

ROGER H. STUEWER

Curriculum Vitae

Present Position

Professor Emeritus, Program in History of Science and Technology, University of Minnesota

Faculty appointments in:

School of Physics and Astronomy

Minnesota Center for Philosophy of Science

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Personal Information

Date of Birth: September 12, 1934

Married, 2 children (daughter deceased)

U.S. citizen

1954-56 U.S. Army, Honorable Discharge

Education

1952 High School Diploma (valedictorian), Bonduel, Wisconsin

1958 B.S. (Education, with honors), University of Wisconsin, Madison

1959-60 University of Vienna, Austria (no degree)

1964 M.S. (Physics), University of Wisconsin, Madison

1968 Ph.D. (Double Ph.D. major in History of Science and Physics), University of Wisconsin, Madison

Positions

1958-59 Germantown (Wisconsin) High School, physics and mathematics teacher

1960-62 Heidelberg College (Tiffin, Ohio), Instructor in Physics

1967-70 Assistant Professor, School of Physics and Astronomy and Minnesota Center for Philosophy of Science, University of Minnesota

1970-71 Associate Professor

1971-72 Associate Professor, History of Science, Boston University

1972-74 Associate Professor and Coordinator, History of Science and Technology, School of Physics and Astronomy and Minnesota Center for Philosophy of Science, University of Minnesota

1974-89 Professor and Director, Program in History of Science and Technology

1980-81 Acting Director, Charles Babbage Institute, University of Minnesota

2000- Professor Emeritus, History of Science and Technology, University of Minnesota

Visiting Appointments

- 1974-75 Honorary Research Associate, Harvard University
 1981-82 Volkswagen Foundation Visiting Professor of History of Science and Technology, Deutsches Museum, Munich, Germany (First Recipient)
 1983-84 Visiting Scholar, Harvard University (in absentia)
 1989 Visiting Professor of the History of Physics, Universities of Vienna and Graz, under the auspices of the Austrian Ministry for Science and Research
 1998 Pieter Zeeman Visiting Professor of the History of Modern Physics, University of Amsterdam

Honors and Awards

- 1974-75 Fellow, American Council of Learned Societies
 1983-84 Fellow, American Council of Learned Societies
 1983 Fellow, American Association for the Advancement of Science
 1990 George Taylor Distinguished Service Award, Institute of Technology, University of Minnesota
 1990 Distinguished Service Citation, American Association of Physics Teachers
 1991 Fellow, American Physical Society
 1996 First Richard K. Gehrenbeck Memorial Lecturer, Rhode Island College, Providence, Rhode Island
 1997-99 Distinguished Lecturer, Sigma Xi
 1998-99 Centennial Speaker, American Physical Society
 1999 Alfred Romer Lecturer, St. Lawrence University
 2000 American Physical Society, Forum on History of Physics, Certificate for Exceptional Service
 2013 Abraham Pais Prize for History of Physics, American Physical Society and American Institute of Physics
 2014 Distinguished Alumni Award, Department of Physics, University of Wisconsin-Madison
 2014 Fellow, American Association of Physics Teachers
 2016 Special Service Award, American Association of Physics Teachers
 2016 Sigma Xi Certificate of Achievement

Professional Societies: Membership, Offices, and Appointments

American Association for the Advancement of Science

- 1980-83 Section L, Electorate Nominating Committee (Chair 1982-83)
 1984-88 Section L, Member-at-Large
 1993-95 Section L, Chair-Elect (1992-93), Chair (1993-94), Retiring Chair (1994-95)

American Association of Physics Teachers

- 1978-2015 Editor, Resource Letters, American Journal of Physics (183 Resource Letters published 1978-2012)
 1978-2015 Publications Committee
 1985-91 Committee on the History and Philosophy of Physics
 2009-12 Committee on the History and Philosophy of Physics
 1998-2015 Committee on the Interests of Senior Physicists

American Institute of Physics

- 1978-93 Advisory Committee on History of Physics, Member and Chair
- 1988-93 Physics Programs Policy Committee, Member
- 1990-95 Visiting Scientist Program in Physics
- 1999- Council of Friends, Center for History of Physics

American Physical Society

- 1979-80 Division of History of Physics, Organizing Committee
- 1982-85 Division of History of Physics, Executive Committee
- 1986-88 Division of History of Physics, Vice Chair (1986-87), Chair (1987-88), Past-Chair (1988-89)
- 1997-00 Forum on the History of Physics, Chair-Elect (1997-98), Chair (1998-99), Past-Chair (1999-2000)
- 2002-06 Forum on the History of Physics Abraham Pais Prize Committee
- 2004-07 Abraham Pais Prize for the History of Physics Selection Committee, Chair (2004-05), Member (2005-07)
- 2004-07 Forum on the History of Physics, Executive Committee
- 2004-06 Forum on the History of Physics, Fellowship Committee
- 2006-09 Forum on the History of Physics, Forum Councilor
- 2007-10 Committee on Committees, Member
- 2007-11 Audit Committee, Member

British Society for the History of Science

Gesellschaft für Wissenschaftsgeschichte (Ordentliches Mitglied)

History of Science Society

- 1972-78 Secretary
- 1972-78 Editor, HSS Newsletter
- 1978-81 Council
- 1979-82 Delegate to American Council of Learned Societies
- 1980-81 Nominating Committee
- 1982-88 Isis Advisory Committee
- 1982- Council of Friends
- 1982-84 Pfizer Award Committee (Chairman 1983-84)
- 1997-00 Watson Davis Prize Committee (Chairman 1999-2000)
- 2007-10 Watson Davis and Helen Miles Davis Prize Committee (Chairman 2009-10)

International Union of the History and Philosophy of Science, Division of History of Science, Commission on History of Modern Physics

- 1991-93 Assessor
- 1993-94 Co-chair and Chair

Midwest Junto of the History of Science

Sigma Pi Sigma, National Physics Honor Society
 1991-00 Affiliate Representative to AAAS, Section L

Sigma Xi, The Scientific Research Society
 1994-96 President and Past-President, University of Minnesota Chapter
 1995-96 Centennial Committee Member, University of Minnesota Chapter

Additional Professional Service

American Council of Learned Societies
 1972-78 Conference of Secretaries
 1974-78 Conference of Secretaries, Executive Committee
 1979-82 Delegate of History of Science Society

American Federation of Information Processing Societies
 1978-80 History of Computing Committee Subcommittee on Archives

American Institute of Physics Committee on the History of Physics
 1978-93 Member (Chairman 1980-93)
 1983-93 Member, Grants-In-Aid Program Committee
 1984-85 Physics Today, Editor Search Committee
 1988-93 Member, Physics Programs Policy Committee

American Studies Association
 1976-79 National Council
 1978-81 Finance Committee

Bakken Library and Museum of Electricity in Life
 1980-2013 Board of Directors
 1991-92 Chairman, Director Search Committee

