

Jobaidur Rahman Khan, PhD
218 Bell Hall, University at Buffalo, Buffalo, NY 14261
Phone: (716) 645-0387, E-Mail: jobaidur@buffalo.edu

CAREER HIGHLIGHTS

- PhD, University of New Orleans, 2009.
- Instructing Engineering Graphics (with AutoCAD, SolidWorks) and Engineering Thermodynamics since Spring 2009.
- Received best paper award in the proceedings of ASME Turbo Expo2011, Canada.
- Expert using ANSYS/FLUENT and modeling a number of thermo-fluid problems since 2003. Also, expert in ThermoFlow, FORTRAN, C++ and Java.
- Published a number of peer reviewed conference and journal papers.

RESEARCH INTERESTS

- Gas turbine systems.
- Fluid mechanics.
- Heat transfer.
- Electronic equipment cooling.
- Energy conservation.
- Alternative fuels.
- Integrated gasification combined cycle (IGCC) power plant.

CURRENT RESEARCH

- Multiphase Flow.
- Wet Compression.
- Biomass gasification/combustion.
- Integrated gasification combined cycles.
- Combustor flow aerodynamics.

EDUCATION

Ph. D. in Engineering,	2003 – 2008
University of New Orleans, Louisiana	
Master of Science in Engineering,	1998 – 2001
University of New Orleans, Louisiana	
Bachelor of Science in Engineering,	1991 – 1996
Bangladesh University of Engineering and Technology, Dhaka, Bangladesh	

ACADEMIC EXPERIENCE

University at Buffalo, Buffalo, NY

Aug '13 – Now

Teaching Assistant Professor, Department of Mechanical and Aerospace Engineering

1. Full responsibility of teaching lecture and laboratory based courses.
2. Participation to ABET report preparation, and course and curriculum development.

Georgia Southern University Statesboro, GA

Aug '12 – Aug '13

Visiting Assistant Professor, Department of Mechanical Engineering

1. Full responsibility of teaching lecture and laboratory based courses.
2. Participation to ABET report preparation, course and curriculum development.

University of New Orleans New Orleans, LA

Jan '09 – July '12

Adjunct Faculty, Department of Mechanical Engineering

1. Full responsibility of teaching lecture and laboratory based courses.
2. Participation to ABET report preparation, course and curriculum development.

TEACHING EXPERIENCE AT A GLANCE

Univ.	Semester	496	364	338	336	335	311	212	204	177	198
UNO	Spr '09			x						x	
	Sum '09								x	x	
	Fall '09									xx	
	Spr '10									xx	
	Sum '10								x		
	Spr '11								x	x	
	Sum '11								x		
	Spr '12		x						x	x	
	Sum '12					x			x		
GSU	Fall '12				x			x		xx	
	Spr '13			x	xx					x	
UB	Fall '13			xxxxxx xxxx					xx		
	Spr '14						xx				
	Sum '14						x				
	Fall '14	x		xxxxxx xxxx					xx		
	Spr '15	x					xx				
	Sum '15						x		x		
	Fall '15	x		xxxxxx xxxx					xx		
	Spr '16	x					xx				
	Sum '16					x	x				
	Fall '16	x		xxxxxx xxxx					xx		x
	Win '16			x							
	Spr '17	x					xxx				x
	Sum '17	x					x				

