

Revised 1/4/17

O. GEOFFREY OKOGBAA, Ph.D., MNSE, PE, FAEng

**Fellow, Nigerian Academy of Engineers
Fellow, Institute of Industrial & Systems Engineers
Corporate Member, Nigerian Society of Engineers**

Mailing Address, Telephone and e-mail

Office: College of Engineering, University of South Florida
4202 E. Fowler Avenue, Tampa, FL 33620-5350

Preferred: Home: 5016 Londonderry Drive, Tampa Palms, Tampa, FL 33647

Tel. cell: +1 813 843 8789

email: okogbaa@aol.com ; okogbaa@usf.edu

EDUCATION

The Ohio State University Columbus, Ohio	Industrial Engineering	BSISE, 1975-1977
The Ohio State University Columbus, Ohio	Industrial Engineering	MSIE, 1978-1979
University of Cincinnati	Mech. & Indus. Engineering	Ph.D., 1980-1983

**REGISTRATION: Registered Professional Engineer, State of Florida, USA (70928)
Nigerian Society of Engineers (Reg #32536)**

Areas Of Special Interest & Expertise:

- Nano-Reliability & Quality Engineering
- Computer Integrated Design & Automated Manufacturing (Robot Task Planning)
- Engineering Design Methodology
- Safety Critical Systems
- Knowledge Worker Performance.

Brief Profession History and Accomplishments

Professor O. Geoffrey Okogbaa served as the **Vice-Chancellor** Federal University Wukari from February 16, 2011-February 16, 2016. In that position he was as the Chief Accounting and Academic Officer of the University. **Prior to this assignment as Vice-Chancellor, Professor Okogbaa was Professor of Engineering at the University of South Florida, Tampa Florida and is currently on un-paid leave of absence (LOA) from that University and holds the position of Professor of Engineering.** As the pioneer Vice-Chancellor, Professor Okogbaa was responsible for unprecedented infrastructural development at the young university including the design, development and construction of the University's basic infrastructure as well as its academic programs, the academic brief, master plan, mission and vision and the university anthem. **Some of his pioneering contributions and accomplishments as pioneer Vice-Chancellor to date include:**

- As part of his service to Nigeria towards the enthronement of democracy, Dr. Okogbaa served as the returning officer for both the Presidential and Gubernatorial Elections in Adamawa State during the 2015 election in Nigeria. Those elections in the State of Adamawa were hitch free and there were no recorded cases of riots and killings in the state during the said elections

- As at the time Dr. Okogbaa completed his tenure, the University barely 5 years old but had over 5,000 students in three faculties namely, Agriculture & Life Sciences; Humanities, Management & Social Sciences; and Pure & Applied Sciences with over 27 academic programs. The university had over 2000 staff in both academic and non-academic categories. These numbers are the highest of all the 12 new Universities.
- Professor Okogbaa saw the University through several (over seven) community crises none of which resulted in school closures, a feat that is unimaginable in the Nigerian University System.
- The University did not witness student or staff strike--an outstanding feat considering the fact that strikes are common and endemic problems in the Nigerian University system.
- Through a private donor, Professor Okogbaa was able to secure funding for a 90 bed University Hospital to be co-funded by TETFund (The Tertiary Education Trust Fund- an organization statutorily mandated by the Federal Government of Nigeria to provide interventions to Tertiary institutions for infrastructural development). For A new University, this is quite an accomplishment considering the fact that University Hospital are usually granted to those institutions that old enough to have a medical school. The University Strategic Plan called for the establishment of a medical School in the 6th year of the University's existence. So the hospital was/is in anticipation of the medical school.
- Through his leadership, the University has secured over N4billion in TETFund Special Intervention projects. This is in addition to over N3.2billion of TETFund Normal Intervention that is part of the yearly allocation to Universities. More importantly, none of the projects undertaken under his leadership were been abandoned.
- Through his network, Dr. Okogbaa secured a commitment from the Central Bank of Nigeria (CBN) to provide N2billion in intervention funds for the construction of the Faculty of Engineering & Technology building.
- Through Dr. Okogbaa's initiative as Vice-Chancellor, Federal University Wukari embarked on the JUNKUN Language Development Project in collaboration with the Nigerian Educational Research and Development Council (NERC). This project received approval by the Federal Ministry of Education for the inclusion of JUNKUN Language as part of 9-Year Basic Education Curriculum for Primary 1-3, 4-6, and JSS 1-3. The Junkun language is the predominant language of the region where the University is located.
- In the next two years, the University will break ground for a 90 bed University hospital funded by TETFUND. For A new University, this is quite an accomplishment considering the fact that university hospital are usually granted to those institutions that old enough to have a medical school.
- Through his leadership, the University has secured over N4 billion in TETFund Special Intervention projects. This was in addition to over N3.2billion of TETFund Normal Intervention that was part of the yearly allocation to Universities. More importantly, none of the projects undertaken under his leadership was abandoned.
- Dr. Okogbaa instituted the University Distinguished Teaching Award to recognize outstanding teaching and to emphasize the significance of teaching, learning and mentoring.

- Dr. Okogbaa also instituted the University Distinguished Research Award to recognize outstanding research and scholarship.
- Through his network, Dr. Okogbaa secured the Central Bank of Nigeria (CBN) approval for a N2billion Intervention for the Construction of the Faculty of Engineering & Technology.
- Through Dr. Okogbaa's initiative, Federal University Wukari embarked on the JUNKUN Language Development Project in collaboration with the Nigerian Educational Research and Development Council (NERC). The outcome of this project is the recent approval by the Federal Ministry of Education for the inclusion of JUNKUN Language as part of 9-Year Basic Education Curriculum for Primary 1-3, 4-6, and JSS 1-3.
- Dr. Okogbaa developed proposal to the state of Taraba Ministry of Education on ways to mitigate the lack of participation of Taraba indigenes in Science Technology and Mathematics (STEM) including such innovation such as:
 - 1). the takeover of a school close to Federal University Wukari and turning that school into a STEM focused Unity School that would serve the North East Region of Nigeria.
 - 2). training of the mathematics and science teachers all over Taraba State in pedagogy and hands-on experiment and practicals using the train-the-trainer model.

Upon completion of the training, our FUW Graduate Assistants from the Sciences will go into live classrooms to assist the teachers as teacher aides to ensure that the practicals are done properly. This type of project was previously conceived and successfully implemented by Professor Okogbaa in his role as the Principal Investigator with tremendous positive student outcomes and was funded by the US National Science Foundation.

Dr. Okogbaa has recently developed this idea into project entitled ASET. ASET (Alliance for Science, Engineering, technology & Innovation) is a nationwide initiative that brings together critical stakeholders in a collaborative partnership aimed at reinvigorating science, engineering and technology and math education at the primary and secondary levels. The first part of this initiative is a national dialogue that would critically examine ways to resuscitate and strengthen **STEM(Science, Technology, Engineering & Mathematics)** and **Innovation** disciplines so that our country can key into the global trends and opportunities in STEM. The next phase of ASET would be the development of the framework and the templates aimed at improving STEM education in primary and secondary schools by training future **STEM and Innovation** teachers, supporting existing STEM and **Innovation** educators, provide students with meaningful and engaging **STEM and Innovation** learning opportunities, and involving current STEM professionals in the important work of educating the next generation of **STEM and Innovation** leaders.

Awards at Federal University Wukari

- 2013: The West African Students Union Parliament Award of Excellence
- 2015: National Union of Nigerian Students (NANS) “ICON OF HOPE TO NIGERIAN STUDENTS” Award
- 2015: Man of the Year Award for 2014 by the Joint Action Coalition of Civil Society Groups
- 2015 Fastest Growing University Award by the Joint Action Coalition of Civil Society Groups

Prior to his current assignment as the Pioneer Vice-Chancellor Federal University Wukari, he was Professor of Industrial & Management Systems Engineering and guest Professor of Statistics and Public Health at the University of South Florida Tampa (USF) where he also served the served as Director of the Institute on Black Life and the Center for Africa and the Diaspora from 1999-2006. In the position as Director of the Institute on Black Life and the African Diaspora, he reported directly to the University Provost and Executive

Vice President. In 1995 he served as faculty Intern and interim Associate Dean of the Graduate School at USF.