Charles Babbage Institute
 1978-80 Program Committee
 1980-81 Acting Director

Charles Babbage Foundation
 1980-81 Vice President

Minnesota-Dakotas Chapter, American Studies Association
 1976-79 President

National American Studies Faculty Board
 1978-80 Member

National Science Foundation
 1970-72 Advisory Panel for History and Philosophy of Science

Seven Pines Symposium
1995-2007 Chair, Advisory Board

United States National Committee for the International Union of the History and Philosophy
of Science (USNC/IUHPS)

1974-80 Member

1974 Delegate to XIVth International Congress of the History of Science, Tokyo

1977 Alternate Delegate to XVth International Congress of the History of Science,
Edinburgh

Vienna International Summer University
1999- Program Committee, Member

Editorial Boards

American Institute of Physics

1979- Editorial Board, History of Modern Physics, 1800-1950

American Journal of Physics

1978-2015 Editor, Resource Letters and Reprint Books

American Physical Society

1997-99 Editorial Advisory Committee, Physics in the 20th Century (New York: Harry
N. Abrams, 1999), by Curt Suplee, edited by Judy R. Franz and John S.
Rigden

Archive for History of Exact Sciences

1989-2016 Editorial Board

Birkhäuser Verlag (Basel)

1988- Editorial Board, Science Networks: International Series on the History of
Exact Sciences

Encyclopedia of Physics (Macmillan)

1992-96 Editorial Board, Editor

Encyclopedia of Physics. Supplement: Building Blocks of Matter (Macmillan)

2000-02 Editorial Board, Editor

Isis

1982-88 Editorial Advisory Committee

NTM: Internationale Zeitschrift für Geschichte und Ethik der Naturwissenschaften, Technik
und Medizin

1992- Editorial Board

Physics in Perspective (Birkhäuser Verlag)

1999-2013 Co-Founder and Co-Editor-in-Chief

2014- Editorial Board

Science History Publications

1974-81 Advisory Editor

Science, Technology, and Human Values

1977-87 Editorial Advisory Board

Twentieth Century Physics (Institute of Physics Publishing)

1991-95 Editorial Board

Research and Development Grants Received and Administered

- 1970-72 National Science Foundation, for research on "Joseph Fraunhofer's and Heinrich Hertz's Contributions to Optics" (\$7,000).
- 1972-74 National Science Foundation, for research on "Constructive Theories of Radiation 1923-28: Background to Complementarity" (\$15,000).
- 1974-76 National Science Foundation, for research on "Topics in the History of Nuclear Physics after 1932" (\$29,000).
- 1974-75 American Council of Learned Societies, grant-in-aid for research on "Topics in the History of Nuclear Physics after 1932" (\$1,000).
- 1975-78 Hill Family Foundation (Northwest Area Foundation), for development of a "Program in Science and Public Policy" at the University of Minnesota (\$172,000).
- 1977-78 University of Minnesota, Graduate School, for duplication of the Archive for History of Quantum Physics (\$5,000).
- 1977-78 University of Minnesota, Small Grants Program, for support for a "Symposium on the History of Nuclear Physics" (\$2,500).
- 1977-78 National Science Foundation, for support for a "Symposium on the History of Nuclear Physics" (\$6,500).
- 1977-78 The Sloan Foundation, for support for a "Symposium on the History of Nuclear Physics" (\$6,500).
- 1977-78 3M Company, St. Paul, for support for a "Symposium on the History of Nuclear Physics" (\$3,000).
- 1980-81 University of Minnesota, Graduate School, "Nobel Prizes in Physics and Chemistry 1901-1929" (\$2,000).
- 1980-85 The Minneapolis Foundation, "Fellowship and Research Program to Utilize Collections of the Bakken Museum of Electricity in Life" (\$148,580).
- 1983-84 National Science Foundation, for research on "The Evolution of Nuclear Models, 1919-1939" (\$25,000).
- 1983-84 American Council of Learned Societies, for research on "The Evolution of Nuclear Models, 1919-1939," (\$10,500).
- 1983-84 University of Minnesota, Bush Sabbatical Fellowship Program, for research on "The Evolution of Nuclear Models, 1919-1939," (\$5,825; includes support from other UM sources).
- 1983-84 National Science Foundation, for dissertation research of Karen Fleckenstein on

- "Maria Goeppert-Mayer and the Development of the Shell Model of the Nucleus" (\$2,440).
- 1985-86 University of Minnesota, Graduate School, for support for research on "History of Nuclear Physics, 1896-1939" (\$5,000).
- 1990-91 National Science Foundation, for research on "History of Nuclear Physics between the Wars" (\$40,000)
- 1990-91 University of Minnesota, Graduate School, for research on "History of Nuclear Physics between the Wars" (\$8,476)
- 1990-91 University of Minnesota, Office of International Education, for research on "History of Nuclear Physics between the Wars" (\$500)
- 1990-91 University of Minnesota, Western European Area Studies Center, for research on "History of Nuclear Physics between the Wars" (\$500)
- 1993 University of Minnesota, Office of International Education, for travel expenses to chair Symposium in Zaragoza, Spain, and deliver invited paper in Florence, Italy (\$650)
- 1994-95 University of Minnesota, Graduate School, for support for research on "History of Nuclear Physics" (\$2743).
- 1995 University of Minnesota, Institute of International Studies and Programs, for travel expenses as co-organizer and session chair of conference on "The Emergence of Modern Physics" in Berlin, Germany (\$650).
- 1996 University of Minnesota, Institute of International Studies and Programs, for travel expenses as organizer and chair of session on "Scientists and the Military" at 4S/EASST conference in Bielefeld, Germany (\$650).
- 1997 University of Minnesota, Institute of International Studies and Programs, for travel expenses as co-organizer and chair of sessions at conference on "Radioactivity: Science and Culture (1896-1930s)" in Paris, France (\$500).
- 1999 University of Minnesota, Office of International Programs, for travel expenses as co-organizer and chair of session at conference on "Volta and the History of Electricity" in Como and Pavia, Italy (\$600).
- 2012-13 University of Minnesota, Professional Development Grant for Retirees, travel expenses to deliver invited paper, "The Seventh Solvay Conference: Nuclear Physics, Intellectual Migration, and Institutional Influence," at conference in Berlin, Germany, September 13-15, 2012, and to attend American Association of Physics Teachers meetings, Summer 2012 and Winter 2013 (\$1988).
- 2013-14 University of Minnesota, Professional Development Grant for Retirees, travel expenses to attend American Association of Physics Teachers meetings, Summer 2013 and Winter 2014 (\$1390).

