

## JOHN C. GREGORY

The University of Alabama in Huntsville  
Chemistry Department  
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### Current Position

Professor, Chemistry and Materials Science, UAH  
Director, Alabama Space Grant Consortium  
Director, Alabama NASA EPSCoR Program  
Director, Laboratory for Materials and Surface Science, UAH

### Education

BSc, Physical Chemistry, 1962, Imperial College, University of London, England  
(*First Class Honors*)  
Associate of the Royal College of Science, London, England, 1962  
PhD, Surface Physical Chemistry, 1967, Imperial College, London, England  
Diploma of Imperial College, 1967, Imperial College, London, England

### Professional Experience

|              |  |                                     |
|--------------|--|-------------------------------------|
| 2000-2001    | Chairman, Dept of Chemistry and<br>Director, Materials Science Program             | University of Alabama in Huntsville |
| 1988-Present | Professor of Chemistry & Materials<br>Science.                                     | University of Alabama in Huntsville |
| 1997-Present | Director, Laboratory for Materials &<br>Surface Science.                           | University of Alabama in Huntsville |
| 1994-1997    | Interim Director, Alliance for Micro-<br>gravity Materials Science & Applications. | NASA/UAH/USRA                       |
| 1991-Present | Director, Alabama Space Grant Consortium   |                                     |
| 1993-Present | Director, Alabama NASA EPSCoR Program  |                                     |
| 1986-1988    | Associate Professor  | University of Alabama in Huntsville |
| 1978-1986    | Associate Research Professor   | University of Alabama in Huntsville |
| 1973-1978    | Assistant Research Professor   | University of Alabama in Huntsville |
| 1971-1973    | Senior Research Associate  | University of Alabama in Huntsville |
| 1969-1971    | Principal Scientist  | Teledyne Brown Engineering          |
| 1967-1969    | NAS-NRC Postdoctoral<br>Research Associate   | NASA, Marshall Space Flight Center  |

## Awards and Honors

|                       |   |                                     |
|-----------------------|---|-------------------------------------|
| 1959-1962             | Entrance Scholar (upper level)                              | Imperial College, London            |
| 1959-1962             | State Scholar   | United Kingdom                      |
| 1963-1966             | J. Lyons Post Graduate Fellow                               | Imperial College, London            |
| 1967-1969             | National Academy of Sciences<br>NRC Post-doctoral Associate | NASA, Marshall Space Flight Center  |
| 1992                  | Alan Berman Publication Award                               | Naval Research Laboratory           |
| 1994                  | Sigma Xi Researcher of the Year Award                       | University of Alabama in Huntsville |
| 1994                  | Alumni Award for Excellence in Research                     | University of Alabama in Huntsville |
| 1997                  | Antarctic Medal   | National Science Foundation         |
| 1998                  | Dean's Service Award  | University of Alabama in Huntsville |
| 1999                  | First Place, National Space Grant<br>10-year Review         | NASA Headquarters                   |
| 2000                  | Outstanding Researcher Award                                | University of Alabama in Huntsville |
| 2001                  | Outstanding Researcher Award                                | University of Alabama in Huntsville |
| 2001-2004 : 2012-2015 | Chairman, National Space Grant Alliance                     |                                     |
| 2004- 2007            | Chairman, National Council of Space Grant Directors         |                                     |

## Graduate students who have worked with me and whose committees I have chaired:

|                  |                                  |
|------------------|----------------------------------|
| K. Guo           | Masters in Physics               |
| Jeffrey Brown    | Masters in Physics               |
| Robin Weiser     | Masters in Chemistry (thesis)    |
| Joseph Petruzzo  | PhD in Physics (thesis)          |
| Penny Pettigrew  | Masters in Chemistry             |
| Robert Connatser | Masters in Physics (thesis 2003) |

I have also worked on numerous PhD Committees in the UAH Physics Department and the University of Alabama in Birmingham Materials Engineering Department.

