

**BARRY MARTIN TROST**  
Biographical Data

**Birthplace & Date:** Philadelphia, PA; June 13, 1941

**Marital Status:** Partner; Carol Ach  
Widowed; wife Susan (deceased), sons Aaron, Carey

**Education:** Undergraduate - B.A. University of Pennsylvania, 1962  
Philadelphia Board of Education Scholarship 1959-62  
Graduate - Ph.D. Massachusetts Institute of Technology, 1965  
Thesis Advisor: H.O. House  
Thesis Title: The Structure and Reactivity of Enolate Anions.  
National Science Foundation Predoctoral Fellow 1963-65

**Appointments:** Stanford University :  
Professor of Chemistry, 1987.  
Job and Gertrud Tamaki Professor in the School of Humanities and Sciences, 1990  
Chair, 1996 - 2002

**Appointments:** University of Wisconsin:  
Assistant Professor of Chemistry, 1965  
Associate Professor of Chemistry, 1968  
Professor of Chemistry, 1969  
Evan P. and Marion Helfaer Professor of Chemistry, 1976  
Chairman, 1980-82  
Vilas Research Professor of Chemistry, 1982

**Appointments:** Visiting Professor of Chemistry:  
University of Marburg, West Germany, 1972  
University of Copenhagen, Denmark, 1979  
University of Hamburg, West Germany, 1985  
Université Pierre et Marie Curie (Paris VI), France, 1986  
Universitat de Barcelona, Spain, 1987  
University of München, West Germany, 1988  
University of Paris-Orsay, 1990  
University of Pisa, Italy, 1992  
Universidade De Santiago De Compostela, Spain, 2002  
University of Cambridge, UK, 2002  
University of Chicago, 2003  
Nanyang Technological University, Singapore, 2010  
Catalysis Research Laboratory Fellow, Heidelberg, Germany, 2012  
Honorary Professor:  
Shanghai Institute of Organic Chemistry, 2006

**Awards and Honors:** Alfred P. Sloan Foundation Fellow 1967-69,  
Camille and Henry Dreyfus Teacher-Scholar 1970-75  
H.I. Romnes Faculty Fellowship, 1975  
American-Swiss Foundation Fellow, 1975  
ACS Award in Pure Chemistry, 1977  
ACS Award for Creative Work in Synthetic Organic Chemistry, 1981

Elected Fellow of American Association for the Advancement of Science, 1977  
Elected to the National Academy of Sciences, 1980  
Baekeland Award, 1981  
Julius Stieglitz Memorial Lecturer of ACS-Chicago Section, 1980-81  
Centenary Lecturer, Royal Society of Chemistry (UK), 1981-82  
Elected Fellow of American Academy of Arts and Sciences, 1982  
First Allan R. Day Award of Philadelphia Organic Chemist's Club, 1983  
Chemical Pioneer of the American Institute of Chemists, 1983  
Medal of the University of Helsinki, 1983  
Alexander von Humboldt Stiftung Award, 1984  
Kentucky Colonel, State of Kentucky, 1987  
MERIT Award of the National Institutes of General Medical Sciences of NIH, 1988  
Nebraska Admiral, State of Nebraska, 1988  
Hamilton Award, University of Nebraska, 1988  
Arthur C. Cope Scholar Award, 1989  
Ernest Guenther Award in the Chemistry of Essential Oils and Related Products,  
American Chemical Society, 1990  
Dr. Paul Janssen Prize for Creativity in Organic Synthesis, 1990  
ASSU Graduate Teaching Award, Stanford University, 1991  
Pfizer Senior Faculty Award, 1992  
Bing Teaching Award, Stanford University, 1993  
Docteur *honoris causa* of the Université Claude Bernard (Lyon-I), France, 1994  
Roger Adams Award, American Chemical Society, 1995  
Doctor Scientiarum Honoris Causa, Technion, Haifa, Israel, 1997  
Merck-Schuchardt Lecturer of the French Chemical Society, 1998  
SCI-ACS (Joint Italian-American Chemical Societies) Lecturer, 1998  
Presidential Green Chemistry Challenge Award, 1998  
Herbert C. Brown Award for Creative Research in Synthetic Methods, American  
Chemical Society, 1999  
Elsevier Award, Belgium Organic Synthesis Symposium, 2000  
Nichols Medal, New York Section, American Chemical Society, 2000  
Yamada Prize, Japan, 2001  
Nobel Laureate Signature Award for Graduate Education, American Chemical  
Society, 2002  
Arthur C. Cope Award, American Chemical Society, 2004  
John Scott Award, City of Philadelphia, 2004  
2007 Thomson Scientific Laureate  
Kitasato Microbial Chemistry Medal, 2007  
Kosolapoff Award, Auburn ACS Section, 2008  
Nagoya Medal, 2008  
Fellow of the American Chemical Society, 2012  
Penn Chemistry Distinguished Alumni Award 2013  
Excellence in Medicinal Chemistry Award, Israel Chemistry Society, 2013  
Ulysses Medal, University College Dublin, Ireland 2013  
Ryoji Noyori Prize, Japan, 2013  
August-Wilhelm-von-Hofmann-Denkmuende, German Chemical Society, 2014  
International Precious Metals Institute Tanaka Distinguished Achievement Award,  
2014  
Tetrahedron Prize, 2014  
Linus Pauling Medal Award, Puget Sound and Portland Oregon Sections of the ACS  
2015  
Albert Nelson Marquis Lifetime Achievement Award, Marquis Who's Who 2017

