Aiman S. Kuzmar, Ph. D., P. E.

P O Box 1073, Huntsville, TX, Tel: (936) 294-1228 Office & (724) 208-2013 cell/ AimanKuzmar@yahoo.com US Permanent Resident and about to become a US Citizen/ Country of Origin: Jordan

Education

Ph. D.: Duke University, Durham, North Carolina

Civil and Environmental Engineering, <u>1994</u>, Major: Solid Mechanics, Materials and Structures & Minor: Mathematics Advisor: Henry Petroski, The Vesic Professor of Civil Engineering, and a professor of History at Duke University Dissertation Area: Linear Elastic Fracture Mechanics in Concrete.

M. C. E.: Rice University, Houston, Texas, Civil Engineering, 1987, Major: Structures

<u>B. S.</u>: King Fahd *University of Petroleum and Minerals, Dhahran*, Saudi Arabia Civil Engineering, 1984, Graduation with Highest Honor, GPA: 3.769/4.000, Rank: 10 th. in the entire class of 1984

Professional Registrations and Licenses

Registered Licensed **Professional Engineer (PE)** in North Carolina, USA (1999 - Date, Registration No.: 024945) Registered **Licensed Certified Civil Engineer** in Jordan with the Jordanian Association of Engineers, (2007 - Date) A Graduate Member with the Australian Institute of Engineers (AIE), 1995.

Continuing Education

- Photovoltaic Renewable Energy Course (60 hours) by Ontility Inc Dept. of Energy Grant, 2012 2013
- Various Structural Engineering classes by Simpson StrongTies, 2000-Date
- Industrial Safety Classes by the Risk Management Institute / College of Mainland, Texas City, TX, Jan-Dec 2012
- Many NCDOT Training Sessions, 1995-2000
- Numerous and various seminars and workshops to maintain current knowledge and professional licenses 1999-Date

Languages

English: Fluent **Arabic**: Native Language **Spanish**: Fair and Working Knowledge

Professional Experience

August 2010 – Present: Associate Professor of Construction Management and Engineering Technology Sam Houston State University, Huntsville, Texas

* Teach Construction Management courses including: Statics, Strength of Materials, Civil Engineering Drafting, Construction Drafting, and Engineering Technology in addition to Direct Independent Studies. * Advise undergraduate students. * Participate in graduate students thesis. * Design and improve curricula. *Conduct research in the areas of: structures, construction, materials, and engineering education. * Write technical and educational manuscripts. * Present, participate in and attend local, national, and international conferences, symposia, and workshops. * Serve in various University committees, and conduct various seminars and workshops for Continuing Education.

August 2000 – July 2010: Assistant Professor of Engineering

Penn State Favette University, Uniontown, Pennsylvania

* Teach various engineering and engineering technology courses including: Engineering Mechanics-Statics, Engineering Mechanics-Dynamics, Strength of Materials, Engineering Technology Statics, Site Planning, Steel Construction, Reinforced Concrete Design, Introduction to Engineering, Mechanical Engineering Systems, Independent Studies in Civil Engineering Materials. * Advise undergraduate students in the engineering program and in the engineering technology program. * Design and improve engineering and engineering technology programs curricula. * Prepare documents and participate actively in all Accreditation Board for Engineering and Engineering Technology (ABET) activities. *Conduct research in the areas of: structures, construction, materials, and engineering education. * Write technical and educational manuscripts. * Present, participate in and attend local, national, and international conferences, symposia, and workshops. * Serve in various University committees, and Serve local communities in Fayette County and participate in the service learning Program, and conduct various seminars and workshops in the Continuing Education program.

2009/2010 Year: Adjunct Professor of Construction Management

Fairleigh Dickenson University, Teaneck, New Jersey

Teach various courses in the Construction Management Program including: Advanced Structural Analysis, Advanced Steel Design, and Advanced Concrete Design.

August 1999 – August 2000: Bridge Design Engineer (Transportation Engineer)

Structure Design Unit of the North Carolina Department of Transportation (NCDOT), Raleigh, North Carolina

* Design and prepare layouts for all kinds of structural elements in highway structures using computer programs and hand calculations based on national codes and specifications like AASHTO, ACI, AISC, and on State code and specifications like the North Carolina Structures Design Manual. * Check the design and layout of highway structures prepared by other NCDOT structural engineers. * Participate in the preparation of plans for highway structures. * These Highway Structures include: Steel, Reinforced Concrete, Prestressed Concrete Bridges Superstructure (Slabs, Girders, ...etc.), Substructures (Bents, Piers, Pier Caps, Footings, Piles ...etc.), Culverts, and Retaining Walls.

