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Louis E. Brus
Curriculum Vitae

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Chemistry Department, MS 3125
Columbia University
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Education:

BA in Chemical Physics (magna cum laude), Rice University, 1965
PhD in Chemical Physics, Columbia University, 1969. Advisor: Richard Bersohn

Professional Experience:

Lieutenant USN, 1969-1973, at the U.S. Naval Research Laboratory, Washington DC
Research in the solid state and chemistry divisions as Scientific Staff Officer.
AT&T Bell Laboratories, Murray Hill, NJ. Member of Technical Staff, , 1973-1984.
Distinguished Member of Technical Staff, 1984-1996.
Columbia University, Professor of Chemistry from July 1996
Professor of Chemical Engineering and Applied Chemistry from July 1997
Thomas Alva Edison Professor 2001-2004
Samuel Latham Mitchill Professor from 2004
Scientific Head, Columbia MRSEC IRG on Complex Films 1998-2008
University of Paris VI (P. & M. Curie), Visiting Professor June 2002.

Awards and Honors:

NSF Predoctoral Fellow 1966-1969
U.S. Naval Research Laboratory Award for Best Paper in Chemistry 1973, (with J. R. McDonald, Jr.)
Elected Fellow, American Physical Society 1980
Herman Bloch Award, "For Scientific Excellence in Industry", University of Chicago, 1995.
Elected Fellow, American Academy of Arts and Sciences 1998.
Irving Langmuir Prize in Chemical Physics, from the American Physical Society 2001
Elected to the U. S. National Academy of Sciences in Chemistry 2004
Chemistry of Materials Prize from the American Chemical Society 2005
R. W. Wood Prize (with A. Ekimov and A. Efros) from the Optical Society of America 2006
Kavli Prize in Nanoscience (with S. Iijima) 2008

Lectureships:

Lecturer, Welch Foundation Symposium on "Valency", 1988
Hutchinson Memorial Lecturer, Rochester University, 1991
Lecturer, Nature Symposium on "Nanotechnology", 1992
Kistiakowsky Memorial Lecturer, Harvard University, 1993
Rohm and Haas Lecturer, University of North Carolina , 1994
C. B. McDowell Lecturer, Univ. of British Columbia, 1994
Fairchild Lecturer, Lehigh University, 1994
Franklin Memorial Lecturer, Rice University, 1995
Lecturer, Welch Foundation Symposium on "Nanochemistry", 1995
A. R. Gordon Lecture Series, Univ. of Toronto, 1996
Kolthoff Lecture Series in Chemistry, Univ. of Minnesota, 1996.

Distinguished Visitor, JILA at University of Colorado, 1999.
Musulin Lecturer, Southern Illinois University, 1999.
H. Nation Lecturer, Georgia Inst. of Technology, 1999.
Riley Lecturer, Notre Dame University, 2001
Professor, 3ième Cycle Seminar in Physical Chemistry, Swiss Federal Universities, Sept. 2002
Pimentel Memorial Lecturer, University of California Berkeley, April 2003
Lane Lecturer, University of Illinois March 2004
ABB Distinguished Lecturer, RPI, October 2004
Hill Memorial Lecturer, Duke University, November 2004
Hascoe Distinguished Lecturer, University of Connecticut, December 2004
Barre Lectures, University of Montreal, May 2005
A. D. Little Lectures in Physical Chemistry, MIT, Sept 2005
Glucker Lecturer, Indiana University, April 2006
L. J. Bircher Memorial Lecturer, Vanderbilt University, March 2007
Eminent Scholar Lecture, University of Arizona, February 2008

Professional Service:

American Chemical Society
Editorial Board,
Journal of the American Chemical Society 1990-1996
Journal of Physical Chemistry 1990-1993, 2003-2006
Nano Letters 2000-2004
ACS Nano 2007-
Alternate Councilor, Physical Chemistry Division, 1988-1991
Bakeland Prize Committee 1991
Nobel Signature Award Committee 1984-1987
Petroleum Research Fund Advisory Board 2002-2003
Langmuir Prize Committee 2004-2008
American Physical Society
Editorial Board: Journal of Chemical Physics 1988-1991
McGrodny New Materials Prize Committee 2002-2004
Langmuir Chemical Physics Prize Committee 2002
Department of Energy
Chemical Sciences Council 2003-2006
Director's External Review Committee, Lawrence Berkeley Laboratory, 1991, 2000
External Review Committee, National Renewable Energy Laboratory 1999
Chemical Sciences Review Committee, Argonne National Laboratory, 1990
External Review Committee, Pacific Northwest National Laboratory, 1997
Study Panel on Research Opportunities in Clusters 1987-1988, Co-chairman.
Gordon Research Conferences
Board of Trustees, 1995-2000
Vice-Chairman 1997, Chairman of the Board 1998
National Academy of Sciences/National Research Council
Chemical Sciences Roundtable 2007-2010
Panel on Benchmarking Chemistry Research Competitiveness 2006
AFOSR Chemical Sciences Review Panel, 1992-1995
Committee on Future Opportunities in AMO Science 1991-1993
Panel on Chemistry in Shock Fronts 1983
Editorial Board:
Chemical Physics Letters 1992-1995, 2004-2010

Nanostructured Materials 1992-1996

Annual Review of Physical Chemistry 1997-2001

Canadian Federal Program Directorate, Chemical Physics Standing Committee 1989-1994
Rochester University,

NSF Center for Photoinduced Charge Transfer, External Review Committee, 1990.

Visiting Committee in Chemistry 2005

Rice University, Dean's Visiting Committee for Chemistry, 1989, 1992.

Harvard University

Tenure Committee (external member) 1991, 1998, 2006

Center for Imaging and Mesoscale Structures (CIMS) Review Committee 2001

UC Berkeley Molecular Design Institute, External Member 1995-1997

University of Toronto, Provost's External Review Committee for Physics, Chemistry, Geology
and Astronomy, 1999.

NSF Nanocenter at Rensselaer Polytechnic, Director's Advisory Committee 2002-2006

Israel National Nanotechnology Initiative, Advisory Board Member, 2007

Dreyfus Foundation, Consultant 2008

Nanosys Incorporated. Scientific Advisory Board