ZIAUL HUQUE

17515 Rustling Aspen Lane
Houston, Texas 77095

Phone: (936) 261-9957 (off)
E-mail: zihuque@pvamu.edu

EDUCATION

Ph.D. Mechanical Engineering, 1991, Oregon State University, Corvallis, Oregon.
M.S. Mechanical Engineering, 1982, Clemson University, Clemson, South Carolina.
BS Mechanical Engineering, 1980, Bangladesh Univ. of Engr. & Tech., Bangladesh

PROFESSIONAL EXPERIENCE

9/08-Present **Professor**, Mechanical Engineering Department, Prairie View A&M University, Prairie View, Texas
1/96-Present **Director**, Computational Fluid Dynamics (CFD) Institute, Prairie View A&M University, Prairie View, Texas.
9/00-8/08 **Associate Professor**, Mechanical Engineering Department, Prairie View A&M University, Prairie View, Texas.
9/92-8/00 **Assistant Professor**, Mechanical Engineering Department, Prairie View A&M University, Prairie View, Texas.
1/96-Present **Director**, Computational Fluid Dynamics (CFD) Institute, Prairie View A&M University, Prairie View, Texas.
1/91-8/92 **Research Associate**, Advanced Combustion Engineering Research Center, Brigham Young University, Provo, Utah.

RESEARCH PROJECTS AS PI/CO-PI

1. "Wind Power for Automotive Vehicles", Co.P.I., Funding Agency: Prairie View A&M University. Funding amount: $20,000. Funding period: June 01, 2014 – August 31, 2014.
2. "Develop a novel nanomaterial for application in post-combustion CO_2 capture", Co.P.I., Funding Agency: DOE. Funding amount: $249,000. Funding period: October 01, 2014 – August 31, 2017.
3. "CREST Center for Energy and Environmental Sustainability (CEES)", Co.P.I., Funding Agency: NSF. Funding amount: $5,000,000. Funding period: October 01, 2010 – September 30, 2016.
4. "Prairie View Scholarship Program to Enhance Minority Participation in the Nuclear Field": Co.P.I., Funding Agency: NRC. Funding amount: $199,251. Funding period: March 01, 2010 – February 29, 2012.
5. "Curriculum Development: Nuclear Engineering and Radiation Science Option", Co.P.I., Funding Agency: NRC. Funding amount: $120,000. Funding period: July 01, 2010 – June 30, 2011.
6. Project/Proposal Title: MRI: Acquisition of a PowerWall Virtual Reality System for Enabling Research/Teaching in Virtual Prototyping: Funding Agency: Co.P.I., Funding Agency: NSF. Funding amount: $216,779. Funding period: October 1, 2009 - September 30, 2012.