His teaching and research interests are in the areas of Nano-Reliability & Quality; Engineering Design; Automated Manufacturing; and Safety Critical System. He is author of over eighty publications and several book chapters, including (2008) Managing logistics flows through enterprise input-output models, in *Supply Chain, The Way to Flat Organisation*, I-Tech Education and Publishing, Wien, Austria, ISBN 953761935-4 (2008, Huo, Y., Jia, F. eds.), 'Design For Maintainability' in Handbook of Environmentally Conscious Mechanical Design, John Wiley & Sons (2007, Myer Kutz, ed), 'Techniques in the Synchronization of Production Rate with Demand Rate in *Manufacturing Systems' in Computer Aided and Integrated Manufacturing Systems Techniques and Applications*, CRC Press (2000, Cornelius T. Leondes, ed), and 'Reliability Computation' in *Handbook of Industrial Engineering*, McGraw-Hill, (1992, William Hodson, ed). ***Dr. Okogbaa is currently under contract with J. Ross Publishing to co-author the book: Design and Optimization Models for Six-Sigma Process.***

Professor Okogbaa has received funding exceeding \$8.1 million in grants and contracts from the US National Science Foundation, NASA, NIOSH, DOE, and other public and private companies in the US.

As an inventor, Dr. Okogbaa was issued a US patent No. 5971248 entitled: “Adaptive Gripper for a Robotic Manipulator” in February 1999. Professor Okogbaa has developed new Reliability Analysis and Maintenance planning tools to evaluate the Reliability of Complex Systems under Transient State. Okogbaa co-developed the MORINHO/HO (Modeling the Reliability of Integrated Network/Hou and Okogbaa) -- an efficient method for comprehensively analyzing integrated network with unreliable nodes with software failures. Dr. Okogbaa has served as **major Professor (10), co-Major Professor (2), or committee member (25) to over 40 doctoral students.** He has served as Thesis supervisor, co-director, and committee member for over 50 masters' students. **He is a member of the Board of Directors of RAMS (Reliability & Maintainability Symposium)—The premier IEEE affiliate organization responsible for Reliability Education both nationally and internationally.**

Professor Okogbaa was honored with the **2001 UPS Corporation/Institute of Industrial Engineers Minority Educator Award for contributions to Minority Education.** Dr. Okogbaa has led efforts to establish a statewide coalition to seek state funding for STEM centric curriculum and related activities for K-12. He was a Finalist, State of Florida Ira D. Baker Minority Educator Award. Institute of Industrial Engineers Award of Excellence for Quality and Reliability Engineering, 1991. William A. Golomski Best paper Award, RAMS/IEEE Conference, 2006. School District of Hillsborough County Florida Achievement Award for infusing STEM into 3-5 classrooms, January 18, 2005. National Research Council (NRC) Associateship Award, 1989.

Detailed Pioneering Contributions & Awards.

- ***Dr. Okogbaa is an elected member of the Nigerian Academy of Engineers***
- ***Professor Okogbaa is a Registered Professional Engineer, State of Florida (# 70928)***
- ***Okogbaa is an Elected Fellow of the Institute of Industrial Engineers (IIE) and served as its Vice President of Industry from 1997-99. He also served as Director of the Quality & Reliability Engineering Division (90-91). President Cincinnati Chapter of IIE (1989).***
- ***As an inventor, Dr. Okogbaa was issued a US patent No. 5971248 entitled: “Adaptive Gripper for a Robotic Manipulator” in February 1999.***
- ***He was elected and has been a member of the USF Academy of Inventors since 2010. This has since become the National Academy of Inventors.***
- ***Okogbaa has secured over \$8.1 million in grants and contracts as PI (\$6.8 million) and co-PI***

- Recipient of the William A. Golomski Best paper Award, RAMS/IEEE Conference, 2006
- *University of South Florida Presidential Award for Faculty Excellence, 2003*
- *Professor Okogbaa as PI and his colleagues developed the USF STARS Project- A USF Graduate & Undergraduate Fellows Project for infusing STEM into the K-12 classroom. Project was funded to the tune of \$3.41 million by the USA National Science Foundation.*
- *Professor Okogbaa has developed new Reliability Analysis and Maintenance planning tools to evaluate the Reliability of Complex Systems under Transient State.*
- *Okogbaa co-developed the MORINHO/HO (Modeling the Reliability of Integrated Network/Hou and Okogbaa) -- an efficient method for comprehensively analyzing integrated network with unreliable nodes with software failures.*
- *Dr. Okogbaa has served as major Professor (10), co-Major Professor (2), or committee member (25) to over 40 doctoral students. He has served as Thesis supervisor, co-director, and committee member for over 50 masters' students.*
- *Dr. Okogbaa has led efforts to establish a statewide coalition to seek state funding for STEM centric curriculum and related activities for K-12.*
- *Since 1991, Dr. Okogbaa has served as a Member of the Board of Directors of RAMS (Reliability & Maintainability Symposium)—The premier IEEE affiliate organization responsible for Reliability Education both nationally and internationally.*
 - *Okogbaa was honored with the 2001 UPS Corporation/Institute of Industrial Engineers Minority Educator Award for contributions to Minority Education.*
 - *Finalist, State of Florida Ira D. Baker Minority Educator Award 2002.*
- *Okogbaa received the Institute of Industrial Engineers Award of Excellence for Quality and Reliability Engineering, 1991.*
- Recipient of the School District of Hillsborough County Achievement Award for infusing STEM into 3-5 classrooms, January 18, 2005.
- Recipient of *National Research Council (NRC) Associateship Award, 1989*

INTERNATIONAL OUTREACH ACTIVITIES

Technical Committee Chair, AFRICA/USA Manufacturing Technology Conference -MANUTECH
 Professor Okogbaa with his colleagues, including Professor Bart Nnaji, Professor Pius Egbelu, Professor Deji Badiru, Professor Augustine Esogbue, Professor Celestine Ntuen, and Professor Nicholas Damachi, organized MANUTECH from 1996-2002 as a way to foster technology transfer from the US to Africa. Professor Okogbaa served as Technical Organizing Committee Chairman from 2000-2002 and was responsible for Technical Sessions as well as fund raising and other arrangements. During the 2002 Conference at the Hotel Presidential in Port Harcourt, the Special Assistant to then President on Manufacturing, Alhaji Adulkadir, delivered the welcome address on behalf of the President. Also representing the Minister of Science and Technology (Professor Isoun) was the then Special Assistant to the Minister, Dr. Emmanuel Denenu.

EXPERIENCE

- 2/10-Pres. Vice Chancellor, Federal University Wukari, Taraba State, Nigeria
- 8/06-Pres. Professor of Industrial & Management Systems Engineering (on Leave of Absence)
- 8/00-8/06 Director, Institute on Black Life & the Center for Africa and the Diaspora
Professor of Industrial & Management Systems Engineering
- 8/99-8/00 Interim Director, Institute on Black Life and the Center for Africa & the Diaspora
- 1998-'99 Professor & Director, Center for Computer Integrated Engineering and Manufacturing
- 1989-'98 Associate Professor, Director, Center for Computer Integrated Engineering and Manufacturing (1990-).
- 01-12/95 Faculty Intern, Graduate School, University of South Florida,
Interim Associate Dean Graduate School, University of South Florida (8/95-12/95).
- 1989 Visiting Prof of Simulation of Advanced Manufacturing Systems, University of Bari, Italy
- 1984-'89 Assistant Professor. Member of Graduate Faculty and Chair for Operations Research and Statistics, University of Cincinnati, Department of Mechanical & Industrial Engineering.
- 1983-'84 Graduate Teaching Associate/Instructor, University of Cincinnati, Cincinnati, Ohio. Taught courses in Engineering Statistical Methods and Reliability.
- 1981-'82 Graduate Teaching Assistant, University of Cincinnati, Cincinnati, Ohio. Taught courses in Computer Programming and Engineering Statistical Methods.
- 1981 Research Associate, Biomechanics Engineering Laboratory, University of Cincinnati.
- 1980-'81 Graduate Teaching Assistant, University of Cincinnati, Cincinnati, Ohio. Taught courses in Computer Programming. Project Consultant/Management Fellow, The Christ Hospital, Cincinnati, Ohio. Developed probabilistic scheduling and maintainability models for new x-ray equipment. Analyzed existing and planned admitting procedures.
- 1978-79 Graduate Research Associate, The Ohio State University, Columbus, Ohio. Developed a prototype model of the University Hospital's automated material handling system and simulation model for system verification and validation.
Graduate Engineering Intern, Office of Research, State of Ohio Office of Economic Development. Responsible for software development and system analysis.