## Professional Service

**Proposal reviewer for:** NASA Headquarters Code S, 1986-1999  
 NASA Johnson Space Center, Code C, 1992-1996  
 NASA Headquarters Code UG, 2002  
 NASA Headquarters Code FE, 1999-  
 U.S. Space Grant, Louisiana Research Program  
 Canadian Science & Engineering Research Council  
 Air Force Office of Scientific Research

**Manuscript reviewer for:** *AIAA Journal*  
*Journal Spacecraft and Rockets*  
*Journal Applied Optics*  
*J. Catalysis*

### National Committee Memberships:

- Chairman, National Space Grant Alliance, Inc; 2001-2004
- Chairman, National Council of Space Grant Directors; 2004-2006
- Chair, Materials Working Group, Mars Mission Strategies Panel, NASA, MSFC 25-26 Sept, 2000
- Chair, National Space Grant Strategic Planning Working Group, 1999-2000
- Founding Board Member, National Space Grant Alliance, 1999-present
- Member, Executive Committee, National Council of Space Grant Directors, 1994-1997; 1999-2002.
- Chair, Southeastern Space Grant Consortium (11 states), 1993-present
- NASA Space Environments Panel: Materials, 1993-present
- NASA Space Environments Panel: Radiation, 1993-present
- SEMATECH Working Group on Neutral Stream Processing, 1994-1997
- NASA Atomic Oxygen Working Group, 1984-1990
- Physics of Spacecraft Glow Workshop, NASA Marshall Space Flight Center, CP-2391, 1985, organizing committee

### Editorships

Proceedings of the National Council of Space Grant Directors Planning Workshop, January 22-24, 2000, Denver. Eds: J.C. Gregory and L. Meagher.

LDEF Materials Results for Spacecraft Applications, NASA CP-3527, Eds. A.F. Whitaker and J.C. Gregory, 1-550, NASA, 1994

Monte Sano Preserve Master Plan, Eds. R.I. Bergquist, J.C. Gregory and A. Stovall, The Huntsville Land Trust, 1-105, 1996

### Research Publications (Refereed)

1. *Effect of Surfaces on the Performance of CdZnTe Detectors*, T.H.Prettyman, F. Ameduri, A. Burger, J.C. Gregory, M.A. Hoffbauer, P.R. Majerus, D B. Reisenfeld, S.A. Soldner, and C S Szeles. **Proc. SPIE- Int. Soc. Opt. Eng. Vol. 4507**, p23-31, (2001).
1. *Interpreting Anomalous Electron Pairs as New Particle Decays*, M. Cherry, M. Christl, S.Dake, J. Derrickson, W. Fountain, M. Fuki, H. Wilczynski, T. Iyono, J.C. Gregory, O. Miyamura, T. Parnell, S.Sugitate, T. Tominaga, Y. Takahashi, J. Watts, J.P. Wefel, J. Wilkes, T. Yokomi, and E. Zager, **J. of Physics G: Nuclear and Particle Physics** 25, L133-L137, 1999.
2. *Performance of CdZnTe Detectors Passivated with Energetic Oxygen Atoms* T. H.Prettyman, M.A.Hoffbauer, J.A.Rennie, S.Cook, J.C.Gregory, M.A.George, P.N.Luke, M.Amman, S.A.Soldner, and J.R.Earnhart, **Nucl. Instr. Meth. Phys. Res. A**, Vol. 422/1-3, 179-184, 1999.
3. *Passivation of CdZnTe Surfaces by Oxidation in Low Energy Atomic Oxygen*, H. Chen, K. Chattopadhyay, K.-T. Chen, A. Burger, M.A. George, J.C. Gregory, P. K. Nag, J.J. Weimer, R.B. James, **J Amer Vac Soc A** 17(1), Jan/Feb 1999.
4. *Cosmic Rays and Proton Helium Spectra: Results from JACEE Experiments*, K. Asakimori, T.H. Burnett, M.L. Cherry, K. Chevli, M.J. Christl, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, R. Holynski, J. Iwai, A. Iyono, W.V. Jones, A. Jurak, M. Kobayashi, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, E.D. Olson, T.A. Parnell, F.E. Roberts, T. Shiina, S.C. Strausz, Y. Takahashi, T. Tominaga, S. Toyoda, J.W. Watts,