7. "Turbomachinery Design Optimization", P.I., Funding Agency: NASA (CUIP). Funding amount: $125,000. Funding period: August 20, 2007 - August 19, 2012.
8. "Optimization of Supersonic Inlet Based on Multi-Objective Optimization Approach Using Genetic Algorithm", P.I., Funding Agency: UTC. Funding amount: $53,874. Funding period: January 01, 2008 - December 28, 2008.
9. "University Consortium on Reusable Launch Vehicle", P.I., Funding Agency: NASA (URETI). Funding amount: $350,000. Funding period: August 19, 2002 - August 18, 2007.
10. "Advanced Injector Optimization for RBCC Engine Concept", P.I., Funding Agency: NASA. Funding amount: $300,000. Funding period: September 1, 1999 - August 31, 2004.
11. "Pollution Control in Fuel Cell Applications Using Ceramic Candle Filter for Cleaner Power Generation", P.I., Funding Agency: NSF. Funding amount: $100,000. Funding period: October 1, 1997 - September 30, 1999.
12. "Air Augmented Rocket (AAR) Computational Fluid Dynamics Analysis to Support the Cold Flow and Hot Fire Ejector Rocket Tests", P.I. Funding Agency: Rocketdyne Division of Boeing North America. Funding amount: $24,000. Funding period: March 1, 1997 - April 30, 1998.
13. "Simultaneous Hot Gas Desulfurization and Particulate Filtration Testing", P.I., Funding Agency: Industrial Filter & Pump Mfg Co. Funding amount $100,000. Funding period: January 4 – April 30, 1998.
14. "Combustion CFD Technology for Advanced Airbreathing Propulsion Systems", P.I. Funding Agency: NASA. Funding amount: $200,000. Funding period: March 1, 1997 - February 28, 1999.
15. "Nozzle Optimization Process Improvement", P.I. Funding Agency: Rocketdyne Division of Boeing North America. Funding amount: $28,000. Funding period: March 1, 1996-September 15, 1996.
16. "Determination of Thermal Conductivity of Green Powder Compacts Used for Self-Propagating Hugh Temperature Synthesis", P.I. Funding agency: NSF. Funding amount: $100,041. Funding period: September 1, 1994 - December 31, 1997.
17. "Slag Characterization and Removal Using Pulse Detonation Technology for Coal Gasification", P.I. Funding agency: U.S. Department of Energy. Funding amount: $135,130. Funding period: October 1, 1995 - December 31, 1997.
18. "Characterization and Failure Analysis of Ceramic Filters Utilized for Emission Control During Coal Gasification", P.I. Funding agency: U.S. Department of Energy. Funding amount: $191,349. Funding period: October 1, 1994 - December 31, 1997.
19. "Characterization and Optimization of Sorbents for Hot Gas Cleanup during Coal Gasification", P.I. Funding agency: U.S. Department of Energy. Funding amount: $171,977. Funding period: October 1, 1994 - December 31, 1997.
20. "Texas LoanSTAR Program", Co.-P.I. Funding agency: Texas State Energy Conservation Office. Funding amount: $221,000. Funding period: June 1, 1994 – August 31, 1997.
21. "Industrial Assessment Center Involvement at Prairie View A&M University", Co.P.I. Funding agency: U.S. Department of Energy. Funding amount: $94,418. Funding period: January 15, 1995 - May 30, 1998.

22. "Transportation of Mox Fuels", Co.P.I. (P.I. Dr. Radha), Funding Agency: U.S. Department of Energy. Funding amount $100,000. Funding period: June 1, 1995 - September 30, 1997.
23. "Research Enhancement/Appreciation Award", P.I. Funding agency: Prairie View A&M Research Foundation. Funding amount: $500. Funding period: November 4, 1994 – August 31, 1995.

PUBLICATIONS AND PRESENTATIONS

Journal Papers

1. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "A Study on the Evaluation of Structural Properties of Wind Turbine Blade-Part1", Journal of the Korean Association for Spatial Structures (ISSN 1598-4095) (In Press).
2. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "A Study on the Evaluation of Structural Properties of Wind Turbine Blade-Part2", Journal of the Korean Association for Spatial Structures, (ISSN 1598-4095) (In Press).
3. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "A Study on the y+ Effects on Turbulence Model of Unstructured Grid for CFD analysis of Wind Turbine", Journal of the Korean Association for Spatial Structures, (ISSN 1598-4095) (In Press).
4. F. Asah-Opoku, Zhihua Liang, Ziaul Huque and Raghava R. Kammalapati, "Burnup Simulations Of Different Fuel Grades using MCNPX Monte Carlo Code", Nuclear Technology and Radiation Protection Journal (In Press).
5. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "A Study on the Missile-Target Interaction Analysis on the Concrete Dome Structure ", Journal of Architectural Institute of Korea - Structure & Construction, Volume 30, No. 6, (Serial No. 308) pp. 11-18. (JAIK_SC.2014.30.6.11) (ISSN 1226-9107).
6. Kyoungsoo Lee, Ziaul Huque, Raghava Kommalapati and Sang-Eul Han, "The evaluation of Aerodynamic Interaction of Wind Blade Using Fluid Structure Interaction Method", Journal of Clean Energy Technologies, Volume 3, Number 4, pp. 270-275, July 2015.
7. Lee, Kyoung-Soo, Huque, Ziaul, Kim, hyo-Jin, Han, Sang-Eul., "The Aerodynamic force evaluation of Wind turbine blade using CFD", Journal of the Wind Engineering Institute of Korea 18 (2), pp. 55-63, 2014. (ISSN 1226-7872)
8. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "Aerodynamic force evaluation of Pointed Tip Wind Turbine Blade Using CFD", Journal of Architectural Institute of Korea - Structure & Construction, Volume 30, No. 7, (Serial No. 309) pp. 21-28. (JAIK_SC.2014.30.7.21). (ISSN 1226-9107)
9. Lee, Kyoung-Soo, Huque, Ziaul, Han, Sang-Eul, "The Development of Impact Force Model of Large Commercial Aircraft Considering the Fuel Mass Effect", Journal of Architectural Institute of Korea - Structure & Construction, Volume 30, No. 8, (Serial No. 310) pp. 19-28. (JAIK_SC.2014.30.8.19) (ISSN 1226-9107).
10. Mohammad A. Hossain, Shubarna Khan, Ziaul Huque and Raghava R. Kammalapati, "Isogeometric Analysis of Wind Turbine Blade Airfoil Using Non-Uniform Rational B-Spline (NURBS)", International Journal of Engineering Research and Technology, Volume 3, Issue 05, May 2014.

