

# NBS Technicalendar

U.S. DEPARTMENT OF COMMERCE  
National Bureau of Standards

*Circulate  
to all  
Employees*

The NBS Technicalendar is issued weekly on Thursdays covering events scheduled for the following week. Listed are activities of interest primarily to the NBS staff. Items for inclusion should be in writing in proper format (see format of items listed herein) and **MUST** be received by **noon on Wednesday**. Items to be included and requests for copies of this calendar should be sent to Room A607, Administration Building, attention Mrs. Betty L. Burris, Editor or Mrs. Dorothy W. Shankle, Asst. Editor (Phone: 301-921-2264).

All lectures and meetings are open unless otherwise stated.

January 7 to January 11, 1980

## MEETINGS AT THE NATIONAL BUREAU OF STANDARDS Gaithersburg, Maryland

### NBS COLLOQUIUM

January 11, 1980 10:30 a.m.

Green Auditorium

"Atmospheric Composition: Constant or Changing?"

Michael B. McElroy

Abbott Lawrence Rotch Professor of Atmospheric Science  
Harvard University

Factors which influence the abundance of atmospheric gases such as carbon dioxide ( $\text{CO}_2$ ), nitrous oxide ( $\text{N}_2\text{O}$ ), and ozone ( $\text{O}_3$ ) will be discussed. It is pointed out that substantial changes in  $\text{CO}_2$  and  $\text{N}_2\text{O}$  may have taken place in the past with consequences both for climate and atmospheric chemistry. Influence of agriculture and energy practices are of research interest. The talk reports current progress and problems.

(NBS contact, James W. Elkins, 921-2886.)

- 1/8--Tuesday 10 a.m. SCIENTIFIC COMPUTING DIVISION-SCIENTIFIC SOFTWARE TUTORIAL MEETING: MATLAB -- An Interactive Matrix Laboratory, C. Moler, U. of New Mexico. Rm. A340, Metrology Bldg. (NBS contact, David Kahaner, 921-3395.)
- 1/8--Tuesday 10 a.m. SPECIAL JOINT CMS-CAPQ SEMINAR: Diffusion of Hydrogen, Deuterium, and Tritium in Niobium, G. Matusiewicz, Dept. of Metallurgy and Mining Engineering, U. of Illinois at Urbana. Rm. B165, Physics Bldg. (NBS contact, Dr. Masao Kuriyama, 921-2986.)
- 1/8--Tuesday 10:30 a.m. ATOMIC AND PLASMA RADIATION SEMINAR: Spectroscopic Studies of Ions and Metastable Atoms Using a Hollow Cathode, G. Lombardi, Harvard and Smithsonian Center for Astrophysics. Rm. B215, Physics Bldg. (NBS contact, Daniel Kelleher, 921-2011.)
- 1/8--Tuesday 10:30 a.m. FIRE RESEARCH SEMINAR: Detailed Modeling of Reactive Flow Systems: Physics or Curve Fitting? J. P. Boris, NRL. Rm. B163, Chemistry Bldg. (NBS contact, B. McCaffrey, 921-3242.)
- 1/8--Tuesday 1 p.m. NUCLEAR & RADIOLOGICAL PHYSICS SEMINAR: Effect of an External Electric Field on Electronic Excitation Energy Transfer in Molecular Crystals, D. Hanson, State University of New York, Stonybrook. Conference Rm. C301, Radiation Physics Bldg. (NBS contact, Cynthia Maria, 921-2031.)
- 1/8--Tuesday 1:30 p.m. CERAMICS, GLASS, AND SOLID STATE SCIENCE DIVISION SEMINAR: Molecular Dynamics Studies of Glass Structure, T. Soules, General Electric Company, Cleveland, Ohio. Rm. B163, Chemistry Building. (NBS contact, Jack Wenzel, 921-2817.)
- 1/8--Tuesday 3:30 p.m. CHEMICAL STABILITY AND CORROSION DIVISION SEMINAR: Ionic Transport Studies of Fluorites, A. Chadwick, U. of Kent, Canterbury, England. Rm. B163, Chemistry Bldg. (NBS contact, Dr. Alan Franklin, 921-2901.)
- 1/9--Wednesday 10:30 a.m. CENTER FOR ABSOLUTE PHYSICAL QUANTITIES COLLOQUIUM: Highly Excited Hydrogen Atoms: An Atomic Cornucopia, P. Koch, Physics Dept., Yale University. Rm. B165, Physics Bldg. (NBS contact, D. Deslattes, 921-2061.)
- 1/9--Wednesday 11 a.m. NBS COLLOQUIUM ON MATHEMATICAL MODELING IN SCIENCE AND ENGINEERING: Propagating Flame Fronts and Their Stability, B. J. Matkowsky, Northwestern University. Lecture Rm. B, Administration Bldg. (NBS contact, Ron Rehm, 921-2631.)
- 1/9--Wednesday 11 a.m. NUCLEAR & RADIOLOGICAL PHYSICS SEMINAR: Comparison of Electron and Proton Scattering by the Oxygen Isotopes, M. V. Hynes, MIT. Conference Rm. C301, Radiation Physics Bldg. (NBS contact, R. P. Madden, 921-2031.)
- 1/9--Wednesday 1:30 p.m. SCIENTIFIC COMPUTING DIVISION-SCIENTIFIC SOFTWARE TUTORIAL MEETING: Introduction to Vector Processing on the Control Data CYBER 200, M. Kascic, Jr., Control Data Corporation. Rm. B163, Chemistry Bldg. (NBS contact, David Kahaner, 921-3395.)
- 1/10--Thursday 10:30 a.m. POLYMER SCIENCE & STANDARDS SEMINAR: Biomedical Applications of Ion Thruster Technology, B. Banks, Head, Research and Advanced Concepts Sect., NASA-Lewis Research Center, Cleveland, OH. Rm. A340, Metrology Bldg. (NBS contact, Dr. John Tesk, 921-3336.)



