

- Roelof, E. C. (APL), Smith, E. J. (JPL), Wood, D. (Univ. California, San Diego), and Ip, W.-H. (Max-Planck Institute/Lindau), "Gradients and Anisotropies of High Energy Cosmic Rays in the Outer Heliosphere";
- Decker, R. B. (APL) and Vlahos, L. (Univ. Maryland), "Energetic Ion Acceleration at Collisionless Shocks";
- Decker, R. B. (APL) and Vlahos, L. (Univ. Maryland), "Prompt Acceleration of Ions by Oblique Turbulent Shocks in Solar Flares";
- Gold, R. E. (APL), Lanzerotti, L. J., and MacLennan, C. G. (AT&T Bell Labs.), and Krimigis, S. M. (APL), "Latitude Dependence of Co-Rotating Shock Acceleration";
- Gold, R. E. (APL) and Venkatesan, D. (Univ. Calgary), "Longitudinal Distribution of Cosmic Rays in the Heliosphere";
- Roelof, E. C. "Evidence for Regions of Negligible Cosmic-Ray Modulation in the Inner Heliosphere ($r < 10$ AU)";
- Venkatesan, D. (Univ. Calgary) and Decker, R. B., and Krimigis, S. M. (APL), "Voyager 1 and 2 Measurements of Radial and Latitudinal Cosmic Ray Gradients during 1981-84."
- Oct 11—"Solar Seismology," J. Toomre, University of Colorado.
- Oct 18—"Fractals in Aggregation," V. F. Family, Emory University and M.I.T.
- Oct 25—"Magnetoelastic Bifurcations in Amorphous Ribbons," H. T. Savage, Naval Surface Weapons Center.
- Nov 1—"Maximum Matching without Tears," M. O. Rabin, Harvard University.
- Nov 8—"A New Era in Permanent Magnets," J. F. Herbst, General Motors Corporation.
- Nov 15—"Neutron Scattering and Its Applications," J. J. Rhyne, National Bureau of Standards.
- Nov 22—"The El Niño Southern Oscillation Phenomenon and Global Climate Variability," E. Rasmusson, National Oceanic and Atmospheric Administration.

COLLOQUIA

- Sep 27, 1985—"Wavefront Array Processing," Q. E. Dolecek, Applied Physics Laboratory.
- Oct 4—"Kakatau: The Giant Volcanic Eruption a Century Ago," R. S. Fiske, Smithsonian Institution.