- J.P. Wefel, B. Wilczynski, R.J. Wilkes, W. Wolter, B. Wosiek, H. Yokomi, E.L. Zager, **Astrophysical Journal** 502, 278, 1998.
5. *Elemental Abundance of High Energy Cosmic Rays*, Y. Takahashi, K. Asakimori, T.H. Burnett, M.L. Cherry, K. Chebli, M.J. Christl, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, R. Holynski, J. Iwai, A. Iyono, W.V. Jones, A. Jurak, M. Kobayashi, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, E.D. Olson, T.A. Parnell, F.E. Roberts, T. Shiina, S.C. Strausz, Y. Takahashi, T. Tominaga, S. Toyoda, J.W. Watts, J.P. Wefel, B. Wilczynski, R.J. Wilkes, W. Wolter, B. Wosiek, H. Yokomi, E.L. Zager, **Nuclear Physics B** (Proc. Suppl.) 60B, 83-92, 1998.
  6. *Effect of Surface Treatment on Unalloyed Titanium Implants: Spectroscopic Analyses*, D.V. Kilpadi, G.N. Raikar, J. Liu, J.E. Lemons, Y. Vohra, and J.C. Gregory, **J. Biomed. Materials Res**, 40, 646-659, 1998.
  7. *Design and Flight Performance of the Cosmic Ray Detector BUGS-4*, A.E. Smith, J.J. Petruzzo III, J.C. Gregory, C. Thoburn, R.W. Austin, J.H. Derrickson, T.A. Parnell, M.R.W. Mashed, P.H. Fowler, **Nucl. Instrum. Meth. Phys. Res.**, 402(1), 104-122, 1998.
  8. *A One-Meter Radius Spherical Drift Chamber for the Measurement of Relativistic Heavy Nuclei*, J.J. Petruzzo III, A.E. Smith, J.C. Gregory, C. Thoburn, R.W. Austin, T.A. Parnell, J.H. Derrickson, M.R.W. Mashed, P.H. Fowler, **Nucl. Instrum. Meth. Phys. Res.**, 402(1), 123-138, 1998.
  9. *A Simple, Inexpensive, Hyperthermal Atomic Oxygen Sensor*, G.P. Miller, P.J. Pettigrew, G.N. Raikar, J.C. Gregory, **Rev Sci Instrum** 68(9), September 1997.
  10. *Atmospheric Radioactive Isotopes at Orbital Altitudes*, J.C. Gregory, **Radiation Measurements**, 26(6), 841-850, 1996.
  11. *Production of Electron-Positron Pairs by 200-GeV/Nucleon Oxygen and Sulfur Ions in Nuclear Emulsion*, J.H. Derrickson, P.B. Eby, K.H. Moon, T.A. Parnell, D.T. King, J.C. Gregory, Y. Takahashi, and T. Ogata, **Physical Review A**, 51(2), 1253-1259, Feb. 1995.
  12. *Surface Characterization of Titanium Implants*, G.N. Raikar, J.C. Gregory, J.L. Ong, L.C. Lucas, J.E. Lemons, D. Kawahara and M. Nakamura, **J Vac Sci Technol A** 13(5), Sep/Oct 1995.
  13. *Surface Characterization of SiC Mirrors Exposed to Fast Atomic Oxygen*, G.N. Raikar, J.C. Gregory, W.D. Partlow, H. Herzig, and W.J. Choyke, **Surface and Interface Analysis** 23(2), 77, 1995.
  14. *Spectroscopic Characterization of Passivated Titanium in a Physiologic Solution*, J.L. Ong, G.N. Raikar, L.C. Lucas, R.B. Connatser and J.C. Gregory, **J Materials in Medicine** 6, 113-119, 1995.
  15. *Surface Characterization of Ion Beam Sputter Deposited Ca-P Coatings After In-vitro Immersion*, J.L. Ong, L.C. Lucas, G.N. Raikar, J.J. Weimer and J.C. Gregory, **Colloids Surfaces A: Physicochem. Eng. Aspects** 87, 151-162, 1995.
  16. *A Hybrid Set-Up to Study Charmed Particle-Production in S-32 Nucleus Central Interactions*, N. Armenise, H. Beker, V. Bisi, A.C. Breslin, M.G. Catanesi, M.J. Christl, D.H. Davis, J.H. Derrickson, S. Diliberto, W.F. Fountain, J.C. Gregory, T.H. Parnell, L.