11. Kyoungsoo Lee, Ziaul Huque, SangEul Han, "Analysis of stabilizing process for stress-erection of Strarch frame", Engineering Structures; 59:49–67, 01/2014.
12. Shubarna Khan, Ziaul Huque, Mohammad A. Hossain and Raghava R. Kammalapati, "Wind Turbine Blade Tip Comparison as a Function of Taper using Computational Fluid Dynamic", Advances and Applications in Fluid Mechanics, Volume 14, Issue 6, Pages 267-283, ISSN: 0973-4686, 2014.
13. Mohammad A. Hossain, Ziaul Huque and Raghava Kommalapati, "Propagation of Shock on NREL Phase VI Wind Turbine Airfoil Under Compressible Flow, Journal of Renewable Energy, vol. 2013, Article ID 653103, 9 pages, 2013. doi:10.1155/2013/653103.
14. Samarita Sarker, Zhihua Liang, Ziaul Huque and Raghava R. Kommalapati, Impact of Point Sources Emissions on Ozone Formation for Houston Galveston Brazoria (HGB) Area, International Journal of Biological, Ecological and Environmental Sciences (IJBEES) Vol. 2, No. 5, 2013 ISSN 2277 – 4394
15. Shahzeb Sheikh, Zhihua Liang, Ziaul Huque and Raghava R. Kommalapati, Life Cycle Assessment of Bio-ethanol fuel Emissions for Passenger Cars in Houston Area of Texas, International Journal of Biological, Ecological and Environmental Sciences (IJBEES) Vol. 2, No. 5, pp. 108-112, 2013 ISSN 2277 – 4394
16. Ziaul Huque, Isaac K. Ofuafor, Donald Harby and Raghava R. Kommalapati, "Performance Predictions of Wind Turbine Blades using Artificial Neural Network Method", International Journal of Engineering Research and Technology, Vol. 2, Issue 6, June 2013.
17. Mohammad A. Hossain, Ghizlane Zemmouri, Ziaul Huque and Raghava Kommalapati, "Discrete Optimization of Wind Turbine Blade Airfoil", International Journal of Engineering Research and Technology, ol. 2, Issue 2, February 2013.
18. Mohammad A. Hossain, Ziaul Huque, Raghava Kommalapati and Shubarna Khan, "Numeric Investigation of Compressible Flow Over NREL Phase VI Airfoil", International Journal of Engineering Research and Technology, Vol. 2, Issue 2, February 2013.
19. Raghava R. Kammalapati, Frederick Sunderman, Zhihua Liang and Ziaul Huque, "Impact Of The Use Of Ambient Catalysts In Stationary Air Conditioning Systems On Houston-Galveston-Area (HGA) Air Quality", International Journal of Engineering Research and Technology, Vol. 2, Issue 6, June 2013.
20. Ziaul Huque, Ghizlane Zemmouri, Donald Harby, and Raghava Kommalapati, "Optimization of Wind Turbine Airfoil Using Nondominated Sorting Genetic Algorithm and Pareto Optimal Front", International Journal of Chemical Engineering, Volume 2012, Article ID 193021, 9 pages, doi:10.1155/2012/193021
21. Ziaul Huque and Saugata Sarkar, "Pareto Optimal Front in Multi-Objective Optimization of Rocket Based Combined Cycle Inlet/Ejector System", Advances and Applications in Fluid Mechanics, Volume 10, Number 1, pp 1-20, 2011.
22. Ziaul Huque, Muhammad R. Ali and Raghava Kommalapati, "Application of Pulse Detonation Technology for Boiler Slag Removal", Fuel Processing Technology, 90, pp 558-569, 2009.
23. Z. Huque and G.M.S. Azad, "Thermal Conductivity Effects on Steady State Propagation Speed During Self-Propagating High-Temperature Synthesis of Ti+C Green Comapcts", Materials Science and Engineering B, 147(2008), pp 19-26.