x → One Section

xx.... → More than one sections

TEACHING AND RESEARCH EXPERIENCE

University at Buffalo, Buffalo, NY

Aug '13 – Now

Teaching Assistant Professor, Department of Mechanical and Aerospace Engineering

- 1 Instructed the course of "**MAE Lab II**" during the Fall 2013, 2014, 2015, 2016 (Over 250 students in 10 sections) semester, Winter 2016 (7 Students), assisted by 5 TA's.
- 2 Instructed the course of "**Thermodynamics I**" during the Fall 2013, Fall 2014, Summer 2015, Fall 2015, Fall 2016 (Almost 100 students in 2 sections in Falls and 25 in Summer) semester, assisted by 2 TA's.
- 3 Instructed the course of "**Machines and Mechanisms I**" during the Spring 2014 (75 students in 2 sections), Summer 2014 (21 Students), Spring 2015 (150 students in 2 sections), Summer 2015 (25 Students), Spring 2016 (150 students in 2 sections), Summer 2016 (25 Students), Spring 2017 (270 Students in 3 sections) assisted by 2 TA's and Summer 2017 (10 Students).
- 4 Instructed the course of "**Fluid Mechanics**" during the Summer 2016 (35 Students).
- 5 Instructed the course of "**Engineering Internship**" during the Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2017 and Summer 2017 (20 Students in each semester).
- 6 Instructed the course of "**Undergraduate Seminar**" during the Fall 2016 (28 Students) and Spring 2017 (28 Students).
- 7 Researched on Unconventional radiator:
 - (a) Developed geometry on ANSYS/Workbench.
 - (b) Developed the geometry on ANSYS/FLUENT to set fluid model and boundary conditions.
 - (c) Simulated fluid mechanics study using ANSYS/FLUENT.
 - (d) Build the model for experimental test for validation.
 - (e) Measured the velocity using anemometer and compared the result.
 - (f) Prepared conference paper showing the results.
- 8 Researched on NOx emission:
 - (a) Developed geometry on ANSYS/Workbench.
 - (b) Transfer the geometry data on ANSYS/FLUENT to set fluid model and boundary conditions.
 - (c) Simulated fluid mechanics study using ANSYS/FLUENT.
 - (d) Submitted conference paper showing the results.

- 9 Supervised Independent Study (Undergrad Research) on a project “Digital Thermodynamics” funded by SUNY LSAMP (Louis Stokes Alliance for Minority Participation) during summer 2014:
 - (a) Developed database for the property values for different gases in MS Access table.
 - (b) Developed user interface for the gas property calculation.
 - (c) Developed graphical representation (Temperature vs Entropy diagram) for different cycles, e.g. Carnot cycle, Brayton cycle etc.
- 10 Supervised Independent Study (Undergrad Research) on a project “Digital Thermodynamics”:
 - (a) Developed database for the steam table in MS Access table.
 - (b) Developed user interface for the steam property calculation.
 - (c) Developed graphical representation (Temperature vs Entropy diagram) for Rankine cycle.
- 11 Supervised Independent Study (Undergrad Research) on stress concentration with axial loading on bar:
 - (a) Validated the stress concentration charts found in textbook of solid mechanics with simulation software Creo.
 - (b) Developed stress concentration chart for new parameters.
- 12 Supervised Independent Study (Undergrad Research) on Horizontal Axis Wind Turbine:
 - (a) Developed geometry on Creo.
 - (b) Transfer the geometry data on ANSYS/FLUENT to set fluid model and boundary conditions.
- 13 Collaborating research with former colleagues (from Georgia Southern University):
 - (a) Developed model in SolidWorks and analyzed in ANSYS/FLUENT.
 - (b) Submitted conference paper showing the results.

Georgia Southern University Statesboro, GA

Aug '12 – Aug '13

Visiting Assistant Professor, Department of Mechanical Engineering

- 1 Instructed the course of "**Energy Science Laboratory**" during the Spring 2013 (13 students) semester.
- 2 Instructed the course of "**Heat Transfer**" during the Fall 2012 (20 students) and Spring 2013 (44 Students in one section and 22 in other section) semesters.
- 3 Instructed the course of "**Solid Modeling and Analysis**" using Computer Software SolidWorks during the Fall 2012 (25 students) semester.

- 4 Instructed the course of "**Engineering Graphics**" using Computer Software AutoCAD during the Fall 2012 (40 students in one section and 50 students in other section) and Spring 2013 (44 Students) semesters.
- 5 Researched on "Power augmentation in compressor with wet compression" using ANSYS/FLUENT.
 - (a) Reviewed literature for wet compression.
 - (b) Developed model in ANSYS/FLUENT for discrete phase model and multiphase model.
 - (c) Submitted conference paper showing the method and results.
- 6 Researched on "Wind Turbine" using ANSYS/FLUENT and SolidWorks.
 - (a) Co-advised the MS student of Dr. Mosfequr Rahman for wind turbine.
 - (b) Developed model in SolidWorks and analyzed in ANSYS/FLUENT.
 - (c) Submitted conference paper showing the results.
- 7 Researched on "Water/methanol Injection in Turbocharger" for undergraduate research.
 - (a) Advised undergraduate student for turbocharger.
 - (b) Setup experiment for turbocharger in a mechanical workshop of San Antonio, TX.
- 8 Advised one future graduate student for his independent study.