- Ramello, G. Romano, T. Shiina, Y. Takahashi, et al., **Nucl Instrum Meth Phys Res** 361(3), 497-505, 1995
17. *Multiphoton Decays of Heavy-Particles*, H. Wilczynski, K. Asakimori, T.H. Burnett, M.L. Cherry, M.J. Christl, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, T. Hayashi, R. Holynski, J. Iwai, A. Iyono, W.V. Jones, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, E.D. Olson, T.A. Parnell, F.E. Roberts, S.C. Strausz, Y. Takahashi, T. Tominaga, J.W. Watts, J.P. Wefel, M. Wilber, B. Wilczynska, R.J. Wilkes, W. Wolter, E.L. Zager, **Acta Physica Polonica B** 26(4), 861-872, 1995.
  18.  *$^{10}\text{Be}$  in Bauxite and Commercial Aluminum*, R. Middleton, J. Klein, B.L. Dezfourly-Arjomandy, A. Albrecht, S. Xue, G.F. Herzog, and J. Gregory, **Nucl Instrum Meth Phys Res B** 92, 362-366, 1994.
  19. *Chemical and Morphological Changes on Silver Surfaces Produced by Microwave Generated Atomic Oxygen*, Mohan K. Bhan, Pallob K. Nag, George P. Miller and John C. Gregory, **J Vac Sci Technol A**, 12(3), May/June 1994.
  20. *Oxidation of Copper by Atomic Oxygen*, G.N. Raikar, J.C. Gregory, P.N. Peters, **Oxidation Of Metals** 42, Nos. 1/2, 1, May 1994.
  21. *Satellite Attitude Stability Measurements Using a Gas Dynamics Pinhole Camera*, Palmer N. Peters, Paul L. Whitehouse, John C. Gregory, **Rarefied Gas Dynamics: Space Science and Engineering**, ed. Bernie D. Shizgal and David P. Weaver, Vol. 160 of Progress in Astronautics and Aeronautics, AIAA, Washington, D.C., 478-487, 1994.
  22. *Multiple-Photon Emission in Heavy-Particle Decays*, K. Asakimori, T.H. Burnett, M.L. Cherry, M.J. Christl, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, T. Hayashi, R. Holynski, J. Iwai, A. Iyono, W.V. Jones, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, E.D. Olson, T.A. Parnell, F.E. Roberts, S.C. Strausz, Y. Takahashi, T. Tominaga, J.W. Watts, J.P. Wefel, M. Wilber, B. Wilczynska, H. Wilczynski, R.J. Wilkes, W. Wolter, E.L. Zager, **J. Physics G-Nuc. and Part. Physics** 20(8), 1257-1265, 1994.
  23. *Electrochemical Corrosion Analyses and Characterization of Surface-Modified Titanium*, J.L. Ong, L.C. Lucas, G.N. Raikar and J.C. Gregory, **Applied Surface Science** 72, 7-13, 1993.
  24. *A Measurement of the Absolute Energy Spectra of Galactic Cosmic Rays During the 1976-77 Solar Minimum*, J.H. Derrickson, T.A. Parnell, R.W. Austin, W.J. Selig and J.C. Gregory, **Nuclear Tracks and Radiation Measurements, Including Thermoluminescence: International Journal of Radiation Applications and Instrumentation**, Part D, 20(3), July 1992.
  25. *A Measurement of the Attitude Stability of the LDEF Satellite Using a Silver/Silver Oxide Detector*, J.C. Gregory, P.N. Peters, **Journal of Guidance, Control and Dynamics**, **AIAA**, 15(1), 282-284, Jan-Feb, 1992.
  26. *Rapidity and Transverse-momentum Distributions in 6.4-TeV S+Pb Interactions From CERN EMU05 Experiments*, A. Iyono, Y. Takahashi, J.C. Gregory, T. Hayashi, T. Shiina, M.J. Christl, J.H. Derrickson, W.F. Fountain, T.A. Parnell, B. Rubin, J.W. Watts, S. Nagamiya, T. Tominaga, S. Dake, M. Fuki, T. Ogata, O. Miyamura, H. Yokomi, **Nucl. Phys. A** 544(1-2), C455-C458, 1992.