April 1995 – Aug 1999: Pavement, Materials & Structures Research Staff Engineer (Transportation Engineer)

Research and Development Unit of the North Carolina Department of Transportation (NCDOT), Raleigh, North Carolina

* Specific Duties Encompass: Preparing Technical Work Plans, Designing and Executing Investigation and Experimental Plans, Projects Management, Providing Necessary Training and Supervising, Preparing Work Summaries, Preparing Budget Estimations, Data Tabulations and Analysis, Writing Reports and Other Official Documents, Reviewing Technical Abstracts, Preparing Technical Abstracts, Implementing the Outcome of Investigations and Projects, Questionnaire Responses and Official correspondence.......* Duties and work assignments relate to: Cooperative Agreement Projects, Operational Test Projects, Experimental Evaluation Projects, Research Contract Projects, Research Implementation Projects, Technology Transfer Projects (T²)..........* Projects Topics Include: Alkali Silica Reactivity (ASR) in Concrete Structures, Thin Bonded Concrete Overlay on Bridge Decks, Seasonal Monitoring of Asphalt and Concrete Pavements, Thin Bonded Concrete Overlay on Pavements, SUPERPAVE ® (Performance Based Specifications), Silica Fume Concrete and Latex Modified Concrete, FWD, Skid Testing and Roughness in Pavements, Recycled Products and Solid Waste, Corrosion of Structural Steel Members, High Strength (Friction Type) Bolts, High Performance Concrete (HPC), Stone Mastic Asphalt Mixtures, Recycled

Asphalt Pavements (RAP), Epoxy Coated Steel Rebars and Prestressing Strands, The Use of Direct Tension Indicators (DTI) Ultrasonic Equipment, Prestressed Concrete, and Drilled Shafts.

August 1994 - March 1995: Structural Engineer Stewart Engineering, Inc., Chapel Hill, North Carolina

* Designing all kinds of structural elements such as: one way, two way and flat plate concrete slabs, composite decks, open web steel joists, columns (including cap and base plates), beams, girders, rigid and hinged connections (column-girder, girder-beam), footings, anchor bolts, wood trusses and wood studs. * Performing Wind Analysis and Designing Shear Walls & Performing Seismic Analysis and Designing Diaphragms if Needed. * Approving Shop Drawings. * Duties and work assignments relate to: (1) Reinforced Concrete Structures (2) Steel Structures (3) Wood Structures. * Structures include: Hospitals, Dormitories, Theaters, Apartment Complexes, Multi-Story Commercial Buildings, Clubhouses & Additions to Existing Units.

August 1988 - August 1994: Faculty Assistant

Duke University, Durham, North Carolina

May 1984 - August 1986

August 1984 - August 1986: **Teaching & Research Assistant**, <u>University of Petroleum & Minerals</u>, Saudi Arabia. May 1984 - August 1984: **Civil Engineer**, <u>Sampo Construction Co.</u>, Taif, Saudi Arabia.