University of New Orleans New Orleans, LA
Adjunct Faculty, Department of Mechanical Engineering

Jan '09 – July '12

- 1 Instructed the course of "**Engineering Thermodynamics I**" during the Summer 2009 (30 students), Summer 2010 (38 students), Spring 2011 (72 students), Summer 2011 (27 students), Spring 2012 (42 students) and Summer 2012 (37 Students) semesters.
- 2 Instructed the course of "**Fluid Mechanics**" during the Summer 2012 (15 students) semester.
- 3 Instructed the course of "**Introduction to Computer Integrated Manufacturing Method**" during the Spring 2012 (22 students) semester.
- 4 Instructed the course of "**Computer Aided Graphics**" using Computer Software AutoCAD for 2-D modeling and SolidWorks for 3-D modeling during the Spring 2009 (22 students), Summer 2009 (15 students), Fall 2009 (22 students in both sections), Spring 2010 (23 students in both sections), Spring 2011 (29 students) and Spring 2012 (19 students) semesters.
- 5 Instructed the course of "**Fluid Mechanics Lab**" during the Spring 2009 (10 students) semester.

- 1 Researched on "Fluidization in Mild-Gasifier" using 30 node parallel processor configuration.
 - (a) Reviewed literature for devolatilization in gasification process.
 - (b) Built coal devolatilization (along with demineralization) model in gasification process in an UDF (User Defined Function) in ANSYS/FLUENT using multi-phase model.
 - (c) Published conference paper showing the method and results.
- 2 Researched on "Droplet Evaporation in Bellmouth" under the supervision of Dr. Ting Wang using FLUENT and GAMBIT software.
 - (a) Developed the geometry and meshing for the computational domain using GAMBIT for 3-D domain.
 - (b) Obtained the results by the simulation in FLUENT by giving the different location for spraying water.
 - (c) Reviewed literature for droplet evaporation.
 - (d) Published conference paper showing the results.
- 3 Researched and advised on "Fluidization in Mild-Gasifier" for Graduate Student.
 - (a) Developed the geometry and meshing for the computational domain, using GAMBIT for 2-D domain.
 - (b) Obtained the preliminary results by the simulation in FLUENT by giving the different velocity for fluidization.
 - (c) Reviewed literature for Eulerian method for granular particle dynamics.
 - (d) Published conference paper showing the results.

- 1 Researched on "Wet Compression and Particle Dynamics in Gas Turbine" under the supervision of Dr. Ting Wang using FLUENT and GAMBIT software.
 - (a) Developed the geometry by mapping and meshing for the compressor blades using GAMBIT, both in 2-D and 3-D domain.
 - (b) Obtained the results by the simulation in FLUENT by giving the different spray amount of water in upstream.
 - (c) Reviewed literature for droplet heat transfer and turbulence.
 - (d) Reviewed literature for appropriate model of coalescence and particle erosion model.
 - (e) Developed User Defined Function (UDF) for liquid particle erosion model.
 - (f) Studied the heat transfer between the air and liquid water droplet.
 - (g) Developed animation for the results with and without liquid water spray for different parameters.

