BIOGRAPHICAL SKETCH

NAME : Kelvin Kirby	POSITION TITLES: Deputy Director Center for Radiation Engineering and Science for Space Exploration: Associate Professor, Department of Electrical and Computer Engineering

EDUCATION AND TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Prairie View A&M University, Texas	B. S.	1978	Electrical Engineering
Texas A&M University, Texas	MEng	1987	Computer Engineering
Texas A&M University, Texas	DEng	1998	Engineering

Professional Experience

10/08-Present: Deputy Director and Education Coordinator, Center for Radiation Engineering and Science for Space Exploration (CRESSE): Responsible for all administrative, operations and fiscal coordination of CRESSE research and activities while ensuring that student educational and outreach goals and objectives are met. Reports to the Director on a daily basis concerning issues or circumstances that require special attention or acknowledgement. Schedules and coordinates meetings and progress reviews for the $5M program over a five year period.

9/07-02/09: Interim Assistant Dean of Engineering: Responsible for scholarships, student development programs and corporate partnerships throughout the College of Engineering.

8/05-8/07: Associate Vice President for Student Affairs: Responsible for division operations and the supervision and leadership of twenty employees in the departments of Student Activities and Leadership, Career Services and Outreach, Intramural Sports, Disability Services, Judicial Services, Special Projects and All Faiths Chapel.

10/99-Present: Program Manager: Program Manager of the National Science Foundation (NSF) sponsored Science, Technology, Engineering and Mathematics (STEM) Enhancement Program at Prairie View A&M University. The ten-year, $6.3 million program is designed to increase enrollment, retention and success of underrepresented student populations in STEM disciplines.

9/98-8/07: Deputy and Managing Director: Deputy and Managing Director of the National Aeronautics and Space Administration (NASA) sponsored Center for Applied Radiation Research (CARR) at Prairie View A&M University. The twelve-year, $12.6 million program provided technical assistance to the NASA space radiation missions and increased minority participation in technical areas of relevance to NASA.

9/04-Present: Associate Professor of Electrical and Computer Engineering: Professor for all levels of electrical and computer engineering courses at Prairie View A&M University. Subjects taught include Introduction to Electrical Engineering, Computer Applications, Network Theory I and II, Logic Circuits, Digital Design, Computer Organization and Design, Computer Interfacing and Communications, Intro to Micro-processors, Circuits Laboratory, Engineering Project Management and Senior Project.

6/93-7/93: Faculty Intern/Researcher - General Electric: Faculty Research Assistant at General Electric Corporate Research and Development for ten weeks. Responsible for testing and enhancements to the modular implementation of a real-time communications protocol and operating system for computer communications.

8/90-7/92: Computer Systems Engineering: Project Manager and Subsection Head within the Directorate of Computer Systems Engineering and Maintenance, National Defense Headquarters, Canadian Forces. Responsible for the definition, design, development, test and implementation of general-purpose computer systems and networks valued over $20 million Canadian. Engineered solutions for specialized computer systems and services.

8/87-7/90: Materiel Acquisition Management/ADP Officer: Deputy Project Manager for a military communications and data processing project valued at $900 million over ten years. Coordinated system redesign, integration and implementation. The systems were vital to the personnel, financial, medical and logistical support required for "Desert Storm."

Summary of Qualifications

Kelvin Kirby has a wealth of experience in managing multi-disciplinary research centers, human resource development, computer and communications systems and military leadership. His doctoral work focused on establishing and managing multi-disciplinary research at small universities. He has expertise in executing government programs and human resource development. His engineering, management and leadership skills are appropriate for his role as Deputy Director and Education Coordinator for the NASA sponsored research center. In addition, he has participated with various aspects of radiation effects and micro-dosimetry research at Prairie View A&M University.

Selected Publications and Presentations

1. “Strengthening the Foundation of Future Black, Hispanic, and American Indian Scientists and Engineers: Highlights of Three National Science Foundation Undergraduate Programs; Science Technology, Engineering and Mathematics (STEM) Human Capital Resources,” American Council on Education Biennial Educating All of One Nation Conference, Phoenix, AZ; Kelvin Kirby, 2005.

2. “Strengthening the Foundation of Future Black Scientists and Engineers: NSF’s HBCU-UP Highlights and Case Stories; Science, Technology, Engineering and Mathematics Enhancement Program,” 2005 American Education Research Association Annual Meeting, Montreal, Canada; Kelvin Kirby, 2005.

3. “Establishing and Managing Multi-Disciplinary Research and Engineering at Small Universities,” American Society for Engineering Education, Annual Conference and Exposition, Kelvin Kirby, 2003.

4. “Innovations in Pre-college Outreach: Scouts Explorer Posts,” American Society for Engineering Education, Annual Conference and Exposition, Kelvin Kirby and Thomas N. Fogarty, 2003.

5. “Enhancing Teacher and Student Performance in Mathematics,” American Society for Engineering Education, Annual Conference and Exposition, Kelvin Kirby, Freddie Frazier and John Gardner, 2003.

6. “SMET Enhancement Program,” American Society for Engineering Education, Annual Conference and Exposition, Kelvin Kirby, 2003.

7. “Preliminary Work on LTM45 Composite for Space Radiation Shielding,” 10th Annual International Conference on Composite Engineering (ICCE10), Vernon Calvin, Christa Polk, Richard Wilkins, Brad Gersey, Yang Zhong, Kelvin Kirby and Jianren Zhou, 2003.

8. "Verification and Quantification of Single Event Effects on High Speed SRAM in Terrestrial Environments," H. Huff, Z. You, T. Nichols, J. Attia, T.N. Fogarty, K. Kirby, R. Wilkins and R. Lawton, NASA University Research Centers, Technical Conference, February 1998.

Invited Presentations

1. **"**Maintaining a Path for Success," 2nd Annual Office of Naval Research / Historical Black Engineering Colleges (ONR/HBEC) Future Engineering Faculty Fellowship Program Symposium, North Carolina A&T State University, Greensboro, NC, January 8-10, 2006.

2. "Solving the Mathematics Puzzle," Annual Conference of Quality Education for Minorities (QEM) Network/HBCU-UP Mathematics Curriculum Workshop, Spelman College, Atlanta, GA, August, 2004.

3. **"**How to Present Data and Outcomes," National Science Foundation (NSF), Division of Human Resource Development, HBCU-Undergraduate Program Annual Principal Investigator's Meeting, Washington, DC, March 2004.

4. **"**Preparing for a National Science Foundation Reverse Site Visit," NSF, Division of Human Resource Development, HBCU-Undergraduate Program Annual Principal Investigator's Meeting, Washington, DC, March 2003.

5. "Mathematics Reform for SMET Gate-Keeper Courses," Quality Education for Minorities (QEM) Network's Annual National Conference – *Taking Care of Business: Measuring Up in Mathematics, Science and Engineering*, Washington, DC, February 2003.

6. "Mathematics Reform for SMET Gate-Keeper Courses," National Science Foundation, HBCU-Undergraduate Program Annual Meeting, Washington, DC, March 2002.

7. "PVAMU-NASA Center for Applied Radiation Research," Quality Education for Minorities (QEM) Network's Annual National Conference – *Building Science, Mathematics, Engineering and Technology (SMET) Research and Teaching Capacity at Minority Institutions,* Washington, DC, February 2002.

Panels and Committees

1. Evaluation and Review Panels for NSF and NASA Programs
2. Member of the Engineering Standards Review Committee, Texas State Board for Educator Certification, to develop standards for Teacher Certification in Mathematics, Physical Science and Engineering, 2002 to present.
3. Advisory Boards for QEM Network and Systemic Research, Inc.