Ph.D. Dissertations

1. Richard Keith Gehrenbeck, "C.J. Davission, L.H. Germer, and the Discovery of Electron Diffraction," University of Minnesota (December 1973)
2. Paul A. Hanle, "Erwin Schrödinger's Statistical Mechanics, 1912-1925," Yale University (December 1975) [External Reader]

3. Katherine S. Arima, "Model and Mechanism in Quantum Physics: A Historical and Philosophical Analysis of Systems Represented by Harmonic Oscillators," University of Toronto (1977) [External Reader]
4. Allan A. Needell, "Irreversibility and the Failure of Classical Dynamics: Max Planck's Work on the Quantum Theory 1900-1915," Yale University (May 1980) [External Reader]
5. Alan Q. Morton, "The Neutrino and Nuclear Physics, 1930-1940," University of London, England (1982) [External Reader]
6. Frederick Hugh Fellows, "J.H. Van Vleck: The Early Life and Work of a Mathematical Physicist," University of Minnesota (March 1985)
7. Karen Elise Johnson, "Maria Goepert Mayer and the Development of the Nuclear Shell Model," University of Minnesota (July 1986)
8. Carsten Jensen, "A History of the Beta Spectrum and its Interpretation," University of Copenhagen, Denmark (1990) [External Reader]
9. Charles Edward Atchley, "The Invention and Discovery of the Neutrino: Elusive Reality and the Nature of Scientific Acceptance," University of Minnesota (December 1991)
10. Peter Heering, "Das Grundgesetz der Elektrostatik: Experimentelle Replikation, wissenschaftshistorische Analyse und didaktische Konsequenzen," Carl von Ossietzky Universität Oldenburg, Germany (August 1995) [External Reader]
11. Michael Sean Reidy, "The Flux and Reflux of Science: The Study of the Tides and the Organization of Early Victorian Science," University of Minnesota (May 2000) [with Sally Gregory Kohlstedt]
12. Kai-Henrik Barth, "Detecting the Cold War: Seismology and Nuclear Weapons Testing, 1945-1970," University of Minnesota (July 2000)
13. Alberto Antonio Martinez, "The Neglected Science of Motion: The Kinematic Origins of Relativity," University of Minnesota (December 2000)
14. Jan Frercks, "Charakterisierung der Forschungspraxis Hippolyte Fizeaus ausgehend von der Replikation seines Ätherwindexperiments von 1852," Carl von Ossietzky Universität Oldenburg, Germany (June 2001) [External Reader]
15. Ioanna Semendeferi, "Exploiting Uncertainty in Radiation Limits: Monticello Dissenters, Health Physicists, and the Civilian Nuclear-Power Debate," University of Minnesota (May 2003)

16. John Gustafson, "Wolfgang Pauli 1900 to 1930: His Early Physics in Jungian Perspective," University of Minnesota (June 2004)

Publications

A. Books

1. Historical and Philosophical Perspectives of Science, ed. (Minneapolis: University of Minnesota Press, 1970); reprinted in Roger Hahn, ed., Classics in the History and Philosophy of Science, Vol. I (New York: Gordon and Breach, 1989).
2. The Compton Effect: Turning Point in Physics (New York: Science History Publications, 1975).
3. Nuclear Physics in Retrospect: Proceedings of a Symposium on the 1930s, ed. (Minneapolis: University of Minnesota Press, 1979).
4. Springs of Scientific Creativity, ed. with R. Aris and H. T. Davis (Minneapolis: University of Minnesota Press, 1983).
5. The Michelson Era in American Science 1870-1930, ed. with Stanley Goldberg (New York: American Institute of Physics [AIP Conference Proceedings 179], 1988).
6. The Invention of Physical Science: Intersections of Mathematics, Theology and Natural Philosophy since the Seventeenth Century. Essays in Honor of Erwin N. Hiebert, ed. with Mary Jo Nye and Joan L. Richards (Dordrecht: Kluwer, 1992).
7. Resource Letters Book V, ed. (College Park: American Association of Physics Teachers, 1994).
8. The Emergence of Modern Physics: Proceedings of a Conference Commemorating a Century of Physics, Berlin 22-24 March 1995, ed. with Dieter Hoffmann and Fabio Bevilacqua (Pavia: Università degli Studi di Pavia, 1996).
9. Controversy and Consensus: Nuclear Beta Decay 1911-1934, by Carsten Jensen (deceased), ed. with Finn Aaserud, Helge Kragh, and Erik Rüdinger (Basel: Birkhäuser Verlag, 1999).
10. Resource Letters Book VI, ed. (College Park: American Association of Physics Teachers, 1999).
11. The Physical Tourist: A Science Guide for the Traveler, ed. with John S. Rigden (Basel, Boston, Berlin: Birkhäuser Verlag, 2009).

B. Articles

1. "The Arthur Holly Compton Research Notebooks 1919-1941," Washington University Archives, MS, 69 pp.

2. "Arthur Holly Compton and the Discovery of the Total Reflection of X-rays," Proc. XIIth Inter. Cong. Hist. Sci., 5 (Paris, 1968), 101-105.
3. "Compton's 'Crucial Test'—Theoretical Preconceptions and Experimental Interpretation," J. Minn. Acad. Sci., 43 (1977), 22-25.
4. "Was Newton's Wave-Particle Duality Consistent with Newton's Observations?," Isis, 60 (1969), 392-394.
5. "A Critical Analysis of Newton's Work on Diffraction," Isis, 61 (1970), 188-205.
6. "Non-Einsteinian Interpretations of the Photoelectric Effect," in Roger H. Stuewer, ed., Historical and Philosophical Perspectives of Science (Minneapolis: University of Minnesota Press, 1970), 246-263.
7. "William H. Bragg's Corpuscular Theory of X-rays and γ -rays," Brit. J. Hist. Sci., 5 (1971), 258-281.
8. "Hertz's Discovery of the Photoelectric Effect," Proc. XIIIth Inter. Cong. Hist. Sci., Section VI (Moscow, 1971), 35-43.
9. "G. N. Lewis on Detailed Balancing, the Symmetry of Time, and the Nature of Light," Hist. Stud. Phys. Sci., 6 (1975), 469-511.
10. "Bateman's Constructive Theory of Radiation," Proc. XIVth Inter. Cong. Hist. Sci., No. 2 (Tokyo, 1974), 320-323.
11. "On Compton's Research Program," in R. S. Cohen, et al., ed., Essays in Memory of Imre Lakatos, Boston Studies in the Philosophy of Science (Dordrecht: D. Reidel, 1976), Vol. 39, 617-633.
12. "History [of Compton Scattering]" (with Malcolm J. Cooper), in Brian Williams, ed., Compton Scattering (New York: McGraw-Hill, 1977), 1-27.
13. "'On, Minnesota' gave Wisconsin its popular fight song" (with Chun C. Lin and J. H. Van Vleck), [Minnesota] Alumni News, (December 1976/January 1977), 1, 4-5; abridged version reprinted in On Wisconsin, 2:2 (Summer 1980), 4.
14. "Erwin N. Hiebert," Historia Mathematica, 7 (1980), 229-233.
15. "The Nuclear Electron Hypothesis," in Otto Hahn and the Rise of Nuclear Physics, ed. William R. Shea, (Dordrecht: D. Reidel, 1983), 19-67.
16. "Nuclear Physicists in a New World: The Emigres of the 1930s in America," Berichte zur Wissenschaftsgeschichte, 7 (1984), 23-40.