AUTHOR INDEX

Johns Hopkins APL Technical Digest Volume 6, 1985

- Alfvén, H.—*Magnetospheric Currents*, T. A. Potemra (ed.) and *Quantitative Aspects of Magnetospheric Physics*, No. 1, 100.
- Apel, J. R.; Thompson, D. R.; Tilley, D. G.; van Dyke, P.—*Hydrodynamics and Radar Signatures of Internal Solitons in the Andaman Sea*, No. 4, 330.
- Apel, J. R.—See Gasparovic, R. F.
- Beal, R. C.—*Ocean Research with Synthetic Aperture Radar*, No. 4, 293.
- Beggs, J. M.—*The NASA Space Station*, No. 2, 146.
- Berl, W. G.—*Introduction*, No. 2, 118.
- Berl, W. G.—*Milton Stover Eisenhower (1899-1985)*, No. 3, 251.
- Black, H. D.—See Strikwerda, T. E.
- Blum, N. A.—See Charles, H. K., Jr.
- Boyles, C. A.; Dozier, L. B.; Joice, G. W.—*Application of Coupled Mode Theory to Acoustic Scattering from a Rough Sea Surface Overlying a Surface Duct*, No. 3, 216.
- Brandt, A.—See Gasparovic, R. F.
- Brandt, A.—See Sarabun, C. C.
- Brown, H.—*Thoughts on Technology and National Security*, No. 4, 361.
- Bush, A. G.; Frain, W. E.; Reymann, A. C.—*The Richard B. Kershner Space Integration and Test Facility*, No. 1, 85.
- Calman, J.—*Convection at a Model Ice Edge*, No. 3, 211.
- Charles, H. K., Jr.; Wagner, G. D.—*Microelectronics at APL: The First Quarter Century*, No. 2, 130.
- Charles, H. K., Jr.; Weiner, J. A.; Blum, N. A.—*Materials Characterization and Analysis: Applications to Microelectronics*, No. 3, 237.
- Chiu, M. C.—See Rueger, L. J.
- Cullen, J. R.; Rhyne, J. J.—*Magnetic Glasses*, by K. Moorjani and J. M. D. Coey, No. 1, 106.
- Davidson, A. F.; Fountain, G. H.—*The Hopkins Ultraviolet Telescope*, No. 1, 28.
- Dozier, L. B.—See Boyles, C. A.
- Dubbel, D. C.—*The Reduction in Finestructure Contamination of Internal Wave Estimates from a Towed Thermistor Chain*, No. 3, 186.
- Fountain, G. H.—See Davidson, A. F.
- Frain, W. E.—See Bush, A. G.
- Fraser, L. W.—*High Altitude Research at the Applied Physics Laboratory in the 1940s*, No. 1, 92.
- Friedman, M. H.—*The Zuoz Workshop on Cardiovascular and Pulmonary Dynamics*, No. 2, 173.
- Gasparovic, R. F.; Apel, J. R.; Brandt, A.; Kasischke, E. S.—*Synthetic Aperture Radar Imaging of Internal Waves*, No. 4, 338.
- Gerling, T. W.—*Remote Sensing of the Ocean-Surface Wind Field with a Scatterometer and a Synthetic Aperture Radar*, No. 4, 320.
- Gilreath, H. E.—*APL's Independent Research and Development Thrust in Oceanography*, No. 4, 276.
- Gold, R. E.—See Jaskulek, S. E.
- Goldhirsh, J.—*Frontiers of Remote Sensing of the Oceans and Troposphere from Air and Space Platforms: Meeting and Workshop*, No. 2, 175.
- Goldstein, S. J., Jr.—*The Moon's Acceleration and Its Physical Origins: Vol. 1—As Deduced from Solar Eclipses, and Vol. 2—As Deduced from General Lunar Observations*, by R. R. Newton, No. 2, 176.
- Grant, D. G.—See Griffin, M. D.
- Greenwald, R. A.—*High-Frequency Radiowave Probing of the High-Latitude Ionosphere*, No. 1, 38.
- Griffin, M. D.; Strikwerda, T. E.; Grant, D. G.—*An Alternate Fine Guidance Sensor for the Space Telescope*, No. 1, 51.
- Hamill, B. W.—*Symposium on the Role of Language in Problem Solving*, No. 2, 149.
- Hirsh, R. S.—*A Numerical Simulation of Vortex Motion in a Stratified Environment and Comparison with Experiments*, No. 3, 203.
- Howey, P. W.—See Strikwerda, T. E.
- Irvine, D. E.—*Waves Across the Ocean*, No. 4, 313.
- Jaskulek, S. E.; Gold, R. E.; McEntire, R. W.—*Spaceborne Energetic Particle Instrumentation*, No. 1, 20.
- Joice, G. W.—See Boyles, C. A.
- Kasischke, E. S.—See Gasparovic, R. F.