Publications

- 1. Kuzmar, A., " *Hispanic Students and STEM at Selected Houston Schools*," Proceedings of the 10th Latin American and Caribbean Conference for Engineering and Technology LACCEI (Latin American and Caribbean Consortium of Engineering Institutions) in Panama City, Panama, July 2012.
- 2. Kuzmar, A. and Abedalhafiz, A, "What Motivates Engineering Students at the Hashemite University in Jordan to Join Intercollegiate Sports," Proceedings of the American Society of Engineering Education Gulf-Southwest Annual Conference, Huston, Texas, Paper FET077, March 2011.
- 3. Kuzmar, A., "<u>A Look at the Current Status of Teaching Statics Online</u>," Proceedings of the 7th Latin American and Caribbean Conference for Engineering and Technology LACCEI (Latin American and Caribbean Consortium of Engineering Institutions) in San Cristobal, Venezuela, Paper 29, June 2009.
- 4. Kuzmar, A., "*Ethics in Engineering Education and at Penn State Fayette*," Proceedings of the Sixth Latin American and Caribbean Conference for Engineering and Technology LACCEI (Latin American and Caribbean Consortium of Engineering Institutions) in Tegucigalpa, Honduras, Paper 93, June 2008.
- 5. Kuzmar, A., Alhiyari, T., and Abedalhafiz, A., "*Engineering Students with Disabilities in Jordan*," Proceedings of the International Division of the 2008 Annual American Society of Engineering Education Conference, Pittsburgh, Pennsylvania, Paper 1964, June 2008.
- 6. Kuzmar, A., Abedalhafiz, A, and Alhiyari, T.," *Engineering Students Opinion on PE 603100- Sports and Health: an Introductory Physical Education Course*," Proceedings of International Division of the 2008 Annual American Society of Engineering Education Conference, Pittsburgh, Pennsylvania, Paper 2338, June 2008.
- 7. Shehadeh, O., and Kuzmar, A., "<u>The Opinion of the Engineering Faculty Members at the Hashemite University on Teaching Engineering Using Arabic Instead of English</u>" Proceedings of the American Society of Engineering Education Zone one 2008 Conference, Paper 28, March, 2008.
- 8. Kuzmar, A., "*Engineering Mechanics Courses and Distance Learning*," Proceedings of the 2nd International Conference on Interactive Mobile and Computer Aided Learning (IMCL), Amman, Jordan, paper 118, April 2007.

- 9. Kuzmar, A., "<u>Engaging Engineering and Engineering Technology Students with Various Engineering Professional Societies</u>," Proceedings of the 13th International Conference on Industry, Engineering, and Management Systems (IEMS 2007), Cocoa Beach, Florida, pp. 378-385, March 2007.
- 10. Kuzmar, A., Muslih, I., and Meredith, D., "<u>The Overlap between Mechanical and Civil Engineering Graduate</u> <u>Education</u>," Proceedings of the American Society of Engineering Education Illinois-Indiana Annual Conference, Indianapolis, Indiana, Session 1B: Paper 72, March 2007.
- 11. Johnson, P., and Kuzmar, A., "A One-Credit First-Year Introduction to Engineering Seminar Course at Penn State Fayette Helps Freshman Students in Choosing an Appropriate Engineering Major: a Student's Perspective," Proceedings of the American Society of Engineering Education Illinois-Indiana Annual Conference, Indianapolis, Indiana, Session 4C, Paper 70, March 2007.
- 12. AbdelHafiz, A., and Kuzmar, A., "<u>How Selected Universities Treat Physical Education Courses in Their Engineering Curricula</u>," Proceedings of the American Society of Engineering Education Illinois-Indiana Annual Conference, Indianapolis, Indiana, Session 5A: Paper 71, March 2007.
- 13. Kuzmar, A., and Muslih, I. "<u>A Look at the Ways in Which Universities Offer Common Civil-Mechanical Engineering Courses</u>," Proceedings of the International Journal of Modern Engineer (IJME)/ INTERTECH International Conference, Union, New Jersey, Paper ENG 205-092, October 2006.
- 14. Passmore, L., and Kuzmar, A., "A Comparison Between the Engineering Mechanics-Strength of Materials Course in the Engineering, and Engineering Technology Programs at The Pennsylvania State University," Proceedings of the Mechanics Division of the 2006 Annual American Engineering Education Conference, Chicago, Illinois, Paper 2006-1321, June 2006.
- 15. Kuzmar, A., "<u>Undergraduate Research Collaboration Between Penn State Main Campus and One of Its Remote Campuses</u>," Proceedings of the Materials Division of the 2005 Annual American Engineering Education Conference, Portland, Oregon, Paper 1632, June 2005.
- 16. Kuzmar, A., "<u>Student's Ownership Of Class Project Improves Learning</u>," Proceedings of the Engineering Technology Division of the 2005 Annual American Engineering Education Conference, Portland, Oregon, Paper 1532, June 2005.
- 17. Kuzmar, A., "<u>Engineering Statics and Engineering Technology Statics: Differences and Similarities at Penn State Fayette</u>," Proceedings of the American Society of Engineering Education Mid-Atlantic Annual Conference, Teaneck, New Jersey, April 2005.
- 18. Kuzmar, A., "*Computers in Civil and in Civil Engineering Technology Education*," Proceedings of the American Society of Engineering Education Mid-Atlantic Annual Conference, Teaneck, New Jersey, April 2005.
- 19. Kuzmar, A., "*Engineering Technology Students and National Concrete Conferences*," Proceedings of the American Society of Engineering Education New England Annual Conference, Fairfield, Connecticut, Session 1E: pp. 642-647, April 2005.
- 20. Muslih, I., Meredith, D., and Kuzmar, A., "<u>Overlap between Mechanical and Civil Engineering Undergraduate Education</u>," Proceedings of the American Society of Engineering Education Illinois-Indiana Annual Conference, DeKalb, Illinois, Session D-Track 1: Paper 153, April 2005.
- 21. Kuzmar, A., "*Learning by Teaching: an Alternative Approach in Engineering Education*," Proceedings of the American Society of Engineering Education Gulf-Southwest Annual Conference, Corpus Christi, Texas, Paper F2A3 Kuzmar, March 2005.
- 22. Kuzmar, A., "<u>An Industrial Engineering Educational Steel Partnership in Southwestern Pennsylvania</u>" Proceedings of the 11th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, ISBN: 0-9710330-4-8, pp. 149-155, March 2005.
- 23. Kuzmar, A., "<u>Student's Ownership Of Class Project Improves Learning.</u>" Radcliffe, David (Editor); Humphries, Josh (Editor). 4th ASEE/AaeE Global Colloquium on Engineering Education. Brisbane, Qld.: Australasian Association of Engineering Education, [553]-[565], 2005
- 24. Epoxy Coated Prestressing Strands, Report for the FHWA/NC Project 170-31(3), July 1999
- 25. Laboratory Test Methods for Shear Bond Strength of Concrete Overlay, Report No. NC/RD/98-001, Aug 1998
- 26. Standard Method of Test for: In Situ Direct Tensile Bond Strength of Concrete Overlay, NCDOT MT-T 41-1996