17. "Artificial Disintegration and the Cambridge-Vienna Controversy," in Observation, Experiment, and Hypothesis in Modern Physical Science, ed. Peter Achinstein and Owen Hannaway (Cambridge, Mass.: MIT Press, 1985), 239-307.
18. "Niels Bohr and Nuclear Physics," in Niels Bohr: A Centenary Volume, ed. A. P. French and P. Kennedy (Cambridge, Mass.: Harvard University Press, 1985), 197-220, 362-363.
19. "Bringing the News of Fission to America," Physics Today, 38 (October 1985), 48-56.
20. "Gamow's Theory of Alpha Decay," in The Kaleidoscope of Science: The Israel Colloquium Studies in History, Philosophy, and Sociology of Science, Vol. I, ed. Edna Ullman-Margalit (Dordrecht, Boston, Lancaster, Tokyo, D. Reidel, 1986), 147-186.
21. "The Naming of the Deuteron," American Journal of Physics, 54 (1986), 206-218.
22. "Rutherford's Satellite Model of the Nucleus," Hist. Stud. Phys. Sci., 16 (1986), 321-352.
23. "Introduction" to Basic Bethe: Seminal Articles in Nuclear Physics (New York: American Institute of Physics and Tomash Publications, 1986), xi.
24. "A Personal Appreciation: Erwin Nick Hiebert. The Wisconsin Years," in Mary Jo Nye, Joan L. Richards, and Roger H. Stuewer, ed., The Invention of Physical Science (Dordrecht: Kluwer, 1992), xi-xviii.
25. "Japanese 'Magic' Mirrors," The Physics Teacher, 30 (September 1992), 327.
26. "Mass-Energy and the Neutron in the Early Thirties," Science in Context, 6 (1993), 195-238.
27. "The Origin of the Liquid-Drop Model and the Interpretation of Nuclear Fission," Perspectives on Science, 2 (1994), 39-92.
28. "History and Science," in Wolf Misgeld, Karl Peter Ohly, Horst Rühaak, and Heide Wiemann, ed., Historisch-genetisches Lernen in den Naturwissenschaften (Weinheim: Deutscher Studien Verlag, 1994), 41-68. Revised version, "History and Physics," in Jorge Barojas and Andrée Tiberghien, ed., Research on Physics Education and Teacher Training (Science Education sector of UNESCO and the International Commission on Physics Education, 1997). Further revised version, "History and Physics," Science and Education, 7 (1998), 13-30.
29. "The Seventh Solvay Conference: Nuclear Physics at the Crossroads," in Anne J. Kox and Daniel M. Siegel, ed., No Truth Except in the Details: Essays in Honor of Martin J. Klein (Dordrecht: Kluwer, 1995), 333-362.

30. "Einstein's Interpretation of 'God is subtle...,'" American Journal of Physics, 62 (1994), 295.
31. "One Hundred Resource Letters, 1962-1995," American Journal of Physics, 63 (1995), 303-306 (with A. P. French).
32. "Preface" to Richard J. Weiss, A Brief History of Light (Singapore: World Scientific, 1996), pp. vii-viii.
33. "Gamow, Alpha Decay, and the Liquid-Drop Model of the Nucleus," in E. Harper, W.C. Parke, and G.D. Anderson, ed., The George Gamow Symposium (San Francisco: Astronomical Society of the Pacific, 1997), 30-43.
34. "History as Myth and Muse," Inaugural Lecture, Pieter Zeeman Visiting Professor of the History of Modern Physics (Amsterdam: University of Amsterdam Press, 1999), 24 pp.
35. "Intervention" in Proceedings of an International Conference on History of Science and Technology in Education and Training in Europe, Louis Pasteur University, Strasbourg, France, June 25-26, 1998 (forthcoming).
36. "Theoretical Physicists and Their Institutes," Institute of Theoretical Physics, University of Amsterdam, December 10, 1999, 20 pp.
37. "De la física atómica a la nuclear" ["From Atomic to Nuclear Physics"], in José Manuel Sanchez-Ron, ed., El siglo de los cuantos (Madrid: Sociedad Estatal España Nuevo Milenio, 2001), pp. 99-141.
38. "The Compton Effect: Transition to Quantum Mechanics," Annalen der Physik, 9 (2000), 975-989; translated as "Der Comptoneffekt und die Entwicklung der Quantenmechanik," in Heiner Müller-Krumbhaar and Herman-Friedrich Wagner, ed., ... Er würfelt doch (Weinheim and New York: Wiley-VCH, 2001), pp. 537-551.
39. "The Discovery of Artificial Radioactivity," in Monique Bordry and Pierre Radvanyi, ed., Oeuvre et engagement de Frédéric Joliot-Curie (Les Ulis: EDP Sciences, 2001), pp. 11-20.
40. "The Origin of the HSS *Newsletter*," History of Science Society Newsletter 31 (April 2002), 1-2.
41. "The Chemical Tourist," Chemical Heritage 22 (Fall 2004), 3.
42. "History of Physics II Report," History of Physics Newsletter, 9 (Fall 2005), 17.
43. "Figuring Rainbows," The Physics Teacher, 44 (September 2006), 330.

