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B.Sc. Physics & Mathematics - Andhra Christian College, India, 1982

M.Sc. Nuclear Physics - Andhra University, India, 1986

M.S. Electro Optics - University of Houston-Clear Lake, TX, 1991

Ph.D. Physics (Nuclear Structure Theory) - Andhra University, India, 1994

### **Selected Papers**

P.B. Saganti, F.A. Cucinotta, J.W. Wilson, T.F. Cleghorn, C.J. Zeitlin; Model Calculations of the Particle Spectrum of the Galactic Cosmic Ray (GCR) Environment: Assessment with ACE/CRIS and MARIE Measurements, *Rad Meas* **41** (9-10) 1152-1157, 2006

P.B. Saganti, F.A. Cucinotta, J.W. Wilson, L.C. Simonsen, and C.J. Zeitlin, Radiation Climate Map for Analyzing Risks to Astronauts on the Mars Surface from Galactic Cosmic Rays, 2001 Mars Odyssey special issue, *Space Science Reviews*, **110** (1-2), 143-156, 2004.

P.B. Saganti, F.A. Cucinotta, J.W. Wilson, and W. Schimmerling, Visualization of Particle Flux in the Human Body on the Surface of Mars, invited presentation at the 2nd International Conference on Space Radiation Research, Nara, Japan, March 2002: *J. Radiat. Res.*, **43**, S119-S124, 2002

Dr. Saganti is currently a tenured Professor of Physics at Prairie View A&M University (part of the Texas A&M System) with an additional responsibility as a NASA-CARR Faculty. He teaches fundamental physics as well as advanced nuclear and radiation courses. He conducts extensive research developing space radiation environment model calculations for Low Earth Orbit (LEO), Moon, and Mars for NASA in collaboration with Los Alamos National Laboratory (NM) and Brookhaven National Laboratory (NY). Apart from research grants and awards from NASA, Dr Saganti also received several recognitions as a faculty member including Teaching Excellence Awards (2009 and 2010) from the Chancellor of TAMUS. Also, Dr. Saganti has Adjunct Faculty commitments with the University of St. Thomas (teaching Astronomy classes in Physics) and University of Houston – Clear Lake (teaching medical imaging classes in Computer Science and Computer Engineering).

Dr. Saganti worked as a Sr Scientist for Lockheed Martin (1993-2003) at NASA-JSC, prior to joining PVAMU as a faculty, and contributed to the NASA's Space Exploration Vision through Image Science Analysis Group supporting more than 30 Space Shuttle missions including Hubble Space Telescope repair missions, MIR and ISS. Dr. Saganti also served on the Space Shuttle Columbia accident as part of the image analysis investigation team and developed the needed image interpretation techniques and received Lockheed Martin's prestigious award, *Top Flight* (2003) for his contribution and support.

Dr. Saganti's research work from NASA appeared in several prestigious publications such as - Radiation Damage to DNA (National Geographic, 2001) and The Radiation Environment Model at Mars (DISCOVER and SCIENCE, 2002). Dr. Saganti is an author and co-author of eight books and more than 200 research publications in peer-reviewed and conference proceedings. According to Google Books, Dr. Saganti's published work has been cited in more than 100 books / reports around the world during the past ten years and his NASA space radiation work is being referenced in several thousands of web pages. Dr. Saganti mentored more than 50 students with nearly 100 student author poster or podium research presentations.

#### Other Papers:

F.A. Cucinotta, P.B. Saganti, J.W. Wilson, and L.C. Simonsen, Model Predictions and Visualization of Particle Flux on the Surface of Mars, invited presentation at the 2nd International Conference on Space Radiation Research, Nara, Japan, March 2002: *J. Radiat. Res.*, **43**, S35-S39, 2002

F.Cucinotta, W.Shimmerling, J.Wilson, L.Peterson, G.Badhwar, P.Saganti, and J.Dicello, Space Radiation Cancer Risks and Uncertainties for Mars Mission, *Radiation Research*, **156**, 682-688, 2001

Book: Materials in Extreme Environment, Editors: Daryush Ila, Christian Mailhiot, and Premkumar Saganti, MRS Publication, 2006. **ISBN-978-1-55899-886-5**