildings' Form and Energy Consumption," Architectural Education for the New Millennium Issues, Innovations and Traditions, UIA Architectural Education Commission 1<sup>st</sup> International Conference, Bibliotheca Alexandria, Egypt, Mar. 8-10, Abstract pp. 28. (Poster Format).
- Mokhtar, A., (2000), "Coordinating and Customizing Multi-disciplinary Design Information Using the Internet", CIB w96, conference on design management in the architectural and engineering office, Atlanta, Georgia, May 19-20, pp.305-315.
- Ismail M. Budaiwi, Adel A. Abdou, and Ahmed H. Mokhtar, (2000) "Water Use and Conservation Guidelines for Residential Buildings in Saudi Arabia", The 1st Symposium on water conservation, organized by the ministry of Agriculture and Water, Riyadh, Saudi Arabia, April 16-19.
- Mokhtar, A., Bédard, C., Fazio, P., (1997), "A Methodology for Dynamically Assembling and Modifying an Active-Repository Building Database," IT Support for Construction Process Re-engineering, Proceeding of the CIB Workshop W78 and TG10, Queensland, Australia, July 9-11, pp.285-295.
- Mokhtar, A., Bédard, C., Fazio, P., (1997), "Planning and Scheduling Design Changes in a Collaborative Multi-disciplinary Design Environment," Computing in Civil Engineering, Proceedings of the Fourth Congress Held in Conjunction with A/E/C Systems, Philadelphia, June 16-18.
- Mokhtar, A., Bédard, C., Fazio, P., (1996) "An Active Database for Inter-Disciplinary Coordination of Building Design Information," Proceedings of The Third Canadian Conference for Computing in Civil and Building Engineering, CSCE, Montreal, Canada, August 26-28.
- Mokhtar, A., Alkass, S., Ghanbari, A., (1996) "Computer Assisted Model for Balancing Buildings' Cost with Quality During the Design Stage," The Second International Conference in Civil Engineering on Computer Applications Research and Practice, Bahrain, April 6-8.
- Hegazy, T., Mokhtar, A., (1995) "Construction Bidding on the Internet: A New Perspective," Proceedings of the Fourth IASTED International Conference: Computer Application in Industry, Cairo, Egypt, December 4-7.
- Mokhtar, A., Bédard, C., (1994) "Towards Integrated Construction Technical Documents A New Approach Through Product Modelling," Proceedings of The First European Conference on Product and Process Modelling in the Building Industry, Dresden, Germany, October 5-7.

#### **Regional Conference Papers**

- Mokhtar, A., (2002)," *The Strategic incentive to regulate energy in residences in the GCC countries,*" The sixth housing conference and exhibition, Kuwait Society of Engineers, Kuwait. Sept 23-27, pp. 183-191.
- Mokhtar, A., (1999), "Architectural Engineering Education: An Avenue for an Efficient and Sustainable Built Environment", Second International Symposium on Sustainability in Desert Regions, Al-Ain, United Arab Emirates, November 20-23.

#### **Professional Magazine Articles**

- Mokhtar, A., (2014), "Green Mosques as a Catalyst for Integrating Culture and Sustainability". FM Magazine, February 16. (on-line)
- Mokhtar, A., (2013), "Ask an Eco Expert" Emirates Home Magazine, August 2013, pp 65.
- Mokhtar, A., (2010), "Green mosques," Environment and Development Magazine, Volume 15, No.144, March, pp. 30-31 (in Arabic)
- Mokhtar, A., (2008) "Design Issues for Muslims Praying Spaces in Shopping Malls", 2A Architecture & Art, No.9, Summer, pp.86-87
- Mokhtar, A., (2006) "Danger of Fire in Mosques", World of Engineering, Magazine of the UAE Society of Engineers, No. 43, June, pp. 32-33 (in Arabic)