- 27. Standard Test for: Shear Bond Strength of Concrete Overlay with Overlay Part Obtruding, NCDOT MT-T 40-1996
- 28. Standard Test for: Shear Bond Strength of Concrete Overlay with Overlay Part Extruding, NCDOT MT-T 42-1996

Professional Presentations

- 1. "<u>Interaction between Engineers and Construction Managers</u>" At the 18th International Conference on Industry, Engineering, and Management Systems (IEMS), Cocoa Beach, Florida, March 26, 2012.
- 2. "Self-Sufficient Energy-Efficient Residential and Commercial Building Design Aspects" At the 18th International Conference on Industry, Engineering, and Management Systems (IEMS), Cocoa Beach, Florida, March 27, 2012.
- 3. "<u>Design in Construction Management Programs</u>" At the Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference, Cleveland, Ohio, November 11, 2011.
- 4. "<u>Women in Construction</u>" At the 17th International Conference on Industry, Engineering, and Management Systems (IEMS), Cocoa Beach, Florida, March 28, 2011.
- 5. "What Motivates Engineering Students at the Hashemite University in Jordan to Join Intercollegiate Sports" At the American Society of Engineering Education Gulf-Southwest Conference, University of Houston, Houston, Texas, March 20, 2011.
- 6. "<u>The Importance and Future of the Engineering Profession in our Societies</u>," At the 2010 American Society for Civil Engineers (ASCE) Regional Annual Meeting and Competitions, Fairleigh Dickenson University, Teaneck, New Jersey, March 2010
- 7. "A New ASEE Division is Needed for Service Learning" At the 2008 American Society of Engineering Education Conference & Exposition (The Global Cooperative Education Division), Pittsburgh, Pennsylvania, June 25, 2008.
- 8. "Engineering Students with Disabilities" At the 2008 Annual American Society of Engineering Education Conference & Exposition (The International Division), Pittsburgh, Pennsylvania, June 24, 2008.
- 9. "Engineering Students Opinion on PE 603100- Sports and Health: an Introductory Physical Education Course" At the 2008Annual American Society of Engineering Education Conference & Exposition (The International Division), Pittsburgh, Pennsylvania, June 24, 2008.
- 10. "<u>Ethics in Engineering Education and at Penn State Fayette</u>" At the 6th Latin American and Caribbean Conference for Engineering and Technology LACCEI (Latin American and Caribbean Consortium of Engineering Institutions), hosted by the Universidad Tecnológica Centroamericana, Tegucigalpa, Honduras, June 4th 2008.
- 11. "The Opinion of the Engineering Faculty Members at the Hashemite University on Teaching Engineering Using Arabic Instead of English" At the American Society of Engineering Education Zone one 2008 Conference at the United States Military Academy, West Point, NY, March 29, 2008.
- 12. "<u>Engineering Technology Educators Need Industrial Experience</u>" At the 14th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 11, 2008.
- 13. "<u>The Change of Fracture Toughness of Type I Portland Cement Paste Due to Sodium Sulfate Attack</u>," At the Hashemite University, Zarka, Kingdom of Jordan, January 8th, 2008.
- 14. "<u>Teaching in Two Programs: An Instructor's Experience and Observations</u>" At the 2007 Hendrick Best Practices for Adult Learners Conference: Issue of Access, Penn State University, State College, PA, May 7, 2007.
- 15. "<u>Engineering Mechanics and Distance Learning</u>" At the 2nd International Conference on Interactive Mobile and Computer Aided Learning, Princess Sumayah University for Technology, Amman, Jordan, April 18, 2007.
- 16. "Closed Book Vs. Open Book Tests in Statics" At the 2007 American Society of Engineering Education Mid-Atlantic Spring Conference, New Jersey Institute of Technology (NJIT), Newark, New Jersey, April 14, 2007.
- 17. "Ethics at Various Engineering Programs" At the American Society of Engineering Education Mid-Atlantic 2007 Annual Spring Conference, New Jersey Institute of Technology (NJIT), Newark, New Jersey, April 14, 2007.
- 18. "<u>The Overlap between Mechanical and Civil Engineering Graduate Education</u>" At the American Society of Engineering Education Illinois-Indiana 2007 Annual Conference, Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, Indiana, March 30, 2007.