## Editorial Appointments:

### Journals:

Associate Editor, Journal of the American Chemical Society, 1974-80  
Advisory Board of Editors, Journal of Organic Chemistry, 1973-77  
Editorial Advisory Board, Organometallics, 1981-85  
Editorial Advisory Board, Synthesis, 1985-2008  
Editorial Advisory Board, Chemical & Engineering News, 1989-92  
Board of Editors, Heteroatom Chemistry, 1989-  
Tetrahedron Board of Consulting Editors, 1992-2002  
Editorial Board, Natural Products Letters, 1992-2002  
International Editorial Board, Journal of the Chemical Society-Perkin I, 1992-97  
Editor, CHEMTRACTS-Organic Chemistry, 1993-  
Editorial Board, Chemistry - A European Journal, 1995-2013  
Advisory Board, Bulletin de la Société Chimique de France, 1996-7  
International Advisory Board, Current Organic Chemistry, 1997-  
Editorial Board, Natural Products Letters, 1998-  
Editorial Advisory Board, Organic Letters, 1999-  
Editorial Board, Green Chemistry, 1999-  
Editorial Advisory Board, Advanced Synthesis and Catalysis, 2000-2010  
Editorial Advisory Board, Accounts of Chemical Research, 2001-2003  
Editorial Advisory Board, Journal of Organic Chemistry, 2002-  
Editorial Board, Proceedings of the National Academy of Sciences, 2003-2006  
Editorial Board, Central European Journal of Chemistry, 2003-  
Editorial Advisory Board, Beilstein Journal of Organic Chemistry, 2005-  
Editorial Board, Chemistry - An Asian Journal, 2006-  
Editorial Advisory Board, Reaxys (CrossFire Beilstein) Database, 2007-  
Honorary Editorial Advisory Board, Chemistry - A European Journal, 2014-

### Books:

Modern Alkyne Chemistry: Catalytic and Atom Economic Transformations, Wiley  
2014  
Active Editorial Board of Organic Reactions Series, 1972-81  
Editor, Structure and Reactivity, Concepts in Organic Chemistry Series (Springer-  
Verlag)  
Editorial Board, Dictionary of Organic Compounds  
Editorial Board, Dictionary of Organometallic Compounds  
Editor, Synthesis Today and Tomorrow, with C.R. Hutchinson, Pergamon Press, 1981  
Editor, Selectivity - A Goal for Synthetic Efficiency, with W. Bartmann, Verlag  
Chemie, 1984  
Editor-in-Chief, Comprehensive Organic Synthesis, Pergamon Press, 1991  
Editorial Board, Thieme Verlag, Houben-Weyl, Science of Synthesis, 1992  
Editor, Stereocontrolled Organic Synthesis. Chemistry of the 21st Century, IUPAC-  
Blackwell Scientific Publications, 1994  
Editor, Foundations of Organic Chemistry series, Thieme Verlag, 1995-  
Editorial Board, Science of Synthesis, Houben-Weyl Methods of Molecular  
Transformations 1995-  
Editor, Modern Alkyne Chemistry, Wiley-VCH, 2014

**Consultant:** Central Research, E.I. du Pont de Nemours & Co., Inc.  
Merck Research Laboratories  
ChiroTech  
Genentech

**Author:** "Problems in Spectroscopy", W.A. Benjamin Co., 1967  
"Sulfur Ylides - Emerging Synthetic Intermediates", Academic Press, 1975

