Arthur Bienenstock
Professor of Photon Science, Emeritus
Vice Provost and Dean of Research

Bio

ACADEMIC APPOINTMENTS

• Professor Emeritus, Vice Provost and Dean of Research

Publications

PUBLICATIONS

• Stig Hagstrom obituary PHYSICS TODAY
  Bienenstock, A., Fadley, C. S., Sundqvist, B.
  2012; 65 (5): 65-66

• Better regulation for research universities ISSUES IN SCIENCE AND TECHNOLOGY
  Bienenstock, A.
  2011; 28 (1): 17-18

• Women in Physics in the United States WOMEN IN PHYSICS
  2009; 1119: 189-?

• A fair deal for federal research at universities ISSUES IN SCIENCE AND TECHNOLOGY
  Bienenstock, A.
  2002; 19 (1): 33-37

• Towards the chemically specific structure of amorphous materials: anomalous X-ray scattering from a molybdenum-germanium alloy 19th International Conference on Amorphous and Microcrystalline Semiconductors (ICAMS 19)
  Ishii, H., Brennan, S., Bienenstock, A.
  ELSEVIER SCIENCE BV.2002: 243–248

• Structure of amorphous platinum uridine green sulfate by AWAXS and EXAFS INORGANIC CHEMISTRY
  Serimaa, R., Etelaniemi, V., Laitalainen, T., Bienenstock, A., Vahvasekka, S., Paakkari, T.
  1997; 36 (24): 5574-5579

• An improved regularization technique for analysis of anomalous X-ray scattering data; Platinum uridine blue sulfate as an example JOURNAL OF APPLIED CRYSTALLOGRAPHY
  Serimaa, R., Etelaniemi, V., SERIMAA, O., Laitalainen, T., Bienenstock, A.
  1996; 29: 390-402

• CHARACTERIZATION OF PHASE-SEPARATION IN AMORPHOUS FILMS USING MODERN SMALL-ANGLE SCATTERING METHODS 6th International Conference on the Structure of Non-Crystalline Materials (NCM 6)
  Regan, M. J., Bienenstock, A.
  ELSEVIER SCIENCE BV.1995: 644–652

• AN IMPROVED REGULARIZATION TECHNIQUE FOR THE ANALYSIS OF ANOMALOUS SCATTERING DATA 6th International Conference on the Structure of Non-Crystalline Materials (NCM 6)
  Serimaa, R., SERIMAA, O., Bienenstock, A.
• EVIDENCE OF PHASE-SEPARATION IN AMORPHOUS FEXSi1-X FILMS *Journal of Non-Crystalline Solids*
  VanRaaap, M. B., Regan, M. J., Bienenstock, A.
  1995; 191 (1-2): 155-163

• MICROSTRUCTURAL EVOLUTION OF NIFE/AG MULTILAYERS STUDIED BY X-RAY-DIFFRACTION AND IN-SITU HIGH-RESOLUTION TEM *Journal of Magnetism and Magnetic Materials*
  1995; 151 (1-2): 24-32

• PHASE-SEPARATION IN SPATTERED AMORPHOUS METAL-GERMANIUM ALLOYS *Physical Review B*
  Regan, M. J., Bienenstock, A.
  1995; 51 (18): 12170-12186

• ANISOTROPIC PHASE-SEPARATION THROUGH THE METAL-INSULATOR-TRANSITION IN AMORPHOUS ALLOYS *Physical Review Letters*
  Regan, M. J., Rice, M., VanRaaap, M. B., Bienenstock, A.
  1994; 73 (8): 1118-1121

• STRUCTURAL STUDIES OF THE PHASE-SEPARATION OF AMORPHOUS FEXGe100-X ALLOYS *Physical Review B*
  Lorentz, R. D., Bienenstock, A., Morrison, T. I.
  1994; 49 (5): 3172-3182

• FRACTAL SURFACE OF AMORPHOUS PLATINUM PYRIMIDINE COMPLEXES IN SOLID-STATE AS REVEALED BY ANOMALOUS SMALL-ANGLE SCATTERING *IX International Conference on Small Angle Scattering*
  Serimaa, R., Laitalainen, T., Regan, M. J., Bienenstock, A.
  EDP SCIENCES S A. 1993: 361–64