SERVICE TO THE ENGINEERING PROFESSION

A Fellow of the Institute of Industrial Engineers (IIE), (membership no.: 3937113), Dr Okogbaa served as the Vice President of Industries and a member of the Technical Operations Board, the Institute of Industrial Engineers (1997-99). He was the 1991 recipient of the IIE Quality and Reliability Engineering Division Award of Excellence and served as Director of the Quality and Reliability Engineering Division 1989/90 and the Design Interest Group, 1992/1994. From 1989/90, Director-Elect, QC&RE, Div.,

1988/89, Newsletter Editor, QC&RE Div., 1987/88, President, Cincinnati Chapter IIE, 1986/87, Vice President, Cincinnati Chapter IIE, 1985/86, Secretary Cincinnati Chapter IIE, 1984/85 Program Chairman, QC&RE Division, IIE Spring Conference, Chicago, 1985. Program Chairman, QC&RE Division, IIE Spring Conference, Dallas, 1986, Member of ALPA PI MU since 1978.

- Member of the Organizing Committee and Moderator, Industrial Engineering Research Conference, Atlanta GA, May 1994.
- Served as Session & Track Chair for numerous IIE Research Conferences.
- Faculty Advisor IIE Student Chapter (1993), and ALPA PI MU (1995), USF.
- Editorial Board Member, IIE Transactions, Focused Issue on Quality and Reliability, 1995-
- Book Review Editor, IIE Transactions, Focused Issue on Quality and Reliability (2001-).

Editorial & Related Duties

Editorial Board, International Journal of Reliability, Quality, and Safety Engineering, 2010-

Editorial Board, IIE Transactions on Quality & Reliability 1996-2000

Associate Editor, IEEE Transactions on Reliability, 1995-1999

Editorial Board, International Journal of Quality Science 1995-

Editorial Board, Journal of Quality Management, 1994-1998

Book review Editor, Journal of Quality Management, 1993-94

Editorial Board, World Conference on Robotics Research Refereed Proceedings, 1989

IEEE Transactions on Reliability, IIE Transactions, Journal of Design & manufacturing

Journal of Intelligent Manufacturing, International Journal of Production Research

Journal of Production Planning and Control

Panel and Mail Review

He serves as reviewer for US National Science Foundation, the Canadian National Science Foundation, and the City University of Hong Kong Research Council, and State of Louisiana University System. Dr Okogbaa also serves as a reviewer for over 12 archival journals and is frequently consulted in the areas of Quality, Reliability, and Engineering Design by government as well as public and private organizations

Service To Other Engineering Professional Societies

Senior Member SME (CASA, RI); A Senior member of ASQ, IEEE, and Sigma XI; Dr. Okogbaa serves on the Board of Directors of RAMS (Reliability and Maintainability Symposium) as the Institute of Industrial Engineers representative. Annual participant in INFORMS. He served as Co-Chair PROCIEEM 1990 a State of Florida sponsored International Conference on Manufacturing Productivity.

Service to Humanity and/or Community

Professor Okogbaa served or is currently serving on several professional and community boards.

- Member, Institutional Review Board (IRB), the University Community Hospital, Tampa Florida, (2004-)
- Member, Community Advisory Council of the Children's Board of Hillsborough County(2000-)
- Member of the Education Task force of the USA-Africa Education Foundation (2000-).
- Chair International Technical Committee, Manufacturing Technology Conference (MANUTECH), an International Conference for the Transfer of Manufacturing Technology to Africa. (2002-)
- Faculty Liaison for Black Faculty & Staff Association at the University of South Florida (2000).
- Vice President, Back Faculty & Staff Association at the University of South Florida (2005).
- Faculty advisor for the USF student chapter of NSBE- the National Society of Black Engineers Inc. (1997-03)
- Member, Ivory Club of Tampa Bay, an organization of African Professionals. Social Secretary (1995-97), and Financial Secretary (98-2000), Vice President (2006-).
- co-Chair, Blacks and Wax Museum Planning committee, a collaborative effort between the community and the University of South Florida (2001)

- Founding member & member, Board of Directors, Great Blacks Heritage Museum (2001-2006)
- Member of the Board of Directors of the Black Heritage Festival (2001-2006)
- African American Family Advocacy Council (2000-2003)

Consulting & Workshops

Dr. Okogbaa has conducted workshops and seminars in the areas of Reliability & Quality, ***Total Productive Maintenance (TPM), Six-Sigma, Statistical Quality Control and Statistics*** for the following organizations (topical areas in parenthesis)

- Reliability and Maintainability Symposium --RAMS (Six-Sigma)
- GE (***SQC*** Training)
- NIOSH (***Statistical Design***)
- The Bay Area Manufacturers Association—BAMA (***TPM & SQC***)
- Critikon Inc (***SQC, Six-Sigma***),
- Institute for Advanced Manufacturing Sciences-IAMS (***Manufacturing Simulation***),
- Ford Motor Company (***SQC***)
- Seagate Technologies (***SQC & Design of Experiments***)
- CompuThon (***Statistics***)
- Kaiser Aluminum Corporation (***Reliability & TPM***)
- Critikon, Inc. (***SQC, Design of Experiments***)
- Univol (***ISO 9000***)
- Square D Corporation (***ISO 9000***)
- Unitron Inc. (***SQC software***)
- Broward County, Florida (***Inventory Analyses***)
- Ingersol-Rand (Fault Tree, Reliability)

PROFESSIONAL AND SOCIETY AFFILIATIONS

Served as VP of Industries, Institute of Industrial Engineers, 1998-2000

Senior Member SME (Society for Manufacturing Engineers) 1991-

Senior Member, American Society of Quality (ASQ), 1994-

Institute of Industrial Engineers, (IIE) 1977-, (Senior Member 1984-

Director, Quality and Reliability Engineering Division, IIE, 1989/90

Director-Elect, Quality and Reliability Engineering Division (QC&RE), IIE, 88/89

Newsletter Editor, QC&RE Division, IIE 1987/88

President, Cincinnati Chapter, IIE 1986-87.

Vice President, Cincinnati Chapter, IIE, 1985-86

Secretary Cincinnati Chapter, IIE, 1984-85

Chair, Design Interest Group, IIE, 1992-present

Member, Board of Directors, RAMS/IEEE (Reliability & Maintainability Symposium, 1990-present

TEACHING AWARDS, DISTINCTIONS

1. Teaching Awards and Other Recognition

Ida S. Baker Distinguished Minority Educator Award, State of Florida, (University of South Florida Nominee), 1996.

2. New Courses Developed:

Applied Regression Analysis.

Quality Control Laboratory (with Dr. Das)

Engineering System Safety (To be taught Summer 1998 in the College of Public Health)

Quality Assurance Plans

3. Innovative Methods

He employs Active Learning Strategies and Techniques in all his classes. These include group projects, sharing and participation in small groups, short discussions followed by group work, writing presentations, etc.

DOCTORAL DISSERTATION

Chair and Director

- 1) Dr. Wilkistar Otieno, 2009, University of South Florida, now Assistant Professor, University of Milwaukee
- 2) Dr. Wei Hou, Dec., 2003, University of South Florida, Senior Reliability Engineer, Research in Motion, Canada.
- 3) Dr. Patricia Zarate, August, 2003, University of South Florida
- 4) Paul Robinson, Ph.D May, 2000, University of South Florida
- 5) Dr. Xia Peng, Ph.D (IE), May 1998, University of South Florida
- 6) Dr. Li Jiang, Ph.D (IE), (December 1995), University of South Florida, Software Engineer,
- 7) Dr. Chi-wei Chen, Ph.D (IE), April, 1994), University of South Florida, Instructor, Taiwan
- 8) Dr. Jiansheng Huang, Ph.D (IE), 1993, University of South Florida, Staff Reliability Engineer, Carrier Corporation, Syracuse, NY
- 9) Dr. Fred Chen, Ph.D, (IE), 1989, University of Cincinnati, Assistant Professor, Thomas More College, Crestview Kentucky
- 10) Dr. Rag Aggarwal, Ph.D, (IE), 1989, University of Cincinnati, Owner of a Manufacturing Engineering consulting company in Cincinnati, Ohio, formerly, Vice-President of Research, Metcatt Associates

Co-chair

- 11) Dr. al-Najjar Mazen, Ph.D (Engineering Science), Dec. 1993, University of South Florida
- 12) Dr Ziad Yammine, Ph.D, (IE), 1991, University of Cincinnati, Research Engineer of a Robotics Company in St. Louis MO.