24. Nayem Jahingir and Ziaul Huque, “Design Optimization of Rocket Based Combined Cycle Inlet/Ejector System”, Journal of Propulsion and Power, Volume 21, Number 4, pp. 650-655, 2005.
25. Ziaul Huque and A.M. Kanury, "A Theoretical Analysis of Combustive Synthesis of Titanium Carbide and a Comparison of Predictions with Measurements", CombustionScience & Technology, Vol. 89, pp. 27-45, 1993.
26. Hernandez-Guerrero, A., Ziaul Huque and Kanury, A. M. "An Experimental Investigation of Combustive Synthesis of Titanium Carbide", Combustion Science & Technology, Vol. 81, pp. 115-128, 1992.

Conference Proceedings & Presentations

1. Ziaul Huque, Kyoungsoo Lee, Raghava Kommalapati, Sang-Eul Han, "3D Parametric Shape Optimization of Simple Wind-blade Using CFD", PowerEnergy 2015, Accepted.
2. Ziaul Huque, Shrabanti Roy, Kyoungsoo Lee, Raghava R. Kommalapati, "2D CFD simulation of S809 airfoil in pre and post stall region", PowerEnergy 2015, Accepted.
3. Kyoungsoo Lee, Ziaul Huque, Raghava Kommalapati, Sang-Eul Han, "Aircraft Impact and Blast Simulation on Critical National Infrastructures", PowerEnergy 2015, Accepted.
4. Kyoungsoo Lee, Ziaul Huque, Raghava Kommalapati, Sang-Eul Han, "A Study on the Unsteady Aero-acoustic Characteristics of Horizontal Axis Wind Turbine Blade", PowerEnergy 2015, Accepted.
5. Nazia Binte Munir, Kyoungsoo Lee, Ziaul Huque, Raghava R. Kommalapati, "Evaluation of aerodynamics forces of 3D HAWT blade using CFD", PowerEnergy 2015, Accepted.
6. Sui, Chao, Lee, KyoungSoo, Huque, Ziaul, R. Kommalapati Raghava, "CFD predictions on transitional turbulent effects of wind turbine blade", PowerEnergy 2015, Accepted.
7. Shrabanti Roy, Kyoungsoo Lee, Ziaul Huque, Raghava R. Kommalapati, "Pointed Tip Effect on Aerodynamic Forces for Wind Turbine", PowerEnergy 2015, Accepted.
8. Kyoungsoo Lee, Ziaul Huque, Raghava Kommalapati and Sang-Eul Han, “The Evaluation of Aerodynamic Interaction of Wind Blade Using Fluid Structure Interaction Method”, 2014 International Conference on Energy and Environment Research (ICEER 2014), Madrid, Spain, July 18-19, 2014 (Accepted).
9. Kyoungsoo Lee, Shrabanti Roy, Ziaul Huque, Xinhua Shen, Raghava Kommalapati, “Numerical Aerodynamic Noise Characteristics of NREL Phase VI wind blade using CFD”, Air and Waste Management Association (AWMA) 107th Annual Conference & Exhibition, Long Beach, California, June 24-27, 2014.
10. Kyoungsoo Lee, Ziaul Huque, Xinhua Shen, Raghava Kommalapati, Sang-Eul Han, “Validation and Application of CFD for Urban City Microenvironment”, Air and Waste Management Association (AWMA) 107th Annual Conference & Exhibition, Long Beach, California, June 24-27, 2014.
11. Kyoungsoo Lee, Shrabanti Roy, Ziaul Huque, Raghava Kommalapati, “3D Parametric Shape Optimization of Simple Wind-blade Using CFD Analysis”, AWEA WindPower Conference & Exhibition, Las Vegas, Nevada, May 5-8, 2014 (Accepted).
12. Kyoungsoo Lee, Sangeul Han, Ziaul Huque and Raghava Kommalapati, “The Safety Evaluation of Prestressed Concrete Containment Building Subjected by Large Commercial Aircraft Impact”, Sustainable Nuclear Energy Conference, Manchester, UK, April 9-11, 2014 (Accepted).