- 2 Researched on “Fog and Overspray Cooling for Gas Turbine Systems using Stage-stacking Method” with Equilibrium and Non-equilibrium method using a self-developed software in MS Access under the supervision of Dr. Ting Wang.
 - (a) Obtained the blade geometry for design conditions (e.g. ambient condition, machine RPM, inlet velocity, number of stages etc.).
 - (b) Obtained outputs (e.g. developed pressure ratio, required compressor power, thermodynamic properties in different stages, absolute and relative velocities in different stages etc.) for different off-design conditions (e.g. different ambient condition, different spray amount of water etc.).
 - (c) Published conference paper showing the results.
- 3 Researched on “Fog and Overspray Cooling for Gas Turbine Systems with Low Calorific Value Fuel” using a self-developed software in MS Access under the supervision of Dr. Ting Wang.
 - (a) Developed database for the property values for different gases, steam table and psychrometric information in MS Access table.
 - (b) Developed user interface for the gas property calculation, psychrometric calculation, steam property calculation and simulation of the gas turbine systems.
 - (c) Obtained outputs for different inputs for different gas turbine systems by simulation with the developed software.
 - (d) Published conference paper showing the results.
- 4 Researched on “Moving reference of frame for stator and rotor of compressor” under the supervision of Dr. Ting Wang using FLUENT and GAMBIT software.
 - (a) Developed the geometry and mesh for the stator and rotor using GAMBIT.
 - (b) Obtained the results by the simulation in FLUENT by giving the different boundary conditions and operating conditions.
 - (c) Stored the results by animation in FLUENT.

INDUSTRY EXPERIENCE

Bayou Information Systems, 2306 Lemon St., Metairie, LA – 70001
Systems Engineer

May '01 – Dec '02

- 1 Advised about the purchase of machineries e.g. Refrigerator, Air Conditioner etc.
- 2 Developed an integrated database driven solution to perform complete functionality and daily operation of New Orleans Redevelopment Authority (NORA) with MS Access in backend and Visual Basic 6.0 in front end.
 - (a) Developed database with several tables in MS Access.
 - (b) Developed user interface in Visual Basic 6.0 and connected MS Access database by ODBC Connection.
 - (c) Generated several MS Word documents according to the users choice using VB DAO by embedding the necessary data from database.

OTHER ACTIVITIES/CONSULTING

University of Pretoria

Summer 2017

External Examiner for the course of Fluid Mechanics

- 1 Checked the quality of final exam question paper.
- 2 Checked the quality of grading of a 3 sample final exam papers.

University of Pretoria

Fall 2016

External Examiner for the course of Thermal and Fluid Machines

- 1 Checked the quality of final exam question paper and put feedback on how to improve.
- 2 Checked the quality of grading of a 10 final exam papers.

University of Pretoria

Fall 2015

External Examiner for the course of Thermal and Fluid Machines

- 1 Checked the quality of final exam question paper and put feedback on how to improve.
- 2 Checked the quality of grading of a 15 final exam papers (10 regular and 5 supplementary exams).

University of Pretoria

Fall 2014

External Examiner for the course of Thermal and Fluid Machines

- 1 Checked the quality of final exam question paper and put feedback on how to improve.
- 2 Checked the quality of grading of a 15 final exam papers (10 regular and 5 supplementary exams).

University of Pretoria

Summer 2014

External Examiner for the course of Fluid Mechanics

- 1 Checked the quality of final exam question paper.
- 2 Checked the quality of grading of a few sample final exam papers.

ATTENDED SEMINARS AND CONFERENCES (P stands for paper/abstract presented)

1. P **Conference:** Power and Energy Engineering 2016, London, UK, July 20-21, 2016.
2. P **Conference:** ASME IDETC2015, Boston, Massachusetts, USA, August 2-5, 2015.
3. P **Conference:** ASME IMECE2014, Montreal, Canada, November 14-20, 2014.
4. **Conference:** ASME International Design and Engineering Technical Conferences 2014, Buffalo, NY, USA, August 17-20, 2014.
5. P **Conference:** ASME Turbo Expo2013, San Antonio, Texas, USA, June 3-7, 2013.
6. P **Conference:** ASME International Mechanical Engineering Congress & Exposition, Houston, TX, USA, November 9-15, 2012.
7. P **Conference:** CPERC (Clean Power and Energy Resource Consortium) Annual Technical Review Meeting associated with IETC (Industrial Energy Technology Conference), New Orleans, Louisiana, USA, May 30, 2012.
8. P **Conference:** Proceedings of the 28th Annual International Pittsburgh Coal Conference, Pittsburgh, PA, USA, September 12-15, 2011.