• APPLICATION OF CYLINDRICAL CORRELATION-FUNCTIONS TO ANISOTROPIC SCATTERING FROM AMORPHOUS FILMS *IX International Conference on Small Angle Scattering*
  Regan, M. J., Bienenstock, A.
  EDP SCIENCES S A. 1993: 459–62

• COMPOSITION MODULATION IN AMORPHOUS METAL GERMANIUM ALLOYS DETECTED BY ANOMALOUS SMALL-ANGLE X-RAY-SCATTERING *8TH International Conf on Small Angle Scattering*
  Rice, M., Wakatsuki, S., Bienenstock, A.
  WILEY-BLACKWELL PUBLISHING, INC. 1991: 598–602

• REAL-TIME SMALL-ANGLE X-RAY-SCATTERING STUDY OF THE EARLY STAGE OF PHASE-SEPARATION IN THE SIO2-BAO-K2O SYSTEM *Physical Review B*
  Stephenson, G. B., Warburton, W. K., Haller, W., Bienenstock, A.
  1991; 43 (16): 13417-13437

• X-RAYS PROVIDE NEW SURFACE VISION *Research & Development*
  Brennan, S., Bienenstock, A.
  1989; 31 (12): 52-7

• PEP AS A SYNCHROTRON RADIATION SOURCE *Review of Scientific Instruments*
  Bienenstock, A., Brown, G., Wiedemann, H., Winick, H.
  1989; 60 (7): 1393-1398

• FLUORESCENCE EXTENDED X-RAY ABSORPTION FINE-STRUCTURE STUDY OF SILICON IN NEODYMIUM IRON BORON RARE-EARTH MAGNETS *Journal of Applied Physics*
  Brennan, S., Bienenstock, A., Keem, J. E.
  1989; 65 (2): 697-703

• STRUCTURE AND BONDING IN PHOTODIFFUSED AMORPHOUS AG-GESE2 THIN-FILMS *Physical Review B*
  Fischercolbrrie, A., Bienenstock, A., Fuoss, P. H., Marcus, M. A.
  1988; 38 (17): 12388-12403
• SYNCHROTRON RADIATION STUDIES - ANOMALOUS SCATTERING, GRAZING-INCIDENCE SCATTERING, EXAFS JOURNAL OF NON-CRYSTALLINE SOLIDS
  Bienenstock, A.
  1988; 106 (1-3): 17-25

• SSRL DEVELOPMENT - RECENT AND PLANNED NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT
  Bienenstock, A.
  1988; 266 (1-3): 13-15

• X-RAY STRUCTURAL STUDY OF AMORPHOUS MO-GE FILMS PHYSICAL REVIEW B
  Kortright, J. B., Bienenstock, A.
  1988; 37 (6): 2979-2996

• PHASE-SEPARATION IN AMORPHOUS ZR-FE ALLOYS DETERMINED BY ANOMALOUS X-RAY-SCATTERING AND MAGNETIZATION MEASUREMENTS MATERIALS SCIENCE AND ENGINEERING
  Krebs, H. U., Biegel, W., Bienenstock, A., Webb, D. J., Geballe, T. H.
  1988; 97: 163-167

• LIQUID GEBR4 .2. MOLECULAR PACKING AND LIQUID STRUCTURE JOURNAL OF CHEMICAL PHYSICS
  1987; 87 (1): 613-619

• LIQUID GEBR4 .1. A TEST OF THE ANOMALOUS X-RAY-SCATTERING METHOD AS APPLIED TO DISORDERED MATERIALS JOURNAL OF CHEMICAL PHYSICS
  1987; 87 (1): 604-612

• AN X-RAY ANOMALOUS SCATTERING STUDY OF LIQUID GEBR4 JOURNAL DE PHYSIQUE
  Ludwig, K. F., Wilson, L., Warburton, W. K., Bienenstock, A.
  1985; 46 (C-8): 193-197

• SHORT-RANGE ORDER DETERMINATION IN AMORPHOUS FEGE2 WITH ANOMALOUS X-RAY-SCATTERING JOURNAL DE PHYSIQUE
  LORENTZ, R. D., BIENENSTOCK, A. I.
  1985; 46 (C-8): 187-191