Committee Membership:

- 1). Mark Weatherspoon, Ph. D., Florida State University, 2002
- 2) Jaesik Min, Ph. D, Computer Science, USF, 2002
- 3). Felipe Pachano, Ph. D (IE), 2001, University of South Florida
- 4). George Yanev, Ph. D (Math), 2001, University of South Florida
- 5) Henry Roberts Ph. D(Math), 2000, University of South Florida
- 6). Eduardo Lerin Ph. D (IE), 2000, University of South Florida
- 7) Abhijit Gosavi, Ph.D. (IE), 1999, University of South Florida
- 8) Kejian Liu, Ph.D., (Mathematics), 1998, University of South Florida
- 9). Vincent Camara, Ph.D, (Mathematics), 1997, University of South Florida, faculty with the University of North Carolina, Charlotte.
- 10) Greg Deal, Ph. D, (Engineering Science), 1996, University of South Florida faculty with University No. Illinois
- 11) Dr. Mark Dexter, Ph. D, (EE), 1995, University of South Florida, Engineer with Sandia Labs

- 12) Dr. Weon Sam Chung, Ph.D, (CSE), 1995, University of South Florida, Private Sector
- 13) Dr. Ronald Bell, III, Ph. .D. (EE), 1995, University of South Florida, Engineer with Motorola.
- 14) Dr. Lissa Gilbreath, Ph.D, (IE), 1990, University of South Florida, Assistant Professor, Florida, A&M University
- 15) Dr. Tom Huston, Ph.D, (IE), 1985, University of Cincinnati, Safety and Product Liability consultant and adjunct Assoc. Professor of Industrial Engineering University of Cincinnati
- 16) Dr. Marge Cunningham, Ph.D, (Business), 1986, University of Cincinnati, Assistant Professor of Business, Xavier University, Cincinnati, Ohio
- 17) Dr. Joel Kahn, Ph.D, (IE), 1987, University of Cincinnati, Manager, Technical Services, Proctor and Gamble Company, Cincinnati, Ohio
- 18) Dr. Linda Cahill, Ph.D, (IE), 1988, University of Cincinnati
- 19) Dr. Kader Mazouz, Ph.D, (IE), 1987, University of Cincinnati, Assistant Professor of Mechanical Engineering, Florida Atlantic University.

Helped guide more than 10 (two) doctoral students in defining and framing their research

Master's Thesis

Director

- 1) Swapnil Dixit, May, 2007
- 2) Sulabh Jain, May, 2006
- 3) Indira Polavarapu, May, 2005
- 4) Vijayalakshmi Sampath, March, 2003
- 5) Naren Allasundaram, August, 2002
- 6) Adriana Hernandez, August 2002
- 7) Sri-Lakshmi Devarakonda, 2002
- 8) Ashwin Varma, IE, 1999, QA/Reliability Engineer, Integrated Device Technology, Inc
- 9) Kona Bharat, GTE Data Services, December 1995
- 10) Govandaswami, Subu, June 1995, The WEST CO, Clearwater, Florida
- 11) Ganesh Babu, December 1994, University of South Florida
- 12) Paul Bernasconi, 1993, McDill Airforce Base, Florida
- 13) Theresa Miller, 1990, University of Cincinnati, Engineer, General Electric Co, Cincinnati
- 14) Justin Sucato, 1990, University of Cincinnati, Senior Engineer Bell Atlantic
- 15) Ming-Te Chen, 1989, University of Cincinnati, Doctoral Candidate, Georgia Tech
- 16) Gebre Mogos, 1988, University of Cincinnati, Engineer, IBM
- 17) Corinne Mimouni, 1986, University of Cincinnati, Doctoral Candidate, University of Cincinnati

Over 35 non-thesis MS Students Supervised

Thesis Committee Membership.

- 1) Okogbaa has served on over 30 Thesis committees. A sample of those include
- 2) Swetha Thagella, 2003, University of South Florida
- 3) Bhavaniprasad A.Rao, 2003, University of South Florida
- 4) Krishna Mohan Kanchibhatta, 1998, University of South Florida, Detroit, MI
- 5) Nitin Chhabra, 1998, University of South Florida, Senior Engineer, Clearwater, FL
- 6) Uday Bidirukontham, 1997, University of South Florida, Detroit MI
- 7) Srikanth Tangirala 1997, University of South Florida, Software Company, Morton, IL
- 8) Carlos Saenz, 1997, University of South Florida
- 9) Eduardo Lerin, 1996, University of South Florida, Doctoral Student, USF
- 10) Chandeeep Singh, 1995, University of South Florida
- 11) Hemal Mehta, 1995, University of South Florida
- 12) Steven Olen, 1995, AT&T Paradyne, Largo, Florida
- 13) William Bentley, 1993, Procter & gamble, Albany Georgia
- 14) Samir Benmaklouf, 1992, Ph.D student, North Carolina State Univ. Raleigh, NC
- 15) Gary Maingot, 1991, University of South Florida, Quality Engineer, The Critikon Company, Connecticut
- 16) Dongyan Yao, University of South Florida, April, 1992, Reliability Engineer, Carrier Corp, Syracuse, New York
- 17) Rajendran, Prashant, University of South Florida, 1991, Systems Engineer in a Manufacturing firm in Jacksonville, Fl
- 18) Dr. Shih Pan, 1989, University Cincinnati, Post-doctoral fellow, NIOSH, Cincinnati
- 19) Tim Haller, 1988, University of Cincinnati, Engineer, General Electric, Cincinnati, Ohio
- 20) Rick Allgeier, 1988, University of Cincinnati, employment, unknown
- 21) John Hoffman, 1987, University of Cincinnati, Engineer, GE, Cincinnati, Ohio

Undergraduate Honors Thesis

- 1) Regina Nuzzo, University of South Florida, Graduate Student, Stanford University

TECHNICAL ACHIEVEMENTS

Patent No. 5971248

The University of South Florida was issued US patent No. 5971248 under Dr. Okogbaa's name, entitled: "Adaptive Gripper for a Robotic Manipulator" in February 1999. The focus of this work was the development of a universal Robotic manipulator that would adapt to most product sizes and loads without the use of a customized manipulator arm. Typically most robots arms are designed for specific loads, which effectively limit their use within such specifications. This invention would accommodate loads within the kinematics limits of the manipulator joints and would not be necessarily limited by load size.

Research on Transient Analysis of the Reliability of Complex Systems

Professor Okogbaa has done pioneering work on Reliability Analysis and Maintenance planning tools for the evaluation of the Reliability of Complex Systems under Transient State.

Research on the emerging area of Nano-Reliability

Very recently initiated Dr. Okogbaa in collaboration with Stanford University and SEMATECH has initiated Research in the emerging area of nano-reliability. A collaborative proposal among, USF, Stanford, and SEMATECH was for \$800+ was submitted to NSF October 1, 2008

SPONSORED RESEARCH

The Annenberg Foundation, Principal Investigator; Infusing Science, Technology, Engineering and Math (STEM) into the K-5 curriculum, \$2.87 million, submitted December 2008, Pending.

National Science Foundation, Principal Investigator: Nanoreliability; Reliability of Gate Dielectric Films of Ge CMOS Devices, \$863,031, submitted October 2008, Pending.

National Science Foundation, Principal Investigator: Analysis and Implementation of the Decision Based Engineering Design (DBeD) Framework, \$542,129, submitted October 2008, Pending

National Science Foundation, Principal Investigator for USF **STARS II** Project- A USF Graduate & Undergraduate Fellows Project, Funding, \$1.8 million, Funding, September 2007-August 2011,

Florida Department of Education, 21st Century Community Learning Centers (CLC), A USF Faith-based Community Integrated Access PROGRAM (**FACIA**), Funding, \$2,945,000, 2004-2009

US Department of State, Citizen Exchange Program in Cameroon: USF Cameroon Mayors Project, Funding, \$105,595, September 2004-August 2005

National Science Foundation, Principal Investigator for USF **STARS** Project- A USF Graduate & Undergraduate Fellows Project, Funding, \$1.61 million, September 2002-August 2007

National Science Foundation, Resource in Support of Excellence (**RISE**): A USF/NSF Computer Science, Engineering, & Mathematics Scholarship Program, CSEMS, Funding, \$400,000, 2003-2009.