27. *Rapidity Spacings and Intermittency Analyses by Differentiating Charge-Sign in 2--GeV/AMU S+Pb Interaction from CERN EMU05 Experiments*, Y. Takahashi, J.C. Gregory, H. Yokomi, C.H. Chan, B.L. Dong, J.G. Duthie, T. Hayashi, M.J. Christl, J.H. Derrickson, P.B. Eby, W.F. Fountain, T.A. Parnell, F.E. Roberts, S. Nagamiya, S. Dake, T. Tominaga, O. Miyamura, M. Fuki, A. Iyono, T. Ogata, **Nuclear Physics**, A525, 365c-368c, 1991.
28. *Study of Correlations of Positive and Negative Charged Particles*, Y. Takahashi, J.C. Gregory, C.H. Chan, B.L. Dong, J.G. Duthie, T. Hayashi, H. Yokomi, M.J. Christl, J.H. Derrickson, P. Eby, W.F. Fountain, T.A. Parnell, F.E. Roberts, S. Nagamiya, S. Dake, T. Tominaga, M. Fuki, A. Iyono, T. Ogata, O. Miyamura, **Nuclear Physics**, A525, 591c-594c, 1991.
29. *Observation of Be-7 on the Surface of LDEF Spacecraft*, Fishman, G.J., Harmon, B.A., Gregory, J.C., Parnell, T.A., Peters, P., Phillips, G.W., King, S.E., August, R.A., Ritter, J.C., Cutchin, J.H., Haskins, P.S., McKisson, J.E., Ely, D.W., Weisenberger, A.G., Piercey, R.B., and Dybler, T., **Nature**, 349, 678-680 , 1991.
30. *Observation of Associated Bottom Production and Decay in High Energy Hadron Interaction*, B. Wilczynska, H. Wilczynski, R. Holynski, M. Jezebed, A. Jurak, W. Wolter, B. Wosiek, T.H. Burnett, J. Iwai, J.J. Lord, S. Strausz, R.J. Wilkes, W.V. Jones, T. Tominaga, J.P. Wefel, T.A. Parnell, T. Tabuki, J.C. Gregory, T. Hayashi, Y. Takahashi, T. Ogata, S. Dake, H. Oda, M. Fuki, O. Miyamura, **Physical Reviews D** 41(11), 3336, 1990.
31. *Energy Spectra of Cosmic Rays above 1 TeV per Nucleon*, T.H. Burnett, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, T. Hayashi, R. Holynski, J. Iwai, W.V. Jones, A. Jurak, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, A. Olsezski, T.A. Parnell, F.E. Roberts, S. Strausz, T. Tabuki, Y. Takahashi, T. Tominaga, J.W. Watts, J.P. Wefel, B. Wilczynska, R.J. Wilkes, W. Wolter, and B. Wosiek, **Astrophysical Journal** 349, L25, 1990.
32. *Direct Measurement of the Composition and Spectra of Cosmic Rays above 1 TeV/AMU from JACEE*, T.A. Parnell, T.H. Burnett, S. Dake, J.H. Derrickson, W.F. Fountain, M. Fuki, J.C. Gregory, T. Hayashi, R. Holynski, J. Iwai, W.V. Jones, A. Jurak, J.J. Lord, O. Miyamura, H. Oda, T. Ogata, F.E. Roberts, S. Strausz, T. Tabuki, Y. Takahashi, T. Tominaga, J.W. Watts, J.P. Wefel, B. Wilczynska, H. Wilczynski, R.J. Wilkes, W. Wolter, B. Wosiek, **Advances in Space Research** 9(12), 45-54, 1989.
33. *Charge-Sign Clustering in High-Multiplicity, High-Energy Heavy-Ion Collisions*, Y. Takahashi, J.C. Gregory, T. Hayashi, J.H. Derrickson, P.B. Eby, W.F. Fountain, T.A. Parnell, F.E. Roberts, T. Tabuki, J.W. Watts, S. Nagamiya, S. Dake, M. Fuki, A. Iyono, T. Ogata, O. Miyamura, and T. Tominaga, **Journal of the Physical Society of Japan**, Supple. 58, 749, 1989.
34. *Transverse Momentum Distribution and Particle Correlations from EMU05*, Y. Takahashi, C.H. Chan, J.G. Duthie, J.C. Gregory, T. Hayashi, H. Yokomi, J.H. Derrickson, P.B. Eby, W.F. Fountain, T.A. Parnell, F.E. Roberts, T. Tabuki, J.W. Watts, S. Nagamiya, S. Dake, M. Fuki, A. Iyono, O. Miyamura, and T. Tominaga, **Nuclear Physics**, A498, 529, 1989.
35. *Oxygen Atom Velocity Distributions as Viewed from a Spacecraft and Their Use to Determine Thermospheric Temperatures*, P.N. Peters, R.C. Sisk, and J.C. Gregory, **Journal of Spacecraft and Rockets**, 25(1), 53, 1988.