9. P **Conference:** CPERC (Clean Power and Energy Resource Consortium) Annual Technical Review Meeting associated with IETC (Industrial Energy Technology Conference), New Orleans, Louisiana, USA, May 18, 2011.
10. P **Seminar:** CPERC Annual Technical Review Meeting, Southern University of Baton Rouge, Louisiana, USA, August 29, 2009.
11. P **Conference:** ASME Turbo Expo2009, Orlando, Florida, USA, June 8-12, 2009.
12. P **Seminar:** CPERC Annual Technical Review Meeting, University of New Orleans, Louisiana, USA, October 31, 2008.
13. **Conference:** 2008 ASME Heat Transfer / Fluids / Energy / Solar / Nano Conferences, Jacksonville, Florida, USA, August 10-14, 2008.
14. **Conference:** POWER-GEN International Conference, New Orleans, Louisiana, USA, December 11-13, 2007.
15. P **Seminar:** CPERC Annual Technical Review Meeting, Tulane University, Louisiana, USA, August 15, 2007.
16. P **Seminar:** CPERC Annual Technical Review Meeting, Louisiana State University, Louisiana, USA, April 12, 2006.
17. P **Seminar:** CPERC Annual Technical Review Meeting, University of New Orleans, Louisiana, USA, August 27, 2004.
18. **Conference:** ASME 2004 Heat Transfer/Fluids Engineering Summer Conference,

AWARDS/SCHOLARSHIPS

1. **Complementary Accommodation for Conference as an eminent Speaker**, 2016: For presenting previous research as an eminent speaker (listed in the publication list) in the Conference. Award was given in the conference of Power and Energy Engineering 2016, London, UK, July 20-21, 2016.
2. **Young Engineer Travel Award** (\$ 2000.00), 2013: For active involvement in Turbo Expo and authoring & presenting the paper (GT2013-96022, listed in the publication list) in the Proceeding. Award was given in the closing ceremony of Proceedings of ASME Turbo Expo2013, San Antonio, TX, USA, June 3-7, 2013.
3. **Best Paper Award**, 2011: The paper (GT2010-23722, listed in the publication list) published in the Proceedings of ASME Turbo Expo2010, Glasgow, UK, June 14-18, 2010. Award given in the Proceedings of ASME Turbo Expo2011, Vancouver, Canada, June 6-10, 2011.
4. **Research Assistant** (2004-2009): University of New Orleans, LA, USA.
5. **Graduate Assistant** (1999-2000): University of New Orleans, LA, USA.
6. **Scholarship** (1991-1996): During under graduation study at Bangladesh University of Engineering and Technology, Dhaka, Bangladesh.

JOURNAL PUBLICATIONS

1. Wang, T. and **Khan, J.R.**, 2016, "Discussion of Some Myths/Features Associated with Gas Turbine Inlet Fogging and Wet Compression," ASME Journal of Thermal Science and Engineering Applications, Vol.8, Issue 2, 021001/1-9, 2016.