Digital Partners, E-Learning Project in Africa, Funding, \$100,000, Oct 2003-September 2006

State University System of Florida, Principal Investigator for: "Creating Florida's Competitive Workforce in STEM through Education," Educational and General Legislative Budget Request (LBR), funding \$650,000, May 2007-April 2008, pending

Graduate Assistance in Areas of National Need (GAANN, CDFA No. 84.200): A USF Interdisciplinary Doctoral Fellows Program, \$1, 943, 430, August 2006-July 2009, submitted, Nov 7, 2005, rejected, to be resubmitted.

Department of Health and Human Services, Public Health Service
Principal Investigator: TAPESTRY "Technology for Aids/HIV Prevention and Education: Strategies For Training Responsible Youth, \$1,705,670, Dec 20001-Nov 2005, Denied

Hillsborough County Children's Board, Principal Investigator for: **LEAD**: Leadership Development and Anti-Violence Development, \$20,000, July –September 2000

National Science Foundation, Co-Principal Investigator for: NSF Design and Manufacturing Grantees Research Conference, Tampa, Florida, Jan 6-9, 2001, \$289,000, (Dr. Das, Co-PI)

National Science Foundation, Principal Investigator for: Loss Function and Intervention Analyses for Complex Systems under Transient Operation, \$359,333, (with Drs. Das & Tsokos), July 1999-2002, Denied

National Science Foundation, Principal Investigator for: The Impact of TQM Practices on Construction Worker Safety & Vertical Fragmentation, \$ 408,092 (with Drs. Khator, McCright, Bernard, and Mr. Doherty), July 1998-2001, Denied

National Science Foundation/Texas A&M University, Principal Investigator for: "Travel Supplement for NSF Grantees Conference, Monterrey, Mexico, January 5-8, 1998", Funding: \$1,500

National Science Foundation, Principal Investigator for: Hybrid Intelligent System for Fault diagnosis and Preventive Maintenance, Funding Requested: \$300,143, (with Dr. Perez), *July 98-Aug 2001, Pending.*

Bausch & Lomb, Principal Investigator for: Line balancing Problem, Funding requested: \$16,000 (with Professor Gooding), July 97-Dec 1997

National Science Foundation, Principal Investigator for: Maintenance Planning for Multi-unit Transient Systems with Aging and Repair, Funding requested: \$295,836 (with Dr. Das), July 97-Aug 2000, denied, to be resubmitted

National Science Foundation, Principal Investigator for: Design for Maintenance: An Integration of Maintainability Criteria Into Product Design, Funding Requested: \$306,319 (with Dr. Khator), *July 97-Aug 2000, denied, to be resubmitted.*

Johnson & Johnson Corporation, Principal Investigator for: "Calibration Adjustment Project", Funding, \$5,800, January -May 1996.

National Science Foundation, Principal Investigator for: "Preventive Maintenance Policy for Complex Systems Under Transient State," Funding \$158,123, Oct. 1995-Oct. 1998.

Anchor Glass Container, Principal Investigator for "Improving Mold Quality by Minimizing the Effects of Inaccurate Design" Funding \$9,585, June -August 1995, \$7,855, August -December, 1995, Total Funding of \$22,540, June -December, 1995

National Science Foundation, Principal Investigator for: "Research Experience for Undergraduates (REU)", Funding \$10,000, Oct. 1994- May 1995.

Office of Budget and Management Policy, Broward County, Principal Investigator for:"Study of Mass Transit Inventory Management Practices," Funding \$10,000, December 1994-March 1995.

National Aeronautics and Space Administration, Principal Investigator for:"Preventive Maintenance for Complex Systems under Transient State," Funding, \$224,402, 1994-1998, pending, under Review at Kennedy Space Center

National Aeronautics and Space Administration, Co-Principal Investigator for: "Pilot Bridge Program For Minority Engineering Students", Funding, \$190,000, 1994-1997, (\$59,777 funding approved for 1997)

National Science Foundation, Principal Investigator for: "A Knowledge-Based Parameter Design System for off-line Quality Control," Funding, \$25,000, July 1994- March 1996.

NIST/NSF/ASA Senior Research Fellow and Associate Program

Principal Investigator for: "A knowledge-based system of parameter design for off-line quality control," Funding approx. \$42,000, May-August 1994, Denied

National Aeronautics and Space Administration, Co-Principal Investigator for: "Pilot Bridge Program For Minority Engineering Students", Funding: \$43,976, Feb 1,- Aug 31, 1993

National Science Foundation, Principal Investigator for: "Research Experience for Undergraduates (RED)", Funding \$5,281, July 1992- May 1993

DARPA, Principal Investigator for: "Modeling and Knowledge-based Simulation for Maintenance of Complex Systems" Submitted May 1992, Funding \$280,954, Denied

National Science Foundation, Principal Investigator for: "A Computer-Integrated Statistical Process Control System for SMT Circuit Board Production, A Continuation", A Faculty Summer Internships Initiative (\$14,000), with the Critikon Inc., (\$20,000): Total Funding: \$35,000, September 1992-December, 1994.

National Science Foundation, Principal Investigator for: "Travel supplement for NSF Grantees Conference, Georgia Institute of Technology, January 8-10, 1992", Funding: \$1,003, 1992

National Aeronautics and Space Administration, Co-Principal Investigator for: "Pilot Bridge Program For Minority Engineering Students", Funding: \$21,934, March 1,- August 31, 1992.

Square D Corporation; Principal Investigator for: "Development of A comprehensive Quality Assurance System", Funding: \$20,869, September, 1991- August 1992.

Office Of Naval Research (ONR), Principal Investigator for: "An Evaluation of Mental Fatigue on Knowledge Worker Performance" Funding: \$474,032, 1991, Denied.

National Science Foundation, Principal Investigator for: "A Computer-Integrated Statistical Process Control System for SMT Circuit Board Production", A Faculty Summer Internships Initiative (\$7000), with the Critikon Inc., (\$7,000): Total Funding: \$14,000, July 1991- June 1992

State of Florida, Co-Principal Investigator for: "Suncoast Regional Technology Transfer Center Project". Funding: \$28,694, 3/15/90-3/14/91

Critikon Inc, Principal Investigator for: "Data Management Software Development For A Bar-Code Data Acquisition Network" Funding: \$7,000, August 1990-December, 1991

Florida High Technology Council, Co-Principal Investigator for: "Groundwork for A New Center For Computer Integrated Engineering & Manufacturing". Funding: \$18,000, 1989- 1991

National Institute for Occupational Safety and Health (NIOSH), Co-Principal Investigator for "Industrial Engineering/Occupational Safety Graduate Training & Research in the Cincinnati ERC." Funding: \$109,921, 1988-89

Institute for Advanced Manufacturing Sciences, Principal Investigator for: "Development of Maintenance Decision Methods for Flexible Automated Production Systems." Funding: \$25,000, 1988- 1990

National Science Foundation, Principal Investigator for: "Planning Grant for Maintainability Models for Automated Production Systems." Funding: \$10,000, 8/1/86-6/31/87

Kaiser Aluminum and Chemical Corporation, Principal, Investigator for: "Maintainability Models for Equipment and Key Mechanical Components," Funding: \$25,000, 1985-88.

National Science Foundation, Principal Investigator for: "Presidential Young Investigators Award." Funding: \$500,000, 1986, Denied.

University Of Cincinnati, Research Council, Principal Investigator for: "IBM-PC AT," Funding, \$7,000, 1985.

Public Health Service (NIOSH), Participant for, "Industrial Engineering/Occupational Safety Graduate Training & Research in the Cincinnati ERC." Funding: \$149,630, 1987-88, \$160,000 1986-87

BOOKS, JOURNALS AND OTHER REFEREED PUBLICATIONS

Textbooks

Okogbaa, O.G., Mazouz, K, Kapur, K: Design and Optimization Models for Six-Sigma Process, J Ross Publishers, to appear Fall 2013.

Chapters or segments of Books

Albino, V., Messeni Petruzzelli, A., Okogbaa, O.G. (2008) Managing logistics flows through enterprise input-output models, in Huo, Y., Jia, F. (eds.) *Supply Chain, The Way to Flat Organisation* (I-Tech Education and Publishing, Wien, Austria) ISBN 953761935-4

Okogbaa , O. G, Otieno, W, ‘Design For Maintainability’ in **Handbook of Environmentally Conscious Mechanical Design**, John Wiley & Sons, 2006 (Myer Kutz, editor)

Okogbaa, O. G., Albino, Vito “Techniques in the Synchronization of Production Rate with Demand Rate in Manufacturing Systems" in Computer-Aided Design, Engineering, and Manufacturing: Systems Techniques and Applications, Volume IV, Optimization Methods for Manufacturing (Cornelius T. Leondes, ed), CRC Press, 2000, **ISBN/ISSN: 0849309964**.