**Short Courses:**

ACS - "Modern Synthetic Methods"  
Pharmaceutical Society of Sweden - "Modern Organic Synthesis"  
ACS - "Frontiers in Organic Chemistry", Course Director  
ACS Satellite Television Seminar on "Biological and Abiological Catalysis"  
National Science Council, Taiwan - "Organometallics in Synthesis"  
Swiss 3ème Cycle en Chimie - "Transition Metal Complexes. The Chemists' Enzymes"  
ACS Satellite TV Seminar on "Essentials of Organic Chemistry: An Update"

**Committees, Panels, Juries, Delegations:**

Executive Committee, ACS Division of Organic Chemistry, 1977-79  
Advisory Panel, NSF Chemistry Section, 1973-77  
Scientific Review Panel, National Institute of Child Health and Human Development  
Canvassing Committee (and Chairman), ACS Award for Creative Work in Synthetic Organic Chemistry, 1972-74, 1976  
Organizing Committee, Roussel "Table Ronde" on Selectivity in Organic Synthesis, 1977-78  
Evaluation Panel, NRC Postdoctoral Fellowships, 1978  
Jury, Willard Gibbs Medal, Chicago Section ACS, 1979-85  
Organizing Committee Chairman, 3rd IUPAC Symposium on Organic Synthesis, 1980  
Committee on Chemical Sciences, National Academy of Sciences, 1980-83  
U.S. Delegation to People's Republic of China, Chemistry of Natural Products, 1980  
Science Advisory Council, ARCO, 1981-87  
Technical Advisory Panel, Indicators of Scientific Research Instrumentation in Academic Institutions - A Feasibility Study, 1981-83  
Swedish Natural Science Research Council and Swedish Board for Technical Development  
Review Panel on Organic and Bioorganic Chemistry, 1982  
Award Committee, ACS Award for Creative Work in Synthetic Organic Chemistry, 1980-82  
NIH Medicinal Chemistry A Study Section, 1982-86 (Chairman 1984-86)  
Hoechst Workshop - Scientific Organizer, Reisensburg, West Germany, 1983  
National Academy of Sciences, Research Briefing Panel on Chemistry, 1983  
Canvassing Committee, Roger Adams Award in Organic Chemistry, 1983-89  
Chairman, Review Committee for Department of Chemistry, University of Michigan, 1984  
U.S.-Swedish Workshop on the Future of Chemistry, 1984 - One of Five Invited U.S. Participants  
Participant Selection Committee, NSF Organometallic Chemistry Workshop, 1985  
Award Committee, American Institute of Chemists' Chemical Pioneers Award, 1985-  
Visiting Committee for Department of Chemistry, University of Michigan, 1985-  
American Academy of Arts and Sciences-Midwest Center Council, 1985-  
International Advisory Committee if VI International Conference on Organic Synthesis, Moscow, USSR, 1986  
U.S. Organizer, U.S.-Swedish Joint Seminar on Synthetic Selectivity: A Time of Opportunity, Tynningo, Sweden, 1986  
Visiting Committee for Department of Chemistry, The Ohio State University, 1988  
NSF Presidential Young Investigator Panel, 1988

Ciba Foundation Discussion on Molecular Recognition in Synthesis, 1988  
NIH Institute of General Medical Sciences Council Ad-Hoc Member, 1988  
Chairman, Visiting Committee for Department of Chemistry, Iowa State University, 1991  
NRC Committee on Alternative Chemical Demilitarization Technologies, 1992-3  
Canvassing Committee, ACS Cope Award, 1992-5  
Visiting Committee for Department of Chemistry, University of Pittsburgh, 1993  
Organizer of US-Former Soviet Union Workshop on Organic Synthesis, Stanford, 1994  
Jury, Thieme-IUPAC Prize in Synthetic Organic Chemistry, 1994  
Visiting Committee for Department of Chemistry, Texas A & M University, 1994  
National Research Council Commission on Engineering and Technical Systems, 1994-2000  
Jury, Springer Award for Organometallic Chemistry, 1997  
Committee of Visitors, Division of Chemistry, NSF, 1998  
Program Review Committee, Weizmann Institute of Science, Israel, 1998  
Visiting Committee for Department of Chemistry, University of Pennsylvania, 2000  
NICHD Review Panel, 2000  
National Research Council Advisory Board for the Division on Engineering and Physical Sciences, 2000-2002  
Visiting Committee for Department of Chemistry, Vanderbilt University, 2001  
Organizing Committee, Mesilla Conference, 2002  
CAL/EPA Green Chemistry Scientific Advisory Panel, 2007  
NRC Committee on the Review of Basic Energy Sciences Catalysis Program 2007  
Institute of Chemistry, Chinese Academy of Sciences, 2013  
National Science Foundation Review Panel, 2014  
8<sup>th</sup> Singapore International Chemical Congress Advisory Panel, 2014  
ACS Canvassing Committee for Cope Award 2015 –  
ACS Roger Adams Award Committee 2016 –  
NIH Synthetic and Biological Chemistry A Study Section, 2016