44. “Ben Bederson: Physicist-Historian,” in H.H. Stroke, ed., Advances in Atomic, Molecular, and Optical Physics 51 (2005), 65-74.
45. “Historical Surprises,” Science & Education 15 (2006), 521-530.
46. “Einstein’s Revolutionary Light-Quantum Hypothesis,” in Z. Ajduk, M. Krawczyk, and A.K. Wróblewski, ed. The Photon: Its First Hundred Years and the Future. Part I. The Centenary of the Photon. PHOTON2005. International Conference on the Structure and Interactions of the Photon including The 16th International Workshop on Photon-Photon Collisions 30 August-4 September 2005, Warsaw, Poland [Acta Physica Polonica B 37 (2006), 543-558.
47. “Physicist-Historians,” in Kostas Gavroglu and Jürgen Renn, ed., Positioning the History of Science (Dordrecht: Springer, 2007), pp. 169-172.
48. “Introduction,” in Peter Heering and Daniel Osewold, ed., Constructing Scientific Understanding through Contextual Teaching (Berlin: Frank & Timme, 2007), pp. 9-11.
49. “Einstein’s Revolutionary Light-Quantum Hypothesis,” in Christian Joas, Christoph Lehner, and Jürgen Renn, ed., HQ-1 Conference on the History of Quantum Physics [Preprint 350, Vols. I and II] (Berlin: Max Planck Institute for the History of Science, 2008), pp. 1-19.
50. “Introduction,” in Gudrun Wolfschmidt, ed., Heinrich Hertz (1857-1891) and the Development of Communication: Proceedings of the Symposium for History of Science, Hamburg, Germany, October 8-12, 2007. Vol. 10. Nuncius Hamburgensis: Beiträge zur Geschichte der Naturwissenschaften (Hamburg: 2008), pp. 25-29.
51. “The Experimental Challenge of Light Quanta,” in Michel Janssen and Christoph Lehner, ed., The Cambridge Companion to Einstein (New York: Cambridge University Press, 2014), pp. 143-166.
52. “An Act of Creation: The Meitner-Frisch Interpretation of Nuclear Fission,” in Shaul Katzir, Christoph Lehner, and Jürgen Renn, ed., Traditions and Transformations in the History of Quantum Physics [HQ-3: Third International Conference on the History of Quantum Physics, Berlin, June 28-July 2, 2010] (Berlin: Edition Open Access, 2013) [Max Planck Research Library for the History and Development of Knowledge Proceedings 5], pp. 231-245.
53. “Amsterdam Memories,” in Ad Mass and Henriëtte Schatz, ed., Physics as a Calling, Science for Society: Studies in Honour of A.J. Kox (Leiden: Leiden University Press, 2013), pp. 199-206.
54. “The Joy of History” [2013 APS-AIP Abraham Pais Prize Lecture], History of Physics Newsletter 12, No. 3 (Fall 2013), 6-12.

55. "The Seventh Solvay Conference: Nuclear Physics, Intellectual Migration, and Institutional Influence," in Thomas Heinze and Richard Münch, ed. Intellectual and Organizational Renewal: Historical and Sociological Perspectives: (New York: Palgrave Macmillan, 2016), pp. 89-116.
56. "Historical Questions and Physical Inquiry," in Douglas Allchin, ed., Proceedings of the 10th International Conference on History of Science and Science Education (Minneapolis: July 21-25, 2014 (forthcoming).
57. "From the Old to the New World of Nuclear Physics," American Physical Society, Abraham Pais Prize Session, New Orleans, Louisiana, March 13, 2017; <http://meetings.aps.org/Meeting/MAR17/Session/C40.5>

C. Book Reviews

1. Marjorie Johnston, ed., The Cosmos of Arthur Holly Compton (New York: Knopf, 1967); in Isis, 59 (1968), 354-355.
2. Sidney Morgenbesser, ed., Philosophy of Science Today (New York: Basic Books, 1967); in Isis, 59 (1968), 445-446.
3. James R. Blackwood, The House on College Avenue: The Comptons at Wooster, 1891-1913 (Cambridge, Mass.: MIT Press, 1968); in Isis, 60 (1969), 414-415.
4. Richard M. Warren and Roslyn P. Warren, ed., Helmholtz on Perception: Its Physiology and Development (New York: Wiley, 1968); in Isis Critical Bibliography, 60 (1969), 163.
5. J. A. Lohne and Bernhard Sticker, Newtons Theorie der Prismenfarben (Munich: Werner Fritsch, 1969); in Isis, 62 (1971), 115.
6. George Gamow, My World Line: An Informal Autobiography (New York: Viking, 1970); in Isis, 62 (1971), 266-267.
7. M. Stanley Livingston, Particle Accelerators: A Brief History (Cambridge, Mass.: Harvard University Press, 1969); in Isis, 62 (1971), 416-417.
8. David L. MacAdam, ed., Sources of Color Science (Cambridge, Mass.: MIT Press, 1970); in Isis, 62 (1971), 534-535.
9. Vasco Ronchi, The Nature of Light (London: Heinemann, 1970); in Brit. J. Hist. Sci., 5 (1971), 402-403.
10. Ted Bastin, ed., Quantum Theory and Beyond: Essays and Discussions arising from a Colloquium (Cambridge: Cambridge University Press, 1971); in Isis, 63 (1972), 428-429.

11. David C. Lindberg, ed., John Peckham and the Science of Optics (Madison: University of Wisconsin Press, 1970); in Physics Today, 25 (1972), 67-68.
12. W. Robert Nitske, The Life of Wilhelm Conrad Röntgen, Discoverer of the X Ray (Tucson: University of Arizona Press, 1971); in Isis, 65 (1974), 287.
13. Robert S. Shankland, ed., Scientific Papers of Arthur Holly Compton: X-Ray and Other Studies (Chicago: University of Chicago Press, 1973); in Amer. J. Phys., 43 (1975), 117.
14. Thaddeus J. Trenn, ed., Radioactivity and Atomic Theory (London: Taylor and Francis, 1975); in Amer. J. Phys., 44 (1976), 315.
15. Brian McGuinness, ed., Ludwig Boltzmann, Theoretical Physics and Philosophical Problems: Selected Writings (Dordrecht: D. Reidel, 1974); in Arch. Inter. d'Hist. Sci., 26 (1976), 326-327.
16. Stephen G. Brush, The Kind of Motion We Call Heat: A History of the Kinetic Theory of Gases in the 19th Century, 2 Vols. (Amsterdam: North-Holland, 1976); in Isis, 69 (1978), 137-138.
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53. Iwan Rhys Morus, *When Physics Became King* (Chicago and London: The University of Chicago Press, 2005); in History of Physics Newsletter 9 (Spring 2006), 12-14.
54. Robert Fox and Graeme Gooday, ed., Physics in Oxford 1839-1939: Laboratories, Learning, and College Life (Oxford and New York: Oxford University Press, 2005); in Endeavour 30 (March 2006), 4-5.
55. David Kaiser, ed., Pedagogy and the Practice of Science: Historical and Contemporary Perspectives (Cambridge, Mass. and London: The MIT Press, 2005); in Science Education 90 (September 2006), 954-956.

D. Biographies

1. American National Biography
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2. Dictionary of American Biography
 Arthur Holly Compton, Suppl. 7, 132-135
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3. Dictionary of Scientific Biography
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 Eleuthere E. N. Mascart, 9, 154-156
 Jean Baptiste Perrin, 10, 524-526
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 Samuel King Allison, 17, 23-25
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5. Encyclopedia of World Biography

Carl D. Anderson, <u>1</u> , 174-175	Jan H. Oort, <u>8</u> , 208-209
Arthur Holly Compton, <u>3</u> , 93-95	J. Robert Oppenheimer, <u>8</u> , 209-210
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James H. Jeans, <u>5</u> , 543-544	Harlow Shapley, <u>10</u> , 22-23
Jacobus C. Kapteyn, <u>6</u> , 130-131	Otto Stern, <u>10</u> , 206-207
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A. C. Bernard Lovell, <u>6</u> , 600-601	Hideki Yukawa, <u>11</u> , 506-507
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6. Macmillan Encyclopedia of Physics