36. *Reaction of 5eV Oxygen Atoms with Polymeric and Carbon Surfaces in Earth Orbit*, J.C. Gregory, and P.N. Peters, **Polymer Preprints**, 28(2), 459, American Chemical Society, 1987.
37. *Measurements of Background Gamma-Radiation on Spacelab 2*, G.J. Fishman, J.C. Gregory and W.S. Paciesas, **Advances in Space Research** 7, 231, 1987.
38. *The Measured Radiation Environment within Spacelabs 1 and 2 and Comparison with Predictions*, T.A. Parnell, J.W. Watts, G.J. Fishman, E.V. Benson, A.L. Frank and J.C. Gregory, **Advances in Space Research** 7, 1098, 1987.
39. *Heavy Nucleus Interactions Between 20 and 65 GeV per Nucleon*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Physical Review**, D35(3), 824-832, 1987.
40. *Cosmic Ray Results from the JACEE Experiment*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Nuclear Physics** A461, 263, 1987.
41. *Average Transverse Momentum and Energy Density in Ultra-Relativistic Nucleus-Nucleus Collisions*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Physical Review Letters**, 57(26), 3249, 1986.
42. *JACEE Emulsion Chambers for Measuring Energy Spectra of High Energy Cosmic Ray Protons and Helium*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Nuclear Instruments and Methods** A251, 583-595, 1986.
43. *A Measurement of the Angular Distribution of 5eV Atomic Oxygen Scattered Off a Solid Surface in Earth Orbit*, J.C. Gregory and P.N. Peters, **Rarefied Gas Dynamics** 15, 644, 1986.
44. *Free Molecule Lift and Drag Deduced from Shuttle Flight Experiment*, G.R. Karr, J.C. Gregory and P.N. Peters, **Rarefied Gas Dynamics** 15, 604, 1986.
45. *Effects of 5eV Atomic Oxygen Exposure on Space Optics*, P.N. Peters, J.C. Gregory, and J. Swann, **Applied Optics** 25, 1290, 1986.
46. *High Energy Cosmic Ray Events of Ultra-Relativistic Nucleus-Nucleus Collisions*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Nuclear Physics**, A447, 189, 1985.
47. *Excessive Production of Electron Pairs in Low Multiplicity Interactions*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Nuclear Physics** A447, 197, 1985.
48. *Characteristics of JACEE Heavy-Ion Events at Energies above TeV/Nucleon*, T.H. Burnett, S. Dake, J.H. Derrickson, W. Fountain, M. Fuki, J.C. Gregory, T. Hayashi, R. Holynski, J. Iwai, W.V. Jones, A. Jurak, J.J. Lord, C.A. Meegan, O. Miyamura, H. Oda, T. Ogata, T.A. Parnell, E. Roberts, T. Saito, S. Strausz, T. Tabuki, Y. Takahashi, T. Tominaga, J.W. Watts, B. Wilczynska, R.J. Wilkes, W. Wolter, B. Wosiek, **Lecture Notes in Physics** 221, 187-195, 1985.
49. *Proton and Helium Energy Spectra above 1 TeV for Primary Cosmic Rays*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Physical Review Letters**, 51(11), 1010-1013, 1983.