MEETINGS AT THE NATIONAL BUREAU OF STANDARDS  
Gaithersburg, Maryland-----continued

- 1/10--Thursday 10:30 a.m. CENTER FOR THERMODYNAMICS AND MOLECULAR SCIENCE MEETING: Shape Resonance and Autoionization Effects in Molecular Photoionization. Results from the Triply Differential Photoelectron Experiment at SURF II, R. Stockbauer, Surface Science Div., Center for Thermodynamics and Molecular Science, NBS. Rm. B163, Chemistry Bldg. (NBS contact, Dr. Ralph Klein, 921-2711.)
- 1/10--Thursday 11 a.m. CENTER FOR APPLIED MATHEMATICS-EXPOSITORY SEMINAR SERIES: Robust Analysis of GI/GI Queues, C. M. Harris, Center for Management & Policy Research, Inc., Washington, DC. Rm. A434, Administration Bldg. (NBS contact, Lambert Joel, 921-3855.)
- 1/10--Thursday 11 a.m. NUCLEAR & RADIOLOGICAL PHYSICS SEMINAR: Production of Spin Polarized Li Atoms by Optical Pumping, D. Caldwell, Yale University. Conference Rm. C301, Radiation Physics Bldg. (NBS contact, Dr. T. B. Lucatorto, 921-2031.)
- 1/11--Friday 10 a.m. SPECIAL JOINT CMS-CAPO SEMINAR: Photoconductivity and Defects in Nickel Oxide, M. Brown, Materials Research Center, Rensselaer Polytechnic Institute. Rm. B165, Physics Bldg. (NBS contact, Dr. Masao Kuriyama, 921-2986.)
- 1/11--Friday 11 a.m. CENTER FOR BUILDING TECHNOLOGY SPECIAL STAFF SEMINAR: Japanese Research Facility at Their New Location in Tsukuba, H. Lew, Construction Safety Group and I. Benjamin, Center for Fire Research, NBS. Lecture Rm. B, Administration Bldg. (NBS contact, Karen Porterfield, 921-2693.)