- Kerr, J. L.—See McDonough, R. N.
 Krimigis, S. M.—*Guest Editor's Introduction*, No. 1, 2.
 Krimigis, S. M.—*Early Results from the Active Magnetospheric Particle Tracer Explorers (AMPTE) Satellite Experiments*, No. 3, 263.
 Levanon, N.—See Strikwerda, T. E.
 McCloskey, W.—*AMPTE: Notes on the Initial Observations*, No. 1, 108.
 McCloskey, W.—*The Chesapeake Bay*, No. 2, 159.
 McCloskey, W.—*Chesapeake Bay Research Institutions: A Bay-Wide Presence*, No. 4, 369.
 McColligan, E. E.—*Information Systems for Patient Care*, by B. I. Blum, No. 3, 269.
 McDonough, R. N.; Raff, B. E.; Kerr, J. L.—*Image Formation from Spaceborne Synthetic Aperture Radar Signals*, No. 4, 300.
 McEntire, R. W.—See Jaskulek, S. E.
 McGoldrick, L. F.—*Remote Sensing for Oceanography: An Overview*, No. 4, 284.
 Monaldo, F. M.—*Measurements of Directional Wave Spectra by the Shuttle Synthetic Aperture Radar*, No. 4, 354.
 Moorjani, K.—*International Seminar on Amorphous Materials: A New Science and a Novel Technology—A Meeting Report*, No. 3, 257.
 Muller, S.—*Wilhelm von Humboldt and the University in the United States*, No. 3, 253.
 Newman, A. L.—*Development of Medical Electronic Devices in the APL Space Department*, No. 1, 68.
 Newton, R. R.—*The Secular Acceleration of the Earth's Spin*, No. 2, 120.
 Raff, B. E.—See McDonough, R. N.
 Reymann, A. C.—See Bush, A. G.
 Rhyne, J. J.—See Cullen, J. R.
 Rueger, L. J.; Chiu, M. C.—*Development of Precision Time and Frequency Systems and Devices at APL*, No. 1, 75.
 Sarabun, C. C.; Brandt, A.; Tyler, M. A.; Smith, G. D.—*Biological Transport, Internal Waves, and Mixing in the Chesapeake Bay*, No. 3, 227.
 Schoeberlein, H. C.—*A Statistical Analysis of Patches of Oceanic Small-Scale Activity*, No. 3, 194.
 Seymour, S. J.—*Symposium on Applications of Real-Time Oceanographic Circulation Modeling*, No. 4, 364.
 Smith, G. D.—See Sarabun, C. C.
 Smith, G. L.—*Guest Editor's Introduction*, No. 3, 184.
 Smith, G. L.—*Guest Editor's Introduction*, No. 4, 274.
 Strikwerda, T. E.; Black, H. D.; Levanon, N.; Howey, P. W.—*The Bird-Borne Transmitter*, No. 1, 60.
 Strikwerda, T. E.—See Griffin, M. D.
 Thompson, D. R.—*Intensity Modulations in Synthetic Aperture Radar Images of Ocean Surface Currents and the Wave/Current Interaction Process*, No. 4, 346.
 Thompson, D. R.—See Apel, J. R.
 Tilley, D. G.—See Apel, J. R.
 Tyler, M. A.—See Sarabun, C. C.
 Van Allen, J. A.—*Genesis of the International Geophysical Year*, No. 4, 367.
 Van Dyke, P.—See Apel, J. R.
 Venkatesan, D.—*Cosmic-Ray Picture of the Heliosphere*, No. 1, 4.
 Venkatesan, D.—*Origins of Magnetospheric Physics*, by J. A. Van Allen, No. 1, 103.
 Wagner, G. D.—See Charles, H. K., Jr.
 Weiner, J. A.—See Charles, H. K., Jr.

TITLE INDEX

Johns Hopkins APL Technical Digest Volume 6, 1985

BIOMEDICINE

- | | | |
|----|---|--------------|
| 68 | Development of Medical Electronic Devices in the APL Space Department | A. L. Newman |
|----|---|--------------|

BOOKS

- | | | |
|-----|--|---------------------------|
| 100 | Magnetospheric Currents, T. A. Potemra (ed.) and Quantitative Aspects of Magnetospheric Physics, by L. R. Lyons and D. J. Williams | H. Alfvén |
| 103 | Origins of Magnetospheric Physics, by J. A. Van Allen | D. Venkatesan |
| 106 | Magnetic Glasses, by K. Moorjani and J. M. D. Coey | J. R. Cullen, J. J. Rhyne |
| 176 | The Moon's Acceleration and Its Physical Origins: Vol. 1—As Deduced from Solar Eclipses and Vol. 2—As Deduced from General Lunar Observations, by R. R. Newton | S. J. Goldstein, Jr. |
| 269 | Information Systems for Patient Care, by B. I. Blum | E. E. McColligan |

ENVIRONMENT

- | | | |
|-----|---|--------------|
| 159 | The Chesapeake Bay | W. McCloskey |
| 369 | Chesapeake Bay Research Institutions: A Bay-Wide Presence | W. McCloskey |