Arthur Holly Compton, 1, 232-234

7. Macmillan Encyclopedia of Physics. Supplement: Building Blocks of Matter

James Chadwick, 123-125
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8. Oxford Companion to United States History

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9. Salem Press

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10. World Book Encyclopedia

James A. Van Allen	Camille Flammarion
Luis W. Alvarez	George Gamow
Hans Bethe	Murray Gell-Mann
Niels Bohr	Karl Guthe Jansky
Max Born	Bernard Lovell
James Chadwick	J. Robert Oppenheimer
John Douglas Cockcroft	Max Planck
Arthur Holly Compton	Wilhelm C. Roentgen
Paul A. M. Dirac	Ernest Rutherford
Albert Einstein	Joseph J. Thomson
Enrico Fermi	Robert J. Van de Graaff
Richard P. Feynman	Charles T. R. Wilson

E. Invited Lectures

1. "Arthur Holly Compton's 'Crucial Test': Theoretical Preconceptions and Experimental Interpretation," Minnesota Academy of Science, College of St. Catherine, St. Paul, Minnesota, April 28, 1968
1. "Arthur Holly Compton and the Discovery of the Total Reflection of X-Rays," XIIth International Congress of the History of Science, Paris, France, August 1968
2. "The Reception of the Compton Effect," History of Science Society, Dallas, Texas, December 27, 1968
3. "William H. Bragg's Corpuscular Theory of X-Rays and Gamma Rays," Minnesota Academy of Science, University of Minnesota--Duluth, Duluth, Minnesota, May 3, 1969
4. "Non-Einsteinian Interpretations of the Photoelectric Effect," Historical and Philosophical Perspectives of Science Conference, Minneapolis, Minnesota, September 12, 1969
5. "Ideas on the Nature of Radiation," Sculpture and Science Seminar, University of Minnesota, November 7, 1969
6. "Does the Photoelectric Effect Demand the Photon?" Physics and Astronomy Colloquium, University of Minnesota, November 26, 1969
7. "G.N. Lewis and the Photon Concept," History of Science Society, December 28, 1969
8. "G.N. Lewis's Ideas on Time and Light," Minnesota Center for Philosophy of Science Colloquium, University of Minnesota, February 15, 1970
9. "The Development of Scientific Thought," Humanities Proseminar, University of Minnesota, March 5, 1970
10. "Quanta and the Nature of Radiation," Conference, Indiana University, Bloomington, March 12, 1970
11. "Light Quanta and the Photoelectric Effect," History of Science and Technology Colloquium, University of Stuttgart, Germany, July 5, 1971
12. "Hertz's Discovery of the Photoelectric Effect," XIIIth International Congress of the History of Science, Moscow, Russia, August 22, 1971
13. "The Discovery of the Compton Effect," Physics Colloquium, Dalhousie University, Halifax, Nova Scotia, February 1972
14. "Historians of Science in Physics Departments," History of Science Society, New York, New York, December 1972

15. "The Background and Discovery of the Compton Effect," Physics and Astronomy Colloquium, University of Minnesota, May 5, 1974
16. "Bateman's Studies in Radiation Theory 1921-26," XIVth International Congress of the History of Science, Tokyo, Japan, August 20, 1974
17. "The Compton Effect: Historical-Philosophical Remarks," Boston Colloquium for the Philosophy of Science, Boston University, Boston, Massachusetts, December 10, 1974
18. "The Discovery of the Compton Effect," Physics Colloquium, Amherst College, Amherst, Massachusetts, 1975
19. "The Compton Effect: Historical Background and Discovery," Physics Colloquium, Case Western Reserve University, Cleveland, Ohio, October 30, 1975
20. "The Discovery of the Compton Effect," Physics Colloquium, Ohio State University, Columbus, Ohio, 1975
21. "The Discovery of the Compton Effect," History and Philosophy of Science Colloquium, University of Pittsburgh, 1976
22. "The Discovery of the Compton Effect," Physics and Astronomy Colloquium, University of Minnesota, 1976
23. "The Discovery of the Compton Effect," Minnesota Center for Philosophy of Science Colloquium, University of Minnesota, 1976
24. "The Compton Effect: Historical Background and Discovery," Physics and History and Philosophy of Science Colloquium, University of Toronto, Toronto, Canada, December 9, 1976
25. "Rutherford and Nuclear Structure," XVth International Congress of the History of Science, Edinburgh, Scotland, August 16, 1977
26. "Physicists as Humanists and Humorists," Informal Club of St. Paul, February 6, 1978
27. "The Discovery of the Compton Effect," Physics Colloquium, Carleton College, Northfield, Minnesota, February 24, 1978
28. "Niels Bohr, Denmark," Beta Alpha Psi [Business Honorary Society], University of Minnesota, Minneapolis, May 18, 1979
29. "The Nuclear Electron Hypothesis," Otto Hahn and the Rise of Nuclear Physics Conference, McGill University, Montreal, Canada, September 19-22, 1979

30. "Niels Bohr: His Work and its Broader Implications," First Unitarian Society, Minneapolis, Minnesota, December 16, 1979
31. "The Way Things Were: History of Physics in Physics Teaching," American Association of Physics Teachers, Chicago, Illinois, January 24, 1980
32. "The Discovery of the Compton Effect," Physics and Astronomy Colloquium, University of Colorado, Boulder, February 20, 1980
33. "The Plans and Programs of the Charles Babbage Institute, History of Science Society and Society for History of Technology, Toronto, Canada, October 19, 1980
34. "Physics in Historical Perspective," Continuing Education for Women, University of Minnesota, Minneapolis, January 12, 1981
35. "The Discovery of the Compton Effect," Physics and Astronomy Colloquium, Northwestern University, Evanston, Illinois, February 11, 1981
36. "The Situation of the History of Science in the United States," Deutsches Museum Colloquium, Munich, Germany, October 12, 1981
37. "The Discovery of the Compton Effect," Institute of Physics "G. Marconi" Colloquium, University of Rome, November 10, 1981
38. "The Nuclear Electron Hypothesis, 1911-1934," Institute of Physics "G. Marconi" Colloquium, University of Rome, November 10, 1981
39. "The Situation of the History of Science in the United States," History of Science and Technology Seminar, Deutsches Museum, Munich, Germany, November 16, 1981
40. "The Discovery of the Compton Effect," Physics Colloquium, University of Bielefeld, Germany, December 4, 1981
41. "The Discovery of the Compton Effect," Physics Colloquium, University of Cologne, Germany, January 8, 1982
42. "The Discovery of the Compton Effect," History of Science and Technology Colloquium, University of Stuttgart, Germany, February 1, 1982
43. "The Discovery of the Compton Effect," History of Science and Physics Colloquium, University of Hamburg, Germany, February 3, 1982
44. "Gamow's Theory of Alpha Decay," The Israel Colloquium for the History, Philosophy and Sociology of Science, Tel Aviv University, Israel, February 23, 1982