MEETINGS ELSEWHERE OF INTEREST TO NBS PERSONNEL

- 1/7--Monday 3:30 p.m. NASA-GODDARD SPACE FLIGHT CENTER ENGINEERING COLLOQUIUM: Data Packets: The Electronic Envelopes of the Future, E. P. Greene, GSFC. Auditorium, Bldg. 3, Goddard Space Flight Center, Greenbelt, MD. (For further information, call Ms. Katherine Felix, 344-8942.)
- 1/10--Thursday 3:30 p.m. U. OF MD. DEPARTMENT OF BIOPHYSICS-SCHOOL OF MEDICINE BIOPHYSICS SEMINAR: A Model Reconciling Gating Current and Sodium Conductance, C. Armstrong, Dept. of Physiology, U. of Pennsylvania, School of Medicine. Rm. 498, Howard Hall, U. of MD., School of Medicine, 660 West Redwood Street, Baltimore, MD. (For further information, call 301/528-7940.)
- 1/11--Friday 2 p.m. THE JOHNS HOPKINS UNIVERSITY-APPLIED PHYSICS LABORATORY COLLOQUIUM: Technical-Congressional Interaction on Synthetic Fuel Production, H. C. Hottel, MIT. Parsons Auditorium - Howard County Laboratory, JHU/APL, Johns Hopkins Road, Laurel, MD. (For further information, call Dr. E. P. Gray or Dr. A. M. Stone, 301/953-7100.)
- 1/11--Friday 8:30 p.m. THE PHILOSOPHICAL SOCIETY OF WASHINGTON MEETING: Magnito-Optics-A New Twist to an Old Field, W. G. Maisch, Retiring President. John Wesley Powell Auditorium, Cosmos Club, 2170 Florida Ave., NW, Washington, DC. (For further information, call Robert Leachman, 255-9117. Public is welcome.)

TALKS BY NBS GAITHERSBURG PERSONNEL

- BUTRYMOWICZ, D. B.: "Diffusion in Grain Boundries in Metals" and "Data Evaluation in the NBS Diffusion in Metals Data Center," Physico-Technical Institute, Academy of Sciences of the UK. S.S.R., Kharkov, U.S.S.R., 11/22 and 11/26/79.
- COLLE, R.: "Bernoulli's Ghost and the Treatment and Reporting of Measurement Uncertainties," Environmental Sciences Div., Lawrence Livermore Laboratory, Livermore, CA, 1/8/80.
- EISENHOWER, E. H.: "NBS Activities Relevant to Radiation Protection," The Greater Philadelphia Section of the American Society for Non-Destructive Testing, Inc., Lionville, PA, 1/3/80.
- HAN, C. C.: "Dynamic Scattering from Polymer Solutions," Gordon Research Conferences on Polymers, Santa Barbara, CA, 1/15/80.
- HSU, N. N.: "Breaking Pencil Lead Technique, Source Characterization," Working Session & Seminar of the Committee on Acoustic Emission of Reinforced Plastics, sponsored by SPI Corrosion Resistant Structures Committee, Sheraton-Houston Hotel, Houston, TX, 1/15/80.
- SANTORO, A.: "Diffraction Patterns from Modulated Structures," Centre National de la Recherche Scientifique (CNRS), Grenoble, France, 1/8/80.
- WATERS, R. L., Jr.: "Sampling and Analysis Strategies for Plasma Spectrochemical Analysis," International Winter Conference 1980 - Developments in Atomic Plasma Spectrochemical Analysis, San Juan, Puerto Rico, 1/10/80.

ADVANCE NOTICES

- 1/14--Monday 12:15 p.m. WASHINGTON RUBBER GROUP LUNCHEON MEETING: The Washington Rubber Group will wind up its program on the synthetic rubber effort with a talk by Albert J. Davis, Assistant Managing Director, International Institute of Synthetic Rubber Producers, Inc. Dry Dock Room of the Channel Inn's Pier 7 Restaurant, 7th Street and Maine Ave., SW, Washington, DC. (To make luncheon reservations and for further information, call Robin Platky or Doris Henricks, 833-3630.)
- 3/19 and 3/20 NATIONAL ARCHIVES & RECORDS SERVICE (NARS) TO SPONSOR SEMINARS: A Series of Technical Sessions during the FOURTH ANNUAL FEDERAL OFFICE SYSTEMS EXPO (FOSE) will be conducted. Sheraton Washington Hotel, Washington, DC. (General conference sessions will be held each day and will be open to all attendees. A separate series of workshop sessions will also be conducted but will be limited in size and will require advance registration. For reservations for the workshops and for complete information on the NARS General Conference Program and workshop sessions, as well as general FOSE Seminars and Exposition, Contact: National Trade Productions, Inc., 9301 Annapolis Road, Suite 206, Lanham, MD. PHONE: 301/459-1815.)