- 19. "A One-Credit First-Year Introduction to Engineering Seminar Course at Penn State Fayette Helps Freshman Students in Choosing an Appropriate Engineering Major: a Student's Perspective" At the American Society of Engineering Education Illinois-Indiana 2007 Annual Conference, Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, Indiana, March 31st, 2007.
- 20. "<u>How Selected Universities Treat Physical Education Courses in Their Engineering Curricula</u>" At the American Society of Engineering Education Illinois-Indiana 2007 Annual Conference, Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, Indiana, March 31st, 2007.
- 21. "<u>The Importance of Industrial Experience in Engineering Technology Education</u>" At the 13th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 12, 2007.
- 22. "<u>Engaging Engineering and Engineering Technology Students with Various Engineering Professional Societies</u>" At the 13th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 12, 2007.
- 23. "Service Learning Deserves its Own ASEE Division" At the I³/E²: Interdisciplinary Innovation and Imagination in Engineering Education 2006 Annual American Society of Engineering Education (ASEE) St. Lawrence Section Conference, Cornell University, Ithaca, New York, November 18, 2006.
- 24. "<u>The Challenges That a Student with a Non-Engineering Background Faces in Pursuing an Engineering Graduate Study</u>" At the I³/E²: Interdisciplinary Innovation and Imagination in Engineering Education 2006 Annual American Society of Engineering Education (ASEE) St. Lawrence Section Conference, Cornell University, Ithaca, New York, November 18, 2006.
- 25. "The Need for Geology in the Civil Engineering Curriculum" At the I³/E²: Interdisciplinary Innovation and Imagination in Engineering Education 2006 Annual American Society of Engineering Education (ASEE) St. Lawrence Section Conference, Cornell University, Ithaca, New York, November 18, 2006.
- 26. "<u>A Look at the Ways in Which Universities Offer Common Civil-Mechanical Engineering Courses</u>" At the International Journal of Modern Engineer (IJME)/ INTERTECH International Conference, Kean University, Union, New Jersey, October 20, 2006.
- 27. "A Comparison Between the Engineering Mechanics-Strength of Materials Course in the Engineering, and Engineering Technology Programs at The Pennsylvania State University"
 At the 2006 Annual American Society of Engineering Education Conference & Exposition (The Mechanics Division), Chicago, Illinois, June 19, 2006.
- 28. "Biology for Civil Engineers, Is It Essential?" At the 2006 Annual American Society of Engineering Education Conference & Exposition (The Biological and Agricultural Division), Chicago, Illinois, June 20, 2006.
- 29. "<u>An Analysis of the Ways in Which Universities Offer Common Civil and Mechanical Engineering Courses</u>" At the American Society of Engineering Education Joint Illinois-Indiana and North Central 2006 Annual Conference, Indiana Purdue Fort Wayne University, Fort Wayne, Indiana, April 1st, 2006.
- 30. "<u>Do Civil Engineers Need Biology?</u>" At the American Society of Engineering Education Joint Illinois-Indiana and North Central 2006 Conference, Indiana Purdue Fort Wayne University, Fort Wayne, Indiana, April 1st, 2006.
- 31. "<u>Student's Ownership Of Class Project Improves Learning</u>," At the 4th Aaee (Australian Association for Engineering Education) Global Colloquium on Engineering Education, Star City, Australia, 26-29th September 2005.
- 32. "<u>Undergraduate Research Collaboration Between Penn State Main Campus and One of Its Remote Campuses</u>," At the American Engineering Education Conference (The Materials Division), Portland, Oregon, June 14, 2005.
- 33. "<u>Student's Ownership Of Class Project Improves Learning</u>," At the 2005 Annual American Engineering Education Conference & Exposition (The Engineering Technology Division), Portland, Oregon, June 13, 2005.
- 34. "<u>The Effect of Sodium Sulfates on the Fracture Toughness of ASTM Type I Portland Cement Paste</u>" At the 5th International ASTM/ESIS Symposium on Fatigue and Fracture (35th ASTM National Symposium on Fatigue and Fracture Mechanics, Reno, Nevada, May 19, 2005.
- 35. "<u>Interactive Multimedia Support System for Teaching Deaf or Hard of Hearing Engineering Students</u>" At the American Society of Engineering Education Mid-Atlantic Annual Spring Conference, Fairleigh Dickinson University, Teaneck, New Jersey, April 16, 2005.