Okogbaa, O. G., "Reliability Computation," Chapter in: **Industrial Engineering Handbook**, (William Hodson, ed), New York, NY: Mc-Graw Hill, pp. 11.102-11.115, 1992.

Okogbaa, O. G., "Computer application in service industries," Book Chapter in: **Computers and Computer Applications in Developing Countries**, (U. Damachi, R. Souder, N. Damachi, eds), London, UK: McMillan Press, pp. 155-164, 1987.

Albino, V., Okogbaa, O. G., "Performance Evaluation of Unreliability Work Stations in Flexible Manufacturing Systems, in **Production Research, Approaching the 21st Century**, (Mark Pridham, Christopher O'Brien, eds), Taylor & Francis, Nottingham UK, pp. 118-132, 1991

Okogbaa, O.G., Shell, R.L., Patel, M., Damachi, N., "Scheduling Rules for Just-in-Time Policy in a Computer Integrated Manufacturing Environment," in **Expert Systems**, Botten and Raz (editors), Industrial Engineering and Management Press, pp. 68-75, 1988

Okogbaa, O.G., M. Patel, N. Damachi, R.L. Shell), “Determining the Cycle Time of a Robot Assembly Operation," in **Robotics and Industrial Engineering, Vol II**, Fisher and Maimon (editors), Industrial Engineering and Management Press, pp.155-164, 1986.

Shell, R. L., Okogbaa, O. G., "The Effect of Mental Fatigue on Knowledge Worker Performance," in **Work Measurement, Principles and Practice**, (R. Shell, ed), Industrial Engineering and Management Press, pp. 149-156, 1986.

2 Articles

a. **Journal and Refereed Articles**

Okogbaa, O.G., Otieno, W., Devarakonda, L., Albino, V. Design of Sequential Monitoring Plans for a Discrete Process Using Informative Conjugate Priors, *International Journal of Reliability, Quality, and Safety Engineering*. Vol. 17, No. 1 (2010) 57–87

Albino, V., Messeni Petruzzelli, A., Okogbaa, O.G. (2008) Managing logistics flows through enterprise input-output models, in Huo, Y., Jia, F. (eds.) *Supply Chain, The Way to Flat Organisation* (I-Tech Education and Publishing, Wien, Austria) ISBN 953761935-4

Petruzzelli, A, Albino, V, Okogbaa, O. G., “Managing Logistics Flows Through Enterprise Input-Output Models” *International Journal of Operations and Quantitative Management*, 16, no.1, 2010.

Okogbaa, O.G., Otieno, “Reliability Modeling of Transistor Gates at the Nanoscale,” *Proceedings, Reliability and Maintainability Symposium*, Fort Worth, TX, January 2009.

Okogbaa, O., Otieno, W., Peng, X., Jain, S., “Transient Analysis of Maintenance Intervention of Continuous Multi-unit Systems,” *IIE Trans.*, 40: 10, 971-983, 2008.

Jayatileka, S., Okogbaa, O. G., “Accelerated Life Testing for Speedier Product Development: Problems and Strategies”, *Referred Proceedings, Reliability and Maintainability Symposium*, New Port Beach, CA, January 2006.

Polavarapu, I., Okogbaa, O.G., “An Interval Estimate of Mean-Time-To-Failure for a Product with Reciprocal Weibull Degradation Failure Rate,” *Referred Proceedings, Reliability and Maintainability Symposium*, Alexandria, VA USA , January 2005, 261-265

Okogbaa O.G.; Xia Peng , Sampath, V, “Time series intervention analysis with Application to Multi-Unit System Maintenance Management,” *International Journal of Reliability, Quality and Safety Engineering*, Vol. 11, no 3, 243-256, 2004.

Jayatileka, S., Okogbaa, O. G., “Accelerated Life Test for Identifying Potential Failure Modes and Optimizing Critical Design Parameters in a Journal Bearing”, *Proceedings, Reliability and Maintainability Symposium*, Tampa, FL Jan 2003, 101-105

Pontrandolfo, P., Gosavi, A., O. G. Okogbaa, and T.K. Das, *Global supply chain management: a reinforcement learning approach*, *International Journal of Production Research*, vol. 40, no 6, 1299-1317, 2002.

Hou, W., Okogbaa, O.G, “A Simplified Availability Modeling Tool for Networks with 1:1 Redundant Software-Hardware Systems,” *Referred Proceedings, Reliability and Maintainability Symposium*, Seattle, WA Jan 2002, 92-96

Okogbaa, O. G, Jayatileka,S., “Accelerated Life Test for Identifying Potential Failure Modes and Optimizing Critical Design Parameters in a Journal Bearing”, *Proceedings, Reliability and Maintainability Symposium*, Philadelphia, PA, Jan 2001, 72-74

Hou, Wei, Okogbaa, O.G, “Reliability Analysis for Integrated Networks with Unreliable Nodes and Software Failures in the Time Domain”, *Referred Proceedings, Reliability and Maintainability Symposium*, Los Angeles, CA, Jan 2000, 113-117

Robinson, P. and O. Geoffrey Okogbaa, "Post-Warranty Distribution: A New Approach To Modeling The Reliability Of Products With Built-In Obsolescence", SAE 1999 Off-Highway & Power Congress & Exposition, Indianapolis, IN, Sep 13-15, 1999, paper # 1999-01-2861

Pontrandolfo, P., Okogbaa, O.G., "Global Manufacturing: A review and A Framework for Planning in a Global Corporations," International Journal of Production Research, vol. 37, no., 1,1-19, 1999.

Garavelli, C., Albino, V., Okogbaa, O. G., "Vulnerability in Production Systems: A Case Study," International Journal of Production Research, vol. 36, no. 11, 3055-3066, 1998.

Okogbaa O.G.; Xia Peng, "Time series intervention analysis for preventive/predictive maintenance management of multiunit systems," IEEE International Conference on Systems, Man, and Cybernetics, Volume: 5, 1998 Page(s): 4659 -4664

Huang, J., Okogbaa, O.G., "A Heuristic Replacement Scheduling Approach For Multi-Unit Systems with Economic Dependency," International Journal of Reliability Quality and Safety Engineering vol. 3, no.1 (1996) 1-10.

Violante, N., Pontrandolfo, P., Okogbaa, O. G., "The Planning of a Global Corporation by a Hopfield Neural Network, Proceedings, Flexible Automation and Intelligent Manufacturing (FAIM) 1996, Atlanta, GA

Okogbaa, O. G., Peng, X., "A Methodology for Preventive Maintenance Analysis under Transient Response," Referred Proceedings, Annual Reliability and Maintainability Symposium (RAMS), Las Vegas Nevada, January 26-29, 1996.

Huang, J., Miller, C., Okogbaa, O. G., "Optimum Preventive Replacement Interval for the Weibull Life Distribution; Solutions and Applications, Referred Proceedings, Reliability and Maintainability Symposium (RAMS), Washington DC, January 1995.

V. Albino, M. Dassisti, Okogbaa, G., "Approximation Approach for the Performance Analysis of Production Lines under A Kanban Discipline," International Journal of Production Economics, 40 197-207, 1995.

Okogbaa, O. G., Shell, R., Clark, G., " Network Modeling and Simulation of an Automated Materials Handling System," International Journal of Physical Distribution and Logistics Management, Vol. 24 (8), pp. 14-30, 1995.

Hiltunen, R., Petrus, R., Okogbaa, O.G., "The Design Development of An Adaptive Gripper for A Robotic Manipulator", Proceedings, RI/SME 5th World Conference on Robotics Research, MIT, Cambridge, MA, 1994

Okogbaa, O. G., Shell, R., Filipusic, D., " On the Investigation of the Neurophysiological Correlates of Knowledge Worker Mental Fatigue Using the EEG Signal," Journal of Applied Ergonomics, vol. 25 (6), 1994.

Huang, J., Okogbaa, O.G., "Opportunistic Maintenance Schedule Development- A Heuristic Approach," Proceedings of the ISSAT International Conference on Reliability and Quality in Design, Seattle WA, USA, pp. 73-76, January, 1994.