13. Samarita Sarker, Zhihua Liang, Ziaul Huque, and Raghava R. Kommalapati, Impact of Point Sources Emissions on Ozone Formation for Houston Galveston Brazoria (HGB) area, 2nd International Conference on Agricultural, Environment and Biological Sciences, Dec. 17-18, 2013, Pattaya, Thailand.
14. Shahzeb Sheikh, Zhihua Liang, Ziaul Huque, and Raghava R. Kommalapati, Life Cycle Assessment of Bio-ethanol fuel Emissions for Passenger Cars in Houston Area of Texas, 2nd International Conference on Agricultural, Environment and Biological Sciences, Dec. 17-18, 2013, Pattaya, Thailand.
15. Mohammad A. Hossain, Kyoungsoo Lee, Ziaul Huque and Raghava Kommalapati, "Numeric Investigation of Fluid Solid Interaction on Wind Turbine Blade", Proceedings of the ASME 2013 International Mechanical Engineering Congress and Exposition, IMECE 2013-65647, November 15-21, 2013, San Diego, California.
16. Zemmouri, G., Judge, T., Huque, Z., Harby, D.W. and Kommalapati, R. , "Optimization of Airfoil Profile for Wind Turbine Blade Using Genetic Algorithm", CREST-RESSACA Environmental and Energy Sustainability Conference, Houston, Texas, April 26-27, 2012.
17. Monika Patel, Amy Fritz, Ziaul Huque, Donald Harby and Raghava Kommalapati, "Structural Analysis of an NREL Phase VI Wind Turbine Blade With a Pointed Tip Ending at Pitch Axis", CREST-RESSACA Environmental and Energy Sustainability Conference, Houston, Texas, April 26-27, 2012.
18. A.B. Mahmud Hasan, Ziaul Huque, Donald Harby, and Raghava Kommalapati, "Tapered and Angle of Attack Performance Comparison for Untwisted Blade Wind Turbine", International Conference in Mechanical Engineering ICME-11, Dhaka, Bangladesh, December 19-21, 2011.
19. Donald Harby, Isaac Ofuafor, Ziaul Huque, A.B. Mahmud Hasan and Raghava Kommalapati, "Surrogate Models for Stall Regulated Wind Turbine for Improved Performance Predictions", International Conference in Mechanical Engineering ICME-11, Dhaka, Bangladesh, December 19-21, 2011.
20. "Effectiveness of Waste Iron Oxide as a Sorbent Alternative in Hot Gas Cleanup During Coal Gasification", (with Roksana Khan and Daniel Mei), IASTED, International Conference on Power and Energy Systems, Corfu, Greece, June 23- 25, 2008.
21. Taher Fodeibou, Ziaul Huque and Jenny Galvis, "Effects of Mach Number and Angle of Attack on Mass Flow Rates and Entropy Gain in a Supersonic Inlet", Proceedings of World Academy of Science, Engineering and Technology, Volume 36, pp. 545-548, December 2008.
22. "Application of Collaborative Optimization on a RBCC engine Inlet/Ejector System", (with Jahingir, N.) AIAA-2002-3604.
23. "A New Method to Improve Pyrometry results", (with Haque, M.Z., and Jahingir, N., Presented at the ASME Congress, Nov, 2001, New York.
24. "A Comparative Study of Different Methods Used for Acoustic Analysis in a Chemically Reactive Environment", (with Haque, M.Z., and Habibi, A.R.,) SAE 2000-01-0962, 2000.
25. "Effect of Sidewall Leading Edge Sweep Direction on Performance of a Hypersonic 3-D Inlet", (with Ye F., and Butuk N.) AIAA 2000-3600, 2000.
26. "Design Optimization of a RBCC Engine Inlet/Ejector Using Collaborative Optimization and Neural Network", (with Habibi, A.R., and Suleman, N.M.) AIAA 2000-3601, 2000.