- 36. "Computers in Civil and in Civil Engineering Technology Education" At the American Society of Engineering Education Mid-Atlantic Spring Conference, Fairleigh Dickinson University, Teaneck, New Jersey, April 16, 2005.
- 37. "Engineering Statics and Engineering Technology Statics: Differences and Similarities at Penn State Fayette" At the American Society of Engineering Education Mid-Atlantic Annual Spring Conference, Fairleigh Dickinson University, Teaneck, New Jersey, April 16, 2005.
- 38. "<u>Engineering Technology Students and National Concrete Conferences</u>" At the American Society of Engineering Education New England Conference, Fairfield University, Fairfield, New Connecticut, April 9, 2005.
- 39. "Overlap between Mechanical and Civil Engineering Undergraduate Education" At the American Society of Engineering Education Illinois-Indiana Sectional Annual Conference, Northern Illinois University, DeKalb, Illinois, April 2, 2005.
- 40. "<u>Learning by Teaching: an Alternative Teaching Approach in Engineering Education</u>" At the American Society of Engineering Education Gulf-Southwest Conference, Texas A&M Univ. Corpus Christi, Texas, March 25, 2005.
- 41. "<u>An Industrial Engineering Educational Steel Partnership in Southwestern Pennsylvania</u>" At the 11th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 14, 2005.
- 42. "Integrating Engineering, Science, English, and Business into Curriculum Design" At the National Science Foundation Summer Institute for Designing Integrated Curriculum, Onondaga Community College, Syracuse, New York, June 2003.
- 43. "Penn State Fayette Experience with and Views on Marketplace Needs" At the NJCATE/ National Science Foundation conference on: Teaching What the Marketplace Needs, A model for Engineering Technician Education, University of Central Florida, Orlando, Florida, April 2001.
- 44. "Pavement Overlays" At Georgia Tech University, Atlanta, April 2000.
- 45. "Permeability Testing of North Carolina High Performance Concrete (HPC) Mixes" At the FHWA Southeast Regional High Performance Concrete Showcase, Auburn University, Alabama, June 1999.
- 46. "Intermodal Surface Transportation Efficiency Act (ISTEA) Research at the North Carolina Department Of Transportation" At the AASHTO Region II Biennial Meeting, Wrightesville Beach, NC, June 1997.
- 47. "Thin Bonded Overlay on Interstate Highway 440 (I-440) Pavement in North Carolina" At Bradley University, Peoria, Illinois, May 1997.
- 48. "Stress Corrosion Cracking (SCC)" At Duke University, Durham, NC, March 1994.