Jiang, L., Okogbaa, O.G., "A Knowledge-Based Parameter Design System For Off-Line Quality Control," Proceedings of the ISSAT International Conference on Reliability and Quality in Design, Seattle WA, USA, pp. 198-202, January, 1994.

al-Najjar, M., Okogbaa, O.G., "A Knowledge-Based Framework for Opportunistic Part Scheduling for Flexible Manufacturing," *Journal of Design and Manufacturing*, No., 4, pp. 107-114, 1994.

Okogbaa, O.G., Chen, C., and Huang, J., T, Borkes, J. More, "Process Control of PC Board Assembly", *Electronics Manufacturing_Engineering, Technical Quarterly, Society of Manufacturing Engineers (SME)*, Vol. 8, No.3, pp. 1-3, third Quarter, 1993.

Vaiyapuri, V., and Okogbaa, O.G., "An Integrated Design Approach for Feature Based Manufacturing Using Concurrent Engineering", *Refereed Proceedings of the 2nd Industrial Engineering Research Conference, Los Angeles, CA*, pp. 16-20, May 26-27, 1993

L. Leung, W. Miller, Okogbaa, O.G., "Evaluation of Manufacturing Expert Systems: Framework and Model," *The Engineering Economist*, vol 37, no 4, pp. 293-314, 1992

Okogbaa, O.G., M. Chen, C. Changchit, R. Shell, "Manufacturing System Cell Formation and Evaluation Using A New Inter-Cell Flow Reduction Heuristic," *International Journal of Production Research*, vol. 30(5), pp. 1101-1118, 1992.

V. Albino, G. Carrella, Okogbaa, O.G., "Maintenance Policies in Just-in-Time Manufacturing Lines," *International Journal of Production Research*, vol. 30(2), pp. 369-382, 1992.

N. Kittusamy, Okogbaa, O. G., A. J. G. Babu" A preliminary Audit for Ergonomics Design In Manufacturing Environments," *Industrial Engineering*, Vol. 24, no. 7, pp. , 47-53, July 1992.

L. Schleifer, Okogbaa, O.G., "System Response Time and Method of Pay: Cardiovascular Stress Effects in Computer-Based Tasks," *Ergonomics*, vol. 33, No. 12, pp. 1495-1509, 1990.

V. Albino, Okogbaa, O.G., and R. Shell, "An Integrated Algorithm for Performance-Reliability Evaluation of Flexible Automated Production Systems," *Journal Computers & Industrial Engineering*, vol. 18, No 4, pp. 547-558, 1990.

Okogbaa, O.G., R. Shell, G. Clark, "Network Modeling and Simulation of an Automated Materials System Using Q-Gert Networks," *IASTED International Symposium on: Applied Modeling and Simulation*, (M. H. Hamza, ed), Lugano Switzerland, June 1990, pp. 150-153.

Albino, V., Okogbaa, O.G., "Performance Evaluation of Unreliability Work Stations in Flexible Manufacturing Systems," *Extended Summary, Xth International Conference on Production Research*, Taylor & Francis, Nottingham England, , pp. 1120-1122, August 1989

Okogbaa, O.G., Shell, R.L., "The Measurement of Knowledge Worker Fatigue." *IIE Trans.*, 18, 4, pp. 335-342, 1986.

Damachi, N., Okogbaa, O.G., Shell, R., "Safety and Performance Enhancement of Water Crews," *Proceedings, International Industrial Ergonomics and Safety Conference, Louisville, KY, 1986*. Reprinted in *Trends in Ergonomics/Human Factors*, Vol. III, (W. Karwowski, ed.), Elsevier Sc. Publishers, Amsterdam, pp. 985-993, 1986

Huston, T., Shell, R., Okogbaa, O. G., " An Investigation of Mental Fatigue Measurements during an Analytical Task," *Proceedings, International Industrial Ergonomics and Safety Conference, Louisville, KY, 1986*. Reprinted in *Trends in Ergonomics/Human Factors*, Vol. III, (W. Karwowski, ed.), Elsevier Sc. Publishers, Amsterdam, pp. 560-566, 1986.

Damachi, N., Okogbaa, O.G., Shell, R., "Safety Considerations for Water Distribution Maintenance Crews," in Trends in Ergonomics/Human Factors, Vol. II (R. Eberts, ed.), Elsevier Science Pubs, Amsterdam, pp. 493-501, 1985.

Damachi, N., Okogbaa, O.G., Shell, R., "The Impact of Automation on Water Plant Operator Performance," in Trends in Ergonomics/Human Factors, Vol. II (R. Eberts, ed.), Elsevier Sci. Pubs, Amsterdam, pp. 409-416, 1985.

Okogbaa, O.G., Shell, R., Damachi, N., "A Preliminary Assessment of Reading as it Relates to Knowledge Worker Performance," in Trends in Ergonomics/Human Factors, Vol. II (R. Eberts, ed.), Elsevier Science Publishers, Amsterdam, pp. 147-152, 1985.

Okogbaa, O.G., Shell, R., Mital, A., "Data Transformation Concept and Empirical Model Development for Mental Work Output and Fatigue," Proceedings Mid-Regional Conference, Human Factors Society, 1984, Reprinted in Trends in Ergonomics/Human Factors, Vol. I, (A. Mital, ed.) Elsevier Science Publishers, Amsterdam, pp. 233-239, 1984.

Shell, R., Okogbaa, O.G., Huston, T., "The Work Station of the Future," Industrial Engineering Magazine, pp. 38-47, August, 1985.

Okogbaa, O.G., R. Souder, N. Damachi, "The Utilization of Exploratory Data Analysis in Quality Control," QualTest II Transactions, 1983, pp. 19-28.

b. Engineering Education Refereed Publications and/or presentations

Okogbaa, O. G., Das, T., Otieno, W., Nanduri, V., Centeno, G., Martin-Vega, L., “Educating Stars: The University of South Florida is making engineering accessible to grade-school students,” *Industrial Engineer Magazine*, vol., 38, # 8, August 2006.

Das, T., Okogbaa, O. G., Nanduri, V., and Otieno, W., “A new direction for STARS”, A presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference, Melbourne, FL, March 11, 2006.

Cash, O. C., Torres-Garcia, W., Okogbaa, O. G., Das, T., “Thematic summer camp design by STARS”, A presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference held at FIT, Melbourne, FL, March 11, 2006.

Okogbaa, O. G., Das, T., Nanduri, N., and Otieno, W., “A video report of STARS at USF”, A video presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference held at FIT, Melbourne, FL, March 11, 2006.

Das, T., Okogbaa, O. G., Nanduri, V., and Otieno, W., “Evolution of the STARS project at USF”, A poster presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference held at FIT, Melbourne, FL, March 11, 2006.

Okogbaa, O. G., Das, T., Nanduri, V., and Otieno, W., “From science facts to its underlying mathematics, engineering, and scientific principles: A paradigm shift in elementary science education.”, A poster presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference held at FIT, Melbourne, FL, March 11, 2006.

Zekri, S., Okogbaa, O. G., Centeno, G., Das, T., Kumar, A., and Martin-Vega, L., “Implementation of a material science and nanotechnology module at the fifth grade level”, A poster presentation at the GK-12 Symposium of the Florida Academy of Sciences’ 70th Annual conference, Melbourne, FL, March 11, 2006.

Okogbaa, O.G., Das, T., Nanduri, V., and Otieno, W., “From science facts to its underlying mathematics, engineering, and scientific principles: A paradigm shift in elementary science education”, A presentation at the GK-12 Annual Conference at Washington D. C. March 24-26, 2006.

Zekri S, Clayton L, Kumar A, Okogbaa, O. G, Martin-Vega L. “*Long Term Integration Plan of Nanotechnology and Materials Science into Fourth and Fifth Grade Science Curriculum.*”, *Journal of Materials Education*, vol. 27 (3-4), 2005.

Martin-Vega, L., Ganesan, R., Das, T. K., Edwards, C., Okogbaa, G., Centeno, G., Kumar, A., and Hunnicut, L., “The STARS GK-12 Program at the University of South Florida”, *Proceedings of the ASEE Conference*, June 2005, Portland, Oregon.

Centeno, G., Clayton, L., Otero, L., Zekri, S. Okogbaa, O.G., “Innovative Modules to introduce Advanced Science and Engineering Concepts,” *Proceedings of the 34th ASEE/IEEE Frontiers in Education Conference*, October 20-23, 2004, Savannah, GA.

Zekri S, Clayton L, Ferguson E, Okogbaa, O. G, Kumar A, Das T, Centeno G, Martin-Vega L. “An Impact Study of the Implementation of a Materials Science and Engineering Module at the Fifth Grade Level”, (2004) *Journal of Materials Education*, Vol. 26 (3-4): 251-256.