• STRUCTURAL STUDIES OF SPUTTERED NI-AS-O FILMS JOURNAL OF NON-CRYSTALLINE SOLIDS
  LADERMAN, S. S., Bienenstock, A., FLASCK, R., Betts, F.
  1985; 70 (3): 409-427

• STRUCTURAL STUDY OF METALLIC AMORPHOUS MO-GE ALLOYS JOURNAL OF NON-CRYSTALLINE SOLIDS
  Kortright, J., Bienenstock, A.
  1984; 61-2 (JAN): 273-278

• STRUCTURAL STUDIES OF AMORPHOUS MO-GE ALLOYS THROUGH THE SEMICONDUCTOR METAL TRANSITION JOURNAL OF NON-CRYSTALLINE SOLIDS
  Kortright, J., Bienenstock, A.
  1983; 59-6 (DEC): 153-156

• SYNCHROTRON RADIATION RESEARCH - AN OVERVIEW PHYSICS TODAY
  Bienenstock, A., Winick, H.
  1983; 36 (6): 48-?}

• AN ALL WIGGLER AND UNDULATOR SYNCHROTRON RADIATION SOURCE IEEE TRANSACTIONS ON NUCLEAR SCIENCE
  Winick, H., Wiedemann, H., LINDAU, I., Hodgson, K., Halbach, K., CERINO, J., Bienenstock, A., Bachrach, R.
  1983; 30 (4): 3097-3099

• EXAFS INVESTIGATION OF DILUTE CU IMPURITIES IN AMORPHOUS AS2SE3 SOLAR ENERGY MATERIALS
  Laderman, S., Bienenstock, A., Liang, K. S.
  1982; 8 (1-3): 15-22
• APPLICATION OF DIFFERENTIAL ANOMALOUS X-RAY-SCATTERING TO STRUCTURAL STUDIES OF AMORPHOUS MATERIALS PHYSICAL REVIEW LETTERS
  Fuoss, P. H., Eisenberger, P., Warburton, W. K., Bienenstock, A.
  1981; 46 (23): 1537-1540

• RADIAL-DISTRIBUTION FUNCTION STUDIES OF GLASSY GERMANIUM-SILVER-CHALCOGEN ALLOYS JOURNAL DE PHYSIQUE
  Bourne, L. C., Rowland, S. C., Bienenstock, A.
  1981; 42 (NC4): 951-954

• ANOMALOUS SCATTERING DETERMINATIONS OF THE PAIR DISTRIBUTION-FUNCTIONS IN AMORPHOUS GESE JOURNAL OF NON-CRYSTALLINE SOLIDS
  Fuoss, P. H., Warburton, W. K., Bienenstock, A.
  1980; 35-6 (JAN-): 1233-1238

• AN OVERVIEW OF THE STANFORD SYNCHROTRON RADIATION LABORATORY NUCLEAR INSTRUMENTS & METHODS
  Bienenstock, A.
  1980; 172 (1-2): 13-20

• APPLICATIONS OF SYNCHROTRON RADIATION IEEE TRANSACTIONS ON NUCLEAR SCIENCE
  Bienenstock, A.
  1979; 26 (3): 3780-3784

• X-RAY, NEUTRON, AND ELECTRON-SCATTERING MATERIALS SCIENCE AND ENGINEERING

• ATOMIC-STRUCTURE OF PLATINUM CLUSTERS NOUVEAU JOURNAL DE CHIMIE-NEW JOURNAL OF CHEMISTRY
  Gallezot, P., BIENENST, A. I., Boudart, M.
  1978; 2 (3): 263-266

• SYNCHROTRON RADIATION RESEARCH ANNUAL REVIEW OF NUCLEAR AND PARTICLE SCIENCE
  Winick, H., Bienenstock, A.
  1978; 28: 33-113

• STRUCTURAL STUDIES OF GLASSY CUASSE2 AND CU-AS2SE3 ALLOYS PHYSICAL REVIEW B
  Liang, K. S., BIENENST, A., Bates, C. W.
  1974; 10 (4): 1528-1538

• TEMPERATURE-DEPENDENCE OF HGTE BAND-GAP PHYSICAL REVIEW B
  GUENZER, C. S., Bienenstock, A.
  1973; 8 (10): 4655-4667