Research and Teaching Grants

- Actively participated in the process of receiving a \$ 25M grant to the Industrial Sciences Programs at Sam Houston State University) by the late Mr.Pirkle of PA, 2010-Date
- Various Research Proposals and projects on Safety in Roadway Construction Zones (Pending and current at Sam Houston State University)
- Various Research Proposals and projects on STEM education (Pending and current at Sam Houston State University)
- Evaluation of Existing Smartphone Applications & Data Needs for Travel Surveys: Co-PI, 2012 (submitted for \$115,000 funding to TxDOT was not selected)
- Bats Conservation and Habitats in Concrete, Wood & Steel Structures in Huntsville, Texas: Co-PI, 2012 (Current)
- Steel and Concrete Testing: PI, \$33,000 grant from Penn State, 2007
- ACI Codes for the AET 215 Concrete Construction Course, Source: Perkin's Grant, 2005
- Cracking Patterns and Intensities in Silica Fume Concrete, Source: Penn State University ORSAF Grant, 2003
- The Use of Friction Type High Strength Bolts in Painted Structural Steel Joints, Source: Penn State University Research Development Grant (RDG), 2002

Honors

- ◆ Judge in the Science and Engineering Annual Fairs for various and several Harmony Schools of Excellence, Houston, Texas, 2010-Date
- Guest Speaker at High School Camp, Livingston Lake, TX, May 2012
- Guest Speaker at the Annual ASCE Bridge and Canoe Competition at Fairleigh Dickenson University in 2010
- The Fayette Faculty Senator to the Commonwealth College of Penn State University
- ♦ Sigma Xi Associate Membership at Duke University
- ♦ The Student Resident of the International House of Duke University
- ♦ An Associate Resident at the Graduate House at Rice University
- ♦ Treasurer of the Civil Engineering Club while an undergraduate at UPM in Saudi Arabia
- ♦ Highest Honors upon Receiving the B. S. Degree from UPM (Ranked 10^{th.} in the entire Class of 1984)
- Ranked 4th in entire Western Region of Saudi Arabia upon High School Graduation in 1980
- Ranked 1st in entire city of Taif (5th largest city in Saudi Arabia) upon High School Graduation in 1980

Current and Previous Memberships in Professional Associations

American Institute of Steel Construction (AISC), American Society of Engineering Education (ASEE), The Masonry Society (TMS), American Concrete Institute (ACI), American Society of Mechanical Engineers (ASME), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Society of Mechanical Engineers (ASME), Association of Technology, Management, and Applied Engineering (ATMAE), SHSU Construction Association, Australian Institute of Engineers (AIE), Jordanian Association of Engineers (JAE)

Computer Applications

AutoCAD, Microstation, Revit, Geopak, RISA (Structural Analysis), CAFEM (Structural Analysis software), TOWER (Design and Analysis of Self Supported Towers, Guyed Towers, and Transmission Towers), SPOLE (Design and Analysis of monopoles), Various Programs used in NCDOT Bridge Design (Georgia Piers, Layout and Elevations, Bents, AASHTO Truck Loads, Girders..etc.), MS WORD, MS EXCEL, MS ACCESS, MS Project, MS PowerPoint, PROCOMM PLUS, DIALOG, VISIO, PC WRITE, Cricket, McDraw, McWrite, and other applications.

Personal Highlights

Education at three well known universities. Experience as a design Engineer. Experience as an R&D Engineer. Experience as a University Professor. Excellent verbal & written communication skills. Always looking for more technical challenges. Customer service oriented. Constantly seeking knowledge and advancement. Honesty and respectfulness for all. Travel experience to: Austria, Australia, USA, Germany, Britain, France, Honduras, Saudi Arabia, Jordan, Turkey, Syria, Lebanon, Egypt, Palestine, Romania, Canada, and Belgium.