Ganesan, R., Das, T. K., Okogbaa, O.G., and Edwards, C., “*Challenges in Enhancing Science Education in Elementary Classrooms Through University-School District Partnership*”, *Proceedings of the 34th ASEE/IEEE Frontiers in Education Conference*, October 20-23, 2004, Savannah, GA.

Zekri, LaNetra Clayton, Emily Ferguson, Geoffrey Okogbaa, Ashok Kumar, Tapas Das, Grisselle Centeno, and Louis Martin-Vega, "Impact Study of the Implementation of Material Science and Engineering Modules at the Third Through Fifth Grade Levels", Proceedings of the Spring Materials Research Society Conference, April 2004.

A Video Presentation of STARS Track 1 Refer to: <http://stars.eng.usf.edu/>

c. Non-Refereed Articles

C. Garavelli, N. Violante, O. G. Okogbaa, "Global manufacturing systems: A Model Supported by Genetic Algorithms to Optimize Production Planning," Proceedings, 19th International Conference on Computers in Industrial Engineering, Miami FL, March 2-6, 1996

an-Najjar, M., Okogbaa, O.G., "A Rule-Based Opportunistic Approach to FMS Part Scheduling, Proceedings of the 3rd Industrial Engineering Research Conference, Atlanta, GA, pp. 418-423, May 18-19, 1994.

Okogbaa, O.G., and Chen, C., "A Conceptual Design of an On-Line Artificial Neural Network for Diagnosis and Maintenance", Proceedings of the 2nd Industrial Engineering Research Conference, Los Angeles, CA, USA, pp. 275-279, May 26-27, 1993.

Okogbaa, O.G., Huang, J., Chen, C., "Automated On-line Data Acquisition for Process Control of Electronic Circuit Board Assembly", National Science Foundation Grantee's Conference, Charlotte, NC, pp. 1139-1142, January 1993

Okogbaa, O.G., Perez, R., Huang, J., Albino, V., "A framework for Integrated Reliability and Maintenance Decision Support for Complex Automated Production Systems," Proceedings, First Africa-USA International Conference on Manufacturing Technology, Lagos, Nigeria, pp. 54-59, January, 1993.

Okogbaa, O.G., Huang, J., "Simulation Study of Deadlock Phenomenon in FMS," Proceedings of the 1st Industrial Engineering Research Conference,, Chicago, IL, pp. 197-201, May 1992

Okogbaa, O.G., Chen, C., Jiang, L., Huang, J., Albino, V., Damachi, N., " Quality Control Impact on Design and Manufacturing in a Developing Economy," Proceedings, First Africa-USA International Conference on Manufacturing Technology," Lagos, Nigeria, pp. 458-462, January, 1993.

an-Najjar, M., Okogbaa, O.G., "An intelligent Knowledge-Based System For Part Scheduling in Flexible Manufacturing Technology," Proceedings, First Africa-USA International Conference on Manufacturing Technology, Lagos, Nigeria, pp. 221-226 January, 1993.

Okogbaa, O.G., Huang, J., Shell, R., "A Database Design for Predictive Preventive Maintenance Data Base For A Automated Production System, "Computers & Industrial Engineering, vol. 23, no 1-7, 1992.

Okogbaa, O.G., Huang, J., Chen, C., Borkes, T., More, J., "Data Management System Development for On-Line Data Acquisition and Process Control, " Computers & Industrial Engineering, vol 23, no 1-4, pp 341-344, 1992.

L. Leung, and W. Miller, Okogbaa, O.G., "Justification of Manufacturing Expert Systems: A Framework For Analysis,"Computers & Industrial Engineering, Vol 19, 1-4, pp. 539-543, 1991

Okogbaa, O. G., Chen, M, Shell, R., Chaweng, C., "Simulation Comparison of Group Technology and Process Layout in Automated Manufacturing Systems," Proceedings, Institute of Industrial Engineers International Spring conference, Toronto Canada, pp. 306-312, May 1989

Chen, F., Okogbaa, O.G., Shell, R., Lindsay, W., "Empirical Models for Quality Investment," Proceedings, Institute of Industrial Engineers International Spring Conference, Toronto Ont., pp. 374-379, May 1989.

Okogbaa, O. G., Damachi, N., Shell, R., "Analysis of Work Measurement Data Using the Restraint Technique," Proceedings, Institute of Industrial Engineers, Spring Conference, Orlando, Florida, pp. 571-577, May 1988.

Okogbaa, O. G., Shell, R., Dietz, M., "System Downtime Reduction Through Failure Prediction and Maintenance", Proceedings, Institute of Industrial Engineers Spring Conference, Washington, D.C., , 599-604, May, 1987.

Okogbaa, O. G., Shell, R., Dietz, M. , Mammun, C. "A Model to Predict Maintenance Requirements for a Continuous Production Line," 4th International Maintenance Conference, Cincinnati, Ohio, pp. 114-119, Sep, 1987.

Albino, V., Okogbaa, O. G., Shell, R., "Performability in Flexible Automated Production Systems," Proceedings, IXth International Conference on Production Research, Cincinnati, Ohio, pp. 2491-2498, August, 1987.

Damachi, N., Okogbaa, O.G., "The Evolution of Manufacturing in Nigeria: Problems and Prospects," Proceedings, IXth International Conference on Production Research, Cinti, Ohio, pp. 2289-2295, August, 1987.

Okogbaa, O.G., Shell, R., Damachi, N., Patel, M., "Simscrip Simulation of a Scheduling System for Surgical Procedures Requiring Fixed X-Ray Equipment," Proceedings, IXth International Conference on Production Research, Cincinnati, Ohio, pp. 315-323, August, 1987.

Okogbaa, O.G., Shell, R., "Computerized Work Measurement: Present and Future," Proceedings, Institute of Industrial Engineers Fall Conference, Boston, MA., pp. 569-576, December, 1986

Huston, T., Shell, R., Okogbaa, O.G., "An Examination of the Recovery Value of Various Rest Break Durations for an Analytical Task," Proceedings, 3rd Mid-Central Ergonomics/Human Factors Conference, Oxford, Ohio, pp. 115-118, 1986.

Okogbaa, O. G., Damachi, N., Shell, R., "Maintainability and Crew Size Assessment of Water Distribution Systems", Proceedings, Institute of Industrial Engineers Conference, Dallas, TX, pp. 369-377, May, 1986.

Okogbaa, O.G., Shell, R., Mammon, C., "The Design of a Quality Assurance System for Hospital Pharmacies," Proceedings, Institute of Industrial Engineers Fall Conference, , pp. 268-273, December, 1985

Okogbaa, O.G., Shell, R., "The Design of a Sequential Sampling Plan for an Automated Manufacturing System Using the Bayesian Approach," Proceedings, Institute Of Industrial Engineering Conference, Atlanta, Georgia, pp. 471-478, October, 1984.

Okogbaa, O.G., Shell, R. "The Probabilistic Scheduling of Fixed X-Ray Equipment in the Operating Rooms of an Acute Care Hospital," Proceedings, Institute of Industrial Engineering Conference, Chicago, Illinois, pp. 631-638, May, 1983.

d. Papers Submitted and Under Review

Okogbaa, O. G., Devarakonda, L., Albino, V., Otieno, W., “Cost Optimal Bayesian Attribute Sequential Sampling for On-line Control of Automated Production,” International Journal of Quality and Reliability Engineering, submitted January 2013, under 2nd-Review.

Okogbaa, O. G., Polavarapu, I., “Optimal Design of Accelerated Degradation Tests Using on the Reciprocal Weibull Degradation Rate, “ IIE Transactions, under review.

e. Working Paper

Okogbaa, O. G., Dixit, S, Product Design: A Conceptual Development of Product Remanufacturing Index, Department of Industrial & management Systems Engineering, University of South Florida

Okogbaa, O. G., Hou, Wei, Integrated Reliability Analysis of Networks with Software Failures and Hardware Failures’ Department of Industrial & management Systems Engineering, University of South Florida.

f. Policy Formulation

Transforming education through partnerships for global competitiveness” a policy paper developed in support of global partnership for education, Federal University Wukari, 2014.

Special feature on Federal University Wukari and her need for Partnership in Developing a Global skill-set of African graduates, a policy paper published in Africa policy review 2015 Kempstone Media Ltd., 86-90 Paul Street, London, England EC2A 4NE.