27. "Pollution Control in Fuel Cell Applications Using Ceramic Candle Filter for Cleaner Power Generation", (with Suleman N., Habibi A.R. and Selladurai, R., The IV International Congress "Energy, Environment and Technological Innovation, Rome, Italy, September 20-24, 1999.
28. "A Reduced Mechanism using ILDM and Neural Network for DME Combustion in a Small CIDI Engine", (with Liu Q., Butuk N., Chang I., and Biney, P.), Mediterranean Combustion Symposium, Antalya, Turkey, June 20-25, 1999.
29. "Development of a Reduced Mechanism for DME combustion in a Small CIDI Engine using ILDM and Neural Network", (with Liu Q., Butuk N., Chang I., and Biney, P.), First Joint Meeting of the U.S. Sections of the Combustion Institute: Western States, Central States, Eastern States, Washington DC, March 14-17, 1999.
30. "Model Approach to Developing Applied CFD Capability at HBCU Engineering Schools", (with Sindir M.M., Wood B.K., Biney P.O and Butuk N.K.,), AIAA 99-0569, 1999.
31. "CFD Optimization of an Integrated Multi-Tube PDE/Inlet Concept Using Complex Variables", (with Ye F., Butuk N., and Biney P.). AIAA 99-3229, 1999
32. "CFD Simulations of a Novel Multi-Tube Pulse Detonation Engine Inlet Concept", (with Butuk N., Ye F., and Lynch D.,), AIAA 99-2240, 1999.
33. "Optimization of an Integrated Inlet/Ejector of an RBCC Engine Using Collaborative Optimization", (with Butuk, N., and Edward E. Lynch), AIAA-98-3567, 1998.
34. "Development of a Reduced Chemical Mechanism for Combustion Simulation of Ramjet/Scramjet Engines", (with Butuk, N., and Paul Biney), Central States Section of the Combustion Institute: Combustion Fundamentals and Applications, Lexington, Kentucky, June, 1998, pp. 345-350.
35. "Influence of Thermal Conductivity on Steady State Propagation Speed in Combustion Synthesis of Mo+2Si Green Compacts", (with Azad, GM. S., and Cui., T.), International Joint Power Generation Conference, Baltimore, Maryland, August, 1998.
36. "Experimental Investigation of Slag Removal Using Pulse Detonation Wave Technique", (with Mei, D., and Ali., M.) International Joint Power Generation Conference, Baltimore, Maryland, August, 1998.
37. "A Theoretical Analysis of SHS Reaction Wave Propagation Speed through Green Compacts of Titanium and Carbon Powder Mixture", (with Tong Cui and GM Salam Azad), Progress in Advanced Materials and Mechanics, Proceedings of the International Conference on Advanced Materials, pp. 477-482, Beijing, China, August 12-15, 1996.
38. "Parameter Dependent Thermal Conductivity Model for Titanium and Graphite Powder Mixture Compacts", (with Azad, GM. S., and Tong Cui), HTD-Vol. 323 ASME Proceedings of the 31st National Heat Transfer Conference, Volume 1, pp. 193-198, Houston,, Texas, August 3 -6, 1996.
39. "Effect of Pressure Distribution and Back Pulse on the Failure of Ceramic Filters Used for Emission Control During Coal Gasification", (with Khan, R., and Mei, D.,), PD-Vol. 75, Engineering Systems Design and Analysis, Proceedings of the 1996 Engineering Systems Design and Analysis Conference, Volume 3, ASME, pp. 275-279, Montpellier, France, July 1-4, 1996.
40. "Multi-Dimensional Wall Temperature and Boiling Curves for a Single-Side Heated

Vertical Channel with Downward Flow", (with Peatiwala, Q., and Boyd, R.D.), AIAA- 95-3511, Portland, Oregon, August 5-9, 1995.

41. "Modeling Sorbent Injection and Sulfur Capture in Pulverized Coal Combustion and Gasification", (with R.D. Boardman, B.S. Brewster, L.D. Smoot and G.D. Silcox). The 1992 International Joint Power Generation Conference in Atlanta, Georgia, 1992.
42. "Application of a Coal-General, 2-D Combustion Code", (with L.D. Smoot and B.S. Brewster). Ninth Annual International Pittsburgh Coal Conference, Pittsburgh, Pennsylvania, 1992.
43. "A Model for the Chemical Kinetics of Reactions of the Type Solids-->Solids", (with A.M. Kanury, A. Hernandez-Guerrero). #14ge, Annual AIChE Meetings, Chicago, Illinois, 1990.
44. "Theoretical Analysis of Combustive Synthesis of Titanium Carbide", (with A.M. Kanury, A. Hernandez-Guerrero). Annual AIChE Meetings, San Francisco, California, 1989.
45. "Chemical Kinetics of Reactions of the Type: Solids --> Solids", (with A.M. Kanury), WSS/CI 89-2. Spring Meeting of Western States Section of The Combustion Institute, Pullman, Washington, 1989.
46. "Natural Convection in a Horizontal Cylinder with Constant Heat Flux", (with J.A. Liburdy), 82-W*A/HT* -66. Published and presented at the proceedings of ASMEWinter Annual Meeting, Phoenix, Arizona, 1982.
47. "Two-Dimensional Data Reduction Applying an Inverse Heat Conduction (IHC) Technique", (with R.D. Boyd). Proceedings of the Mechanical Engineering Symposium, #2.2, pp. 66-72, Prairie View A&M University, October 27-28, 1994.