45. "The Discovery of the Compton Effect," History of Science and Technology Colloquium, Deutsches Museum, Munich, Germany, February 27, 1982
46. "Gamow's Theory of Alpha Decay," History and Philosophy of Science Colloquium, University of London, Chelsea College, March 18, 1982
47. "The Discovery of the Compton Effect," Sigma Xi and Physics Colloquium, University of Guelph, Guelph, Ontario, Canada, September 21, 1982
48. "Commentary" on Robert Marc Friedman and Elisabeth Crawford, "The Nobel Prizes in Physics," History of Science Society, Philadelphia, Pennsylvania, October 29, 1982
49. "Niels Bohr and Complementarity," Kiwanis Club, Minneapolis, November 22, 1982
50. "The Discovery of the Compton Effect," United Baptist Church Forum, Minneapolis, Minnesota, January 30, 1983
51. "The Origin of Wave Particle Duality," Society of Physics Students Colloquium, University of Minnesota, February 8, 1983
52. "The History of Science, Technology, and Medicine in the United States and Canada in Comparison to the Situation in the Federal Republic of Germany," Deutsches Museum Symposium, Munich, Germany, March 1, 1983
53. "Artificial Disintegration and the Cambridge-Vienna Controversy," History and Philosophy of Science Colloquium, Johns Hopkins University, Baltimore, Maryland, March 16, 1983
54. "The Discovery of the Compton Effect," History of Physics Colloquium, Johannes Gutenberg University of Mainz, Germany, May 11, 1983
55. "Nuclear Physicists in a New World: The Émigrés of the 1930s in America," Gesellschaft für Wissenschaftsgeschichte, Wolfenbüttel, Germany, May 14, 1983
56. "The Discovery of the Compton Effect," Ontario Section of the American Association of Physics Teachers, University of Western Ontario, London, Ontario, Canada, June 17, 1983
57. "Discussions" on "Symmetries in Physics (1600-1980)," First International Meeting on the History of Scientific Ideas, Sant Feliu de Guíxols, Catalonia, Spain, September 20-26, 1983
58. "Rutherford's Satellite Model of the Nucleus," History of Science Society, Norwalk, Connecticut, October 27-30, 1983

59. "The Discovery of the Compton Effect," Physics and Astronomy Colloquium, Joint University of North Carolina and Duke University, Raleigh, North Carolina, November 9, 1983
60. "The Minnesota Model for the History of Science and Technology," History of Science Society, Chicago, Illinois, December 27-30, 1984
61. "Niels Bohr and Nuclear Physics in the Thirties," Minnesota Center for Philosophy of Science Colloquium, University of Minnesota, March 6, 1985
62. "Niels Bohr and Nuclear Physics in the Thirties," American Physical Society, Crystal City, Virginia, April 25-28, 1985
63. "Niels Bohr and Nuclear Physics," History of Science Colloquium, Harvard University, Cambridge, Massachusetts, November 15, 1985
64. "Niels Bohr and Nuclear Physics," Physics Colloquium, University of Wisconsin, Madison, February 20, 1986
65. "Niels Bohr and Nuclear Physics," History of Science and Technology Colloquium, University of Minnesota, Minneapolis, November 5, 1986
66. "Meitner, Frisch, and the Interpretation of Fission," Physics Colloquium Lecture, University of Washington, Seattle, March 2, 1987
67. "An Anecdotal History of Physics," 39ers Dining Club, Minneapolis, Minnesota, January 19, 1988
68. "Niels Bohr and Nuclear Physics," Physics and Astronomy Colloquium, University of Colorado, Boulder, April 6, 1988
69. "Meitner and Frisch, Liquid Drops and Fission," History of Science and Technology Colloquium, University of Minnesota, February 3, 1989
70. "The Origins of the Liquid-Drop Model of the Nucleus," Conference on "Fifty Years of Nuclear Fission," Institute for Advanced Study, Berlin, Germany, March 31, 1989
71. "Meitner, Frisch, Liquid Drops, and Fission," Niels Bohr Institute Colloquium, University of Copenhagen, Denmark, May 25, 1989
72. "Meitner, Frisch, Liquid Drops, and Fission," Physics Colloquium, University of Oldenburg, Germany, June 26, 1989
73. "Meitner, Frisch, Liquid Drops, and Fission," Physics Colloquium, University of Graz, Austria, June 1989

74. "The Complementarity of History and Science," Conference on History of Science in Science Teaching, University of Bielefeld, Germany, October 2, 1989
75. "History of Nuclear Physics between the Wars," History of Physics Colloquium, University of Milan, Italy, October 9, 1989
76. "Commentary" on Diana Barkan, "Making Space for Physical Chemistry" Session, History of Science Society, Gainesville, Florida, October 22, 1989
77. "Meitner, Frisch, Liquid Drops and Fission," Physics and Astronomy Colloquium, University of Minnesota, April 4, 1990
78. "Mass-Energy and the Neutron in the Early Thirties," Conference on "Einstein in Context," Hebrew University of Jerusalem, Israel, April 25, 1990
79. "Meitner, Frisch, and the Interpretation of Fission," Center for the Interdisciplinary Study of Science and Technology Colloquium, Northwestern University, Evanston, Illinois, November 2, 1990
80. "Commentary" at Conference on "The Interaction of Science and Technology," Ringberg Castle, Germany, March 18-20, 1991
81. "Commentary" on Terry Shinn, "Science without Theory: The Intellectual and Political Failure of the Bellevue Grand Electro-Aimant, 1900-1940," University of Cambridge, England, April 3, 1991
82. "Something Rotten in Cambridge or Vienna: The Anatomy of a Scientific Controversy," 39ers Dining Club, Minneapolis, January 21, 1992
83. "Einstein and Nuclear Physics in the Early Thirties," Einstein Conference, Ulm, Germany, March 15, 1992
84. "Commentary" on Peter Heering, "Replicating Coulomb's Experiments on the Inverse Square Law," Conference, University of Oldenburg, Germany, August 25, 1992
85. "Cambridge *versus* Vienna: The Anatomy of a Scientific Controversy," IXth Annual Meeting of the European Physical Society, Florence, Italy, September 15, 1993
86. "The Anatomy of a Scientific Controversy in the 1920s," Presidential Lecture, University of Minnesota Chapter of Sigma Xi, St. Paul, Minnesota, May 18, 1995
87. "The Origins of the Meitner-Frisch Interpretation of Fission," History of Science Colloquium, Harvard University, Cambridge, Massachusetts, March 5, 1996
88. "Gamow, Alpha Decay, and the Liquid-Drop Model of the Nucleus," The George Gamow Symposium, George Washington University, Washington, D.C., April 12, 1996