- Mokhtar, A., (2004), "Forced learning, the missing obligation," Emirates Real Estate, (in Arabic).
- Mokhtar, A., (2004), "Design of Ablution Spaces" Sada Al Mabany, October, issue No. 17, p. 54, (in Arabic)
- Mokhtar, A., (2004), "Precaution in Dealing with (Khawaja) Engineer," Emirates Real Estate, Year 4, No.42, February, pp.78. (in Arabic)
- Mokhtar, A., (2003), "Towards Rationalizing Water Consumption," Sada Al Mabani, Year 1, No. 9, November, pp.68-69 (in Arabic)
- Mokhtar, A., (2003), "Security Engineering in Buildings," Emirates Real Estate, Year 4, No. 38, October, pp.80. (in Arabic)
- Mokhtar, A., (2003), "Classifications and Precautions for Using Thermal Insulation Material," <u>Sada Al Mabani</u>, Year 1, No. 2, April, pp.30-31 (in Arabic)
- Mokhtar, A., (2002), "Readings in the Dubai Municipality Code of Thermal Insulation," Emirates Real Estate, Year 2, No.23, July, pp.34,36 (in Arabic).
- Mokhtar, A., (2002), "Air Conditioning Using the Home Garden Land," <u>Emirates Real Estate</u>, Year 2, No.22, June, pp.48-49. (in Arabic).
- Mokhtar, A., (2002), "Among the Challenges of Using Thermal Insulation in Buildings," Emirates Real Estate, Year 2, No.24, August, pp.48,50. (in Arabic).
- Mokhtar, A., (2002), "Water *Conservation in Buildings*," <u>Emirates Real Estate</u>, Year 2002, No.26, October, pp.46,48. (in Arabic).
- Mokhtar, A, (2002), "The Strategic Incentive to regulate energy consumption in buildings in the GCC," Emirates Real Estate, Year 2, No.19, March, pp.52-54. (in Arabic).
- Mokhtar, A, (2001), "Reducing Consumption The Strategic Incentive to regulate energy in buildings," <u>Albenaa Magazine</u>, year 22, No.132-133, August-September, pp.168, 170. (in Arabic)
- Mokhtar, A, (2001), "The Need of The Emiraty Building Industry to A New Engineering Discipline," Emirates Real Estate, Year 2, No.9, May, pp.80.
- Mokhtar, A., (2000), "An Internet-Based Model for Coordinating and Generating Customizable Multi-media Construction Technical Documents," Research News, Illinois Institute of Technology, February, pp.29-34.

#### **Books**

- Mokhtar, A., (2006), "Design Guidelines for Ablution Spaces in Mosques and Islamic Praying Facilities," American University of Sharjah, United Arab Emirates, (In Arabic and English), ISBN 9948-427-02-5.

#### **Newspapers Citing**

- Gulfnews, "American University of Sharjah students showcase 'green' mosque designs", http://www.gulfnews.com/gngalleries/galleries/ 10321461.html, June 15, 2009
- Campus Journal, "AUS students investigate green mosque designs architecture students to minimize wastage of water and electricity in mosques", Issue 312, June 14, 2009, page 4.
- Khaleej Times, "Eco-friendly mosques of the future", June 10, 2009, pages 1 & 3
- Khaleej Times, "Booklet on designing ablution spaces in mosques published,"
   February 28, 2006.
- Emirates Today, "Ablution booklet is published", February 27, 2006, page 3.

#### Software Development

- Mokhtar, A., (2002) "SIBS - Solar Intensity on Buildings Surfaces".

Developed from scratch to help architecture students in selecting appropriate building forms that achieve energy conservation.

## **Video Production**

- "Design of Ablution Spaces - The Guide"

20 minutes technical documentary video to guide architects in the design of ablution spaces.

Director, script writer, and principal video editor.

#### Journal Papers Reviews

- Reviewer for the Journal of Architectural Engineering (published by the American Society of Civil Engineers).
- Reviewer for the Emirates Journal for Engineering Research.