**Lectureships, Special University and Industry:**

Humble Lecturer in Science, Esso Laboratories, 1972  
Sherwin-Williams Lecturer, University of Illinois, 1974  
Timmie Lecturer, Emory University, 1975  
American Swiss Foundation Lecturer, 1975  
Visiting Distinguished Professor, University of Iowa, 1976  
Merck Lecturer, Bucknell University, 1976  
First Whitmore Lecturer, Penn State University, 1976  
Visiting Distinguished Professor, University of Texas-Austin, 1977  
Denkewalter Lecturer, Loyola University of Chicago, 1978  
Friedman Lecturer, Rutgers University, 1978  
Lemieux Lecturer, University of Ottawa, 1978  
Arthur D. Little Lecturer, Northeastern University, 1979  
Frank B. Dains Memorial Lecturer, University of Kansas, 1979  
Ritter Memorial Lecturer, Miami University, 1980  
Presidential Lecturer, University of Arizona, 1980  
Sandia Lecturer, University of Mexico, 1981  
Bachmann Lecturer, University of Michigan, 1981  
Frontiers in Chemistry Lecturer, Case-Western Reserve, 1981  
Arapahoe Distinguished Lecturer, University of Colorado, 1982  
McNeil-Ortho Chemistry Lecturer, Philadelphia, 1982  
Ayerst Lecturer, University of Montreal, 1983  
Georges-Elie Amyot Lecturer, Universite Laval Quebec, 1983  
Hilmar Johannes Backer Lecturer, University of Groningen, The Netherlands, 1983

Arnold Lecturer, University of Southern Illinois, 1983  
R.P. Schere Lecturer, University of South Florida, 1983  
Randolph T. Major Lecturer, University of Connecticut, 1983  
Frontiers in Chemical Research Lecturer, Texas A&M University, 1984  
First Bachman-Pierce Lecturer, Purdue University, 1984  
Convention Intercantonale Romande Pour l'Enseignement du 3e Cycle en Chemie Lecturer,  
Switzerland, 1984  
Hirschmann Symposium, University of Wisconsin, 1985  
Northwestern's Fall Symposium on Organic Synthesis, 1985  
Middle Rhine Lectureship, 1986  
Rabjohn Lecturer, University of Missouri, Columbia, 1986  
First Burkett Lecturer in Organic Chemistry, DePaul University, 1986  
Kolthoff Lecturer, University of Minnesota, 1987  
10th Annual Distinguished Lecturer, University of Louisville, 1987  
First Glaxo Lecturer, Duke University, 1987  
H.C. Brown Lecturer, Purdue University, 1987  
Job Visiting Professor, Memorial University of Newfoundland, 1987  
Smith Kline and French Lecturer, University of Illinois, 1987  
Warner-Lambert Lecturer, Michigan State University, 1987  
C.S. Hamilton Award, University of Nebraska, 1988-89  
William Rauscher Lecturer, Rensselaer Polytechnic Institute, 1988  
Glenn Brown Visiting Professor, Case Western Reserve University, 1988  
Francis Clifford Phillips Lecturer, University of Pittsburgh, 1989  
Greater Manchester Lecturer in Organic Chemistry, Manchester, England, 1989  
Armes Lecturer in Chemistry, University of Manitoba, Canada, 1989  
Organic Synthesis Lecturer, U.C. - Irvine, 1991  
Distinguished Visiting Speaker, University of Calgary, 1992  
Turner Lecturer, Rice University, 1992  
Merck Lecturer, McGill University, 1992  
Research Center for New Drug Development, Seoul National University, 1992  
Chandler Society Lecturer, Columbia University, 1992  
Sandin Lecturer, University of Alberta, 1993  
Distinguished Scholar Lecturer, Hope College 1993  
Visiting Scholar, University of Iowa, 1993  
Leopold Marcus Lecturer, Washington University in St. Louis, 1993  
Karl Ziegler Gastprofessor, Max Planck Institut-Mülheim, 1993  
Bergmann Lecturer, Yale University, 1993  
Fred Pattison Senior Lecturer, University of Western Ontario, 1994  
Syntex Distinguished Lecturer, Colorado State University, 1994  
Distinguished Lecturer, National Science Council, Taiwan, 1994  
Russell E. Marker Lecturer, University of Maryland, 1994  
Merck Lecturer, University of Sherbrooke, 1994  
Henry Gilman Lecturer, Iowa State University, 1994  
Syntex Distinguished Lecturer, University of Colorado, 1995  
Friend E. Clark Lecturer, University of West Virginia, 1995  
Karcher Lecturer, University of Oklahoma, 1995  
Fuson Lecturer, University of Nevada-Reno, 1996  
Rowland Pettit Memorial Lecture, University of Texas-Austin, 1996  
Wyeth-Ayerst Lecturer, University of Pennsylvania, 1997  
Pfizer Lecture, University of Puerto Rico - Rio Piedras, 1997  
Biomega-Boehringer Ingelheim Research Lecturer, University of British Columbia, 1997  
Joel Broberg Distinguished Lecturer, North Dakota State University, 1998  
McElvain Lecturer, University of Wisconsin - Madison, 1998