2. **Khan, J.R.** and Wang, T., 2013, "Implementation of a Demoisturization and Devolatilization Model in Multi-Phase Simulation for a Hybrid Entrained-Flow and Fluidized Bed Mild Gasifier," *International Journal of Clean Coal and Energy*, 2013, vol. 2, pp. 35-53,
3. **Khan, J.R.** and Wang, T., 2013, "Implementation of a non-equilibrium heat transfer model in stage-stacking scheme to investigate overspray fog cooling in compressors," *International Journal of Thermal Sciences*, Vol. 68, pp. 63-78, 2013.
4. **Khan, J.R.** and Wang, T., 2011, "Investigation of Cooling Effectiveness of Gas Turbine Inlet Fogging Location Relative to the Silencer," *ASME Journal of Engineering for Gas Turbine and Power*, Paper GTP-11-1101, Vol. 134/1, pp. 022001/1-9, 2011.
5. Wang, T. and **Khan, J.R.**, 2010, "Overspray and Interstage Fog Cooling in Compressor using Stage-Stacking Scheme – Part 1: Development of Theory and Algorithm," *ASME Journal of Thermal Science and Engineering Applications*, Vol.2, Issue 2, 031001/1-10, 2010.
6. Wang, T. and **Khan, J.R.**, 2010, "Overspray and Interstage Fog Cooling in Compressor using Stage-Stacking Scheme – Part 2: Case Study," *ASME Journal of Thermal Science and Engineering Applications*, Vol.2, Issue 3, 031002/1-10, 2010.
7. **Khan, J.R.** and Wang, T., 2010, "3D Modeling for Wet-compression in a Single Stage Compressor Including Liquid Particle Erosion Analysis" *ASME Journal of Engineering for Gas Turbine and Power*, Paper GTP-10-1071, Vol. 133/1, pp. 012001/1-13, 2010.
8. **Khan, J.R.** and Hossain, I., 2008, "Study of Vegetable Oils Produced in Bangladesh as Alternative Fuel for Internal Combustion Engines," *Journal of Business and Technology*, Vol. 1, No. 1, December, 2008, pp. 145-149, 2008.

CONFERENCE PUBLICATIONS

1. Raza, H., Porangada, S.S., Islam, W., Naviwala, M. and **Khan, J.R.**, 2017, "Performance Enhancement in Unconventional Radiator," Manuscript accepted for presentation in Proceedings of the ASME 2017 International Mechanical Engineering Congress & Exposition Conference, IMECE 2017, Tampa, Florida, USA, November 3-9, 2017, Paper No: IMECE2017-70255.
2. **Khan, J.R.**, 2015, "Stress Analysis of Various Shaped Blade of Savonius Wind Turbine," Proceedings of the ASME 2015 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference IDETC/CIE 2015, Boston, Massachusetts, USA, August 2-5, 2015, Paper No: DETC2015-47228.
3. **Khan, J.R.** and Rahman, M., 2014, "Stress Analysis of Various Shaped Blade of Savonius Wind Turbine," Proceedings of the ASME 2014 International Mechanical Engineering Congress and Exposition, Montreal, Quebec, Canada, November 14-20, 2014, Paper No: IEMCE2014-36307.
4. Fawcett, M.A. and **Khan, J.R.**, 2014, "Effects of Water Injection on the Power Boost of a Twin Turbocharged Vehicle," Proceedings of the ASME 2014 International

- Mechanical Engineering Congress and Exposition, Montreal, Quebec, Canada, November 14-20, 2014, Paper No: IEMCE2014-36172.
5. Ahmed, M., Zhang, C., McKay, S., Shirsat, V. and **Khan, J.R.**, 2014, "An Investigation of Methane Combustion in a Rectangular Shaped Meso Chamber," Proceedings of the ASME 2014 International Mechanical Engineering Congress and Exposition, Montreal, Quebec, Canada, November 14-20, 2014, Paper No: IEMCE2014-39810.
 6. Rahman, M., Bennett, T., Beckley, D., Glisson, D. and **Khan, J.R.**, 2014, "Finite Element Analysis of Prosthetic Running Blades using different Composite Materials to Optimize Performance," Proceedings of the ASME 2014 International Mechanical Engineering Congress and Exposition, Montreal, Quebec, Canada, November 14-20, 2014, Paper No: IEMCE2014-37293.
 7. **Khan, J.R.**, Bashar, M.M. and Rahman, M., 2013, "Computational Studies on the Flow Field of Various Shapes-Bladed Vertical Axis Savonius Turbine in Static Condition," Proceedings of the ASME 2013 International Mechanical Engineering Congress and Exposition, San Diego, California, USA, November 15-21, 2013, Paper No: IEMCE2013-65081.
 8. **Khan, J.R.**, 2013, "Comparison between Discrete Phase Model and Multiphase Model for Wet Compression," Proceedings of ASME Turbo Expo2013, San Antonio, Texas, USA, June 3-7, 2013, Paper No: GT2013-96022.
 9. **Khan, J.R.**, 2012, "Energy Crisis From Household Dryer Machine," Proceedings of the ASME 2012 International Mechanical Engineering Congress & Exposition, Houston, TX, USA, November 9-15, 2012, ASME Paper No: IMECE2012-89688.
 10. Wang, T. and **Khan, J.R.**, 2012, "Discussion of Some Myths/Features Associated with Gas Turbine Inlet Fogging and Wet Compression," Proceedings of ASME Turbo Expo2012, Copenhagen, Denmark, June 11-15, 2012, ASME Paper No: GT2012-70097.
 11. **Khan, J.R.** and Wang, T., 2011, "Development of a Devolatilization Model in a Eulerian-Eulerian Method for a Hybrid Entrained-Flow and Fluidized Bed Mild Gasifier," Proceedings of the 28th Annual International Pittsburgh Coal Conference, Pittsburgh, PA, USA, September 12-15, 2011.
 12. Mazumder, A.K.M, Wang, T. and **Khan, J.R.**, 2011, "Design and Simulation of a Mild Gasifier Part 1 – Design Considerations and Development of a Multiphase Model," Proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition, November 11-17, 2011, Denver, Colorado, ASME Paper IMECE2011-64473.
 13. Mazumder, A.K.M, Wang, T. and **Khan, J.R.**, 2011, "Design and Simulation of a Hybrid Entrained-Flow and Fluidized Mild Gasifier Part 2 – Case Study and Analysis," Proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition, November 11-17, 2011, Denver, Colorado, ASME Paper IMECE2011-64485.
 14. **Khan, J.R.**, Wang, T. and Chaker, M., 2011, "Investigation of Cooling Effectiveness of Gas Turbine Inlet Fogging Location Relative to the Silencer," Proceedings of ASME Turbo Expo2011, Vancouver, Canada, June 6-10, 2011, ASME Paper GT2011-46809.
 15. **Khan, J.R.**, and Wang, T., 2010, "3D Modeling for Wet-compression in a Single Stage Compressor Including Liquid Particle Erosion Analysis" Proceedings of ASME Turbo Expo2010, Glasgow, UK, June 14-18, 2010, ASME Paper No: GT2010-23722.

16. **Khan, J.R.** and Wang, T., 2009, "Overspray Fog Cooling in Compressor using Stage-Stacking Scheme with Non-Equilibrium Heat Transfer Model for Droplet Evaporation," Proceedings of ASME Turbo Expo2009, Orlando, Florida, USA, June 8-12, 2009, ASME Paper GT2009-59590.
17. Wang, T. and **Khan, J.R.**, 2008, "Overspray and Interstage Fog Cooling in Compressor using Stage-Stacking Scheme – Part 1: Development of Theory and Algorithm," Proceedings of ASME Turbo Expo2008, Berlin, Germany, June 9-13, 2008, ASME Paper No: GT2008-50322.
18. Wang, T. and **Khan, J.R.**, 2008, "Overspray and Interstage Fog Cooling in Compressor using Stage-Stacking Scheme – Part 2: Case Study," Proceedings of ASME Turbo Expo2008, Berlin, Germany, June 9-13, 2008, ASME Paper No: GT2008-50323.
19. **Khan, J.R.** and Wang, T., 2008, "Simulation of Inlet Fogging and Wet-compression in a Single Stage Compressor Including Erosion Analysis," Proceedings of ASME Turbo Expo2008, Berlin, Germany, June 9-13, 2008, ASME Paper No: GT2008-50874.
20. **Khan, J.R.** and Hossain, I., 2008, "Study of Vegetable Oils Produced in Bangladesh as Alternative Fuel for Internal Combustion Engines," The Tenth IASTED International Conference on Power and Energy System PES2008, Baltimore, Maryland, USA, April 16-18, 2008, Paper 617-065.
21. **Khan, J.R.** and Wang, T., 2006 "Fog and Overspray Cooling for Gas Turbine Systems with Low Calorific Value Fuels," Proceedings of ASME Turbo Expo 2006, Barcelona, Spain, May 8-11, ASME Paper No: GT2006-90396.