89. "The Case of the Elusive Particles: A Scientific Controversy in the 1920," First Richard K. Gehrenbeck Memorial Lecture, Rhode Island College, Providence, Rhode Island, April 18, 1996
90. "Rutherford's and Gamow's Theories of Alpha Decay: Classical Mechanics Gives Way to Quantum Mechanics," French Physical Society, Paris, France, July 9, 1997
91. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Physics and Astronomy Colloquium, Colgate University, Hamilton, New York, October 17, 1997
92. "An Act of Creation: The Origins of the Meitner-Frisch Interpretation of Nuclear Fission," Physics Colloquium, American Institute of Physics Visiting Scientist Program, St. Olaf College, Northfield, Minnesota, January 12, 1998
93. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Physics Colloquium, American Institute of Physics Visiting Scientist Program, St. Olaf College, Northfield, Minnesota, January 12, 1998
94. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Physics and Astronomy Colloquium, University of Minnesota, Minneapolis, April 1, 1998
95. "History of Science in Science Teaching," Conference, Louis Pasteur University, Strasbourg, France, June 26, 1998
96. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Physics Colloquium, University of Amsterdam, October 22, 1998
97. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," History of Physics Colloquium, University of Göttingen, Germany, October 27, 1998
98. "History as Myth and Muse," Pieter Zeeman Visiting Professor of the History of Modern Physics Inaugural Lecture, University of Amsterdam, The Netherlands, November 11, 1998
99. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Niels Bohr Institute Colloquium, University of Copenhagen, Denmark, November 20, 1998
100. "An Act of Creation: The Meitner-Frisch Interpretation of Nuclear Fission," APS Centennial Lecture, University of Northern Iowa, Cedar Falls, March 11, 1999

101. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," First Alfred Romer Lecture, St. Lawrence University, Canton, New York, April 22, 1999
102. "An Act of Creation: The Meitner-Frisch Interpretation of Nuclear Fission," Institute Vienna Circle Lecture, University of Vienna, Austria, October 4, 1999
103. "The Case of the Elusive Particles: Nuclear Disintegration and the Cambridge-Vienna Controversy," Ehrenfest Colloquium, University of Leiden, The Netherlands, December 8, 1999
104. "Theoretical Physicists and Their Institutes," Institute of Theoretical Physics 50th Anniversary Symposium, University of Amsterdam, The Netherlands, December 10, 1999
105. "From Atomic to Nuclear Physics," Discovery of Quantum of Action 100th Anniversary Conference, Science Museum of Barcelona, Barcelona, Spain, March 30, 2000
106. "Artificial Nuclear Disintegration and the Cambridge-Vienna Controversy," Martin J. Klein Celebration, Yale University, New Haven, Connecticut, April 14, 2000
107. "The Discovery of Artificial Disintegration," Frédéric Joliot Centenary Conference, Collège de France, Paris, France, October 9, 2000
108. "The Compton Effect: Transition to Quantum Mechanics," Max Planck Centenary Conference, Technical University, Berlin, Germany, December 14, 2000
109. "An Act of Scientific Creativity: The Meitner-Frisch Interpretation of Fission," American Physical Society, Albuquerque, New Mexico, April 20, 2002
110. "Discussions" at Conference on "Science and Entertainment in Science Teaching," Pognana, Lake Como, Italy, June 2-6, 2003
111. "The Discovery of the Compton Effect," Physics and Astronomy Colloquium, Washington University, St. Louis, October 29, 2003
112. "Historical Surprises," Fifth International Conference for History of Science in Science Education, Kesthely, Hungary, July 12-16, 2004
113. "The Experimental Challenge of Light Quanta," Einstein Centenary Lecture, British Academy, London, England, March 5, 2005
114. "Einstein's Revolutionary Light-Quantum Hypothesis," Einstein Centenary Lecture, APS DAMOP Meeting, Lincoln, Nebraska, May 21, 2005

115. "Einstein's Revolutionary Light-Quantum Hypothesis," Photon 2005 International Conference, Warsaw, Poland, August 30, 2005
116. "Nuclear Disintegration and the Cambridge-Vienna Controversy," XXIX Mazurian Lakes Conference, Piaski, Poland, September 5, 2005
117. "The Cambridge-Vienna Controversy on Nuclear Disintegration," XLIV International Winter Meeting on Nuclear Physics, Bormio, Italy, January 31, 2006
118. "An Act of Scientific Creativity: Meitner, Frisch, and Fission," XLIV International Winter Meeting on Nuclear Physics, Bormio, Italy, February 3, 2006
119. "Nuclear Disintegration and the Cambridge-Vienna Controversy," Colloquium, Department of Physics, Indiana University, March 1, 2006
120. "The Cambridge-Vienna Controversy on Nuclear Disintegration," Stefan Meyer Institute for Subatomic Physics, Vienna, Austria, July 6, 2006
121. "Closing Remarks," Sixth International Conference for the History of Science in Science Education: Constructing Scientific Understanding through Contextual Teaching," Carl-von-Ossietzky Universität Oldenburg, Germany, July 14, 2006
122. "Einstein's Revolutionary Light-Quantum Hypothesis," HQ-1 Conference on the History of Quantum Physics, Max Planck Institute for the History of Science, Berlin, Germany, July 5, 2007
123. "Welcoming Remarks," International Symposium on Heinrich Hertz (1857-1894) and the Development of Communication, Rathaus, Hamburg, Germany, October 8, 2007
124. "Heinrich Hertz: Life, Work, and Influence," Closing Remarks, International Symposium on Heinrich Hertz (1857-1894) and the Development of Communication, Hamburg, Germany, October 12, 2007
125. "An Act of Creation: The Meitner-Frisch Interpretation of Nuclear Fission," University of Maryland, Johns Hopkins University, Georgetown University, New Directions in the Foundations of Physics Conference, April 25, 2008
126. "Nuclear Disintegration and the Cambridge-Vienna Controversy," Colloquium, Department of Physics, University of Colorado, April 14, 2010
127. "An Act of Creation: The Meitner-Frisch Interpretation of Nuclear Fission," HQ-3, History of Quantum Physics Conference, Berlin, Germany, June 29, 2010
128. "The Seventh Solvay Conference: Nuclear Physics, Intellectual Migration, and Institutional Influence," Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, Germany, September 14, 2012.

129. "On the 50th Anniversary of the AIP Center for History of Physics: The 1970s and 1980s," American Institute of Physics, College Park, Maryland, September 24, 2012.
130. ""Erwin N. Hiebert (1912-2012): Teacher, Colleague, and Friend," Harvard Memorial Church, Cambridge, Massachusetts, February 17, 2013.
131. "The Joy of History," Abraham Pais Prize for the History of Physics Lecture, Denver, Colorado, April 15, 2013.
132. "From the Old to the New World of Nuclear Physics," Abraham Pais Prize Session, American Physical Society, Pais Prize Session, New Orleans, Louisiana, March 13, 2017. <http://meetings.aps.org/Meeting/MAR17/Session/C40.5>