#### **Granted and Administered Research Proposals**

- Mokhtar, A., (2001), "Developing Design Guidelines for Ablution Spaces in Mosques"
   AUS research grant AED 7,000.
- Mokhtar, A., (1998) "An Internet-Based Model for Coordinating and Generating Customizable Multi-Media Construction Technical Documents" <u>IIT's Educational and Research Initiative Fund (ERIF) Program</u> Illinois Institute of Technology, Chicago US\$10,000.

#### **Non-Granted Research Proposals Applications**

- Mokhtar, A. (Principal Investigator), Al-Homoud, A., Abdalla, J., Al-Tamimi, A., Qaddoumi, N. (2001), "Developing a Construction Handbook for Residential Buildings in UAE" Sharjah Circle of Public Works.
- Al-Tamimi, A., Al-Homoud, A., Abdalla, J., Qaddoumi, N., Mokhtar, A., (2001), "Producing A Comprehensive Manual for Research on the Construction Materials in the UAE, contains all Related Research; Past and Present, and Recommendations for Future Work" Sharjah Circle of Public Works.
- Mokhtar, A., (2000), "Internet-Aided Engineering: A Course for Building Modern Communication and Collaboration Skills", National Science Foundation, USA, Proposal ID #: DUE-9980765.
- Mokhtar, A., (2000), "Investigating the deployment level of computer-based collaboration technology within the building industry" Graham Foundation, Chicago.
- Mokhtar, A., (2000), "A Course For Developing Internet-Based Collaboration Skills" <u>IIT's Educational and Research Initiative Fund (ERIF) Program</u> – Illinois Institute of Technology, Chicago
- Mokhtar, A., (1999), "An Internet-Based Model for Coordinating Engineering Technical Documents" NASA Lewis Research Center, USA.
- Mokhtar, A., (1999), "Component-Based Electronic Drawings: A New Tool for Internet Aided Design" <u>IITRI-funded R&D-projects</u>, Chicago.
- Mokhtar, A., (1999), "Internet-Aided Design: Educating Future Engineers New Collaboration Skills" <u>DuPont Committee on Educational Aid</u>, USA.

# Public Presentations (not related to publications)

- Mokhtar, A., (2013) "Financing Model for Sustainable Development of Affordable Housing through NGO and the Private Sector," Invited Presentation at Future Housing Summit, March 3-5, Abu Dhabi, UAE
- Mokhtar, A., (2009), "Design of Ablution Spaces", Qatar Foundation Engineering Department, August 27.
- Mokhtar, A., (2003), "Defense Side of Buildings Energy Planning," The Sixth Sharjah Urban Planning Symposium, Sharjah, United Arab Emirates, June 2.
- Mokhtar, A., (2002), "Bachelor in Building Engineering a Needed Specialization to Support Urban Improvement", (in Arabic). Presented in a seminar titled "Role of the academic institutions in coordinating architectural identity and urban development in the shadow of globalization", Ajman University, Abu Dhabi, October 30.
- Mokhtar, A., (1999), "Computer-Aided Design Management," College of Architecture, Illinois Institute of Technology, November 10.

- Mokhtar, A., (1999), "Architectural Engineering at Illinois Institute of Technology Sharing the Experience," Department of Architectural Engineering, Cairo University, January 3.
- Participated in the workshop on "Islamic and Local Architecture Its Importance and Applications in Public and Private Buildings" with the "Emirate Real Estate" magazine, October 01.

# Thesis Defense and proposals Committees

### (At the American University of Sharjah)

- One master project proposal in the field of Building Information Modelling.
- One master project proposal in the field of Urban Planning..

# (At Illinois Institute of Technology, Chicago)

- Two PhD thesis defences in the field of Construction Management.
- Two master thesis defences in the field of Construction management.
- A master thesis defence in the field of Structure.
- A PhD thesis proposal in the field of Construction Management.
- A PhD thesis proposal in the field of Indoor Air Quality.
- Two PhD thesis proposals in the field of Architecture.

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