Poster Presentations

1. Shrabanti Roy, Mohammad A. Hossain, Kyoungsoo Lee, Ziaul Huque and Raghava R. Kommalapati; "Effects of Deflection on Aerodynamic Load of NREL Phase VI Wind Turbine Blade"; 11th Annual TAMUS Pathways Student Research Symposium, Kingsville, TX, November 9–10, 2013.
2. Dennis Perry, Kyoungsoo Lee, Ziaul Huque and Raghava R. Kommalapati; "Effects Of Rotation And Blade Taper On Aerodynamic Load Of Pointed Tip NREL Phase VI Wind Turbine Blade"; 11th Annual TAMUS Pathways Student Research Symposium, Kingsville, TX, November 9–10, 2013.
3. Ebere Ekenna, Raghava R. Kommalapati, Ziaul Huque, Kyoungsoo Lee; "Effects Of Rotation And Pitch Angle On Aerodynamic Load Of Pointed Tip Wind Turbine Blade"; 11th Annual TAMUS Pathways Student Research Symposium, Kingsville, TX, November 9–10, 2013.
4. Mohammad A. Hossain, Ziaul Huque and Raghava Kommalapati, "Design of Wind Turbine Blade Using Optimized Aerodynamic Simulator", 10th Annual TAMUS Pathways Student Research Symposium, Galveston, TX, November 9–10, 2012.
5. Shubarna Khan, Ziaul Huque and Raghava R. Kammalapati," Aerodynamic Load Analysis of a Pointed Tip Wind Turbine Blade as Function of Taper", 10th Annual TAMUS Pathway Student Research Symposium, Galveston, TX, November 9-1, 2012.

6. Monika Patel and Amy Fritz, "Finite Element Analysis of a NREL Phase VI Wind Turbine Blade", ", 9th Annual Pathways Student Research Symposium, Texas A&M University, College Station, TX, November 11, 2011.
7. Ghizlane Zemmouri and Tanzi Judge, "Pareto Optimal Front of two different 2D Airfoils", 9th Annual Pathways Student Research Symposium, Texas A&M University, College Station, TX, November 11, 2011.
8. Alexis Crawford, "Design of the Shear Stress Sensor for Wind Flow Analysis", LSAMP Symposium, February 24-26, 2011; Prairie View A&M University.
9. David Gillie Jr., Christopher Morrison and Isaac Ofuafor, "Wind Turbine Blade Optimization with Specification of Parameters for Wind Turbine Design", LSAMP Symposium, February 24-26, 2011; Prairie View A&M University.
10. Alexis Crawford, "Development of a Moiré Sensor to Measure Wind Pressure, Velocity, and Potential Blade Failure for Wind Turbines", 2nd STEAM Research Symposium, March 4, 2011, Prairie View A&M University, Prairie View, Texas.

AWARDS

- **Teaching Faculty of the Year**, Roy G. Perry College of Engr., 2010
- **Outstanding Faculty,** PVAMU Chapter of ASME, 2006.
- **NASA Summer Faculty Fellow,** 2003
- **Welliver Summer Faculty Fellow,** Boeing Company, 2002
- **Excellence in Service Award,** For Outstanding Contribution to the College of Engineering, Prairie View A&M University, December, 2001.
- **Outstanding Faculty Award**, For Outstanding Contribution to the College of Engineering and Architecture, Prairie View A&M University, 1994-1995.
- **Teaching Excellence Award**: The Lockheed-Martin Tactical Aircraft Systems Award in Recognition of Excellence in Engineering Teaching, September, 1995.

PROFESSIONAL SOCIETIES

Member ASME, AIAA