Rennebohm Lecturer, University of Wisconsin - Madison, Pharmacy, 1998  
Rayson Huang Visiting Lecturer in Chemistry, University of Hong Kong, 1998  
Gilbert Stork Lecturer, Columbia University, 1999  
Novartis Lecturer in Chemistry, Novartis Pharmaceutical Co., 1999  
Calvin-Lilly Lecturer, University of Minnesota, 1999  
Bristol-Myers-Squibb Lecturer, M.I.T., 1999  
Merck-Schuchardt-Lectureship, Northern German Universities, 1999  
Boehringer-Ingelheim Lecturer, Yale, 1999  
Bio-Méga Lecturer, Université de Montréal, 1999  
Provid-Rutgers Lectureship, 2000  
Gordon L. Hodgson Jr. Memorial Lecturer, Glaxo-Wellcome, 2000  
BCI Distinguished Lecturer, Queen's University, 2000  
Vielberth Award, University of Regensburg, Germany, 2001  
Hilmar Johannes Backer Lecturer, Groningen, Netherlands, 2001  
Alexander Todd Visiting Professor, Cambridge University, 2002  
Ruzicka Lecturer, ETH-Zürich, 2002  
Henry J. Shine Endowment Lecturer, Texas Tech University, 2002  
Eli Lilly Lectureship in Organic Chemistry, University of Pittsburgh, 2002  
Kilpatrick Lecturer, Illinois Institute of Technology, Chicago, 2003  
Morris S. Kharasch Visiting Professor, University of Chicago, 2003  
Allergan Lecturer, California State University-Long Beach, 2003  
Bristol-Myers-Squibb Lecturer, Princeton, NJ, 2004  
Büchi Lecturer, Oregon State University, 2004  
Merck Distinguished Lecturer, Rutgers, 2005  
Gooch-Stephens Lecturer, Baylor, 2005  
Abbott Lecturer, University of Illinois – Chicago, 2005  
Wang Yu Lecturer, Shanghai Institute of Organic Chemistry, China, 2006  
Boehringer-Ingelheim Lecturer, Yale, 2006  
Stiefvater Memorial Award Lectureship, University of Nebraska, 2006  
Bristol-Myers-Squibb Lecturer, California Institute of Technology, Pasadena, 2006  
Abbott Lecturer, Northwestern University, 2007  
Conference Universitaire de Suisse Occidentale (CUSO) Lecturer, Villars, Switzerland, 2007  
Roche Lecturer, University of Colorado, 2008  
Abbott Lecturer, University of Texas, 2008  
Foster Lecturer, SUNY – Buffalo, 2008  
Daniel Swern Memorial Lecture, Temple University, 2009  
Chambers Memorial Lecturer, University of Rochester, 2009  
Hirschmann Lecturer, University of Wisconsin, 2009  
Robert Robinson Lecturer, Oxford University, 2009  
Laird Lecturer, University of British Columbia, 2009  
Foundation Day Lecturer, Indian Institute of Chemical Technology, Hyderabad, 2009  
Prof. K. Venkataraman Memorial Lecture, National Chemical Laboratory, Pune, India 2009  
Heck Lecturer, University of Delaware, 2009  
Lind Lecture, University of Tennessee, 2009  
Tsinghua Global Vision Lecturer, Tsinghua University, China 2009  
Molecular Science Forum Lectureship, Chinese Academy of Sciences