50. *Extremely High Multiplicities in High-Energy Nucleus-Nucleus Collision*, T.H. Burnett, J.C. Gregory, T. Hayashi, Y. Takahashi, et. al. (The JACEE Collaboration) **Physical Review Letters**, 50, 2062, 1983.
51. Proportional Counter for Monitoring Low-Levels of KR-85 and other Beta and X-Ray Emitting Radionuclides, J.C. Gregory and T.A. Parnell, **IEEE Transactions in Nuclear Science** NS-23 (1), 715, 1976.
52. *Location of Transient Gamma-Ray Sources with Thin Flat Scintillators*, J.C. Gregory, T.A. Parnell, and T.L. Kuo, **IEEE Transactions in Nuclear Science** NS-23 (1), 476, 1976.
53. *A Multiwire Proportional Counter Power Diffractometer for Low Power Analysis of Planetary Soils*, J.C. Gregory and T.A. Parnell, **IEEE Transactions on Nuclear Science** NS-19 (1), 224, 1972.
54. *The Interaction of Nitrogen Atoms and Ions with a Nickel Surface*, J.C. Gregory and D.O. Howard, Chapter 56 in **The Structure and Chemistry of Solid Surfaces**, John Wiley, New York, 1969.

**Research Publications** (*Full Papers Printed in Conference Proceedings and Other Open Literature*)

1. *Atmospheric Fluorescence Yield*, J.H.Adams, M.J.Christl, W.F.Fountain, J.C.Gregory, K.Martens, and P. Sokolsky, **Proceedings of the 27<sup>th</sup> International Cosmic Ray Conference, ICRC-2001**, Copernicus Gesellschaft, Hamburg, Germany, 2001.
1. *Low Temperature Oxidation of Semiconductor Surfaces with Fast Atomic Oxygen*, J.C.Gregory, S.R.Cook, M.A. George, M.A. Hoffbauer, T.H. Prettyman, **Rarefied Gas Dynamics**, Vol. 1, **Proceedings of the 21<sup>st</sup> International Symposium on Rarefied Gas Dynamics**, 26-31 July 1998, Marseille, France, ed. R. Brun, R. Campargue, R. Gatignol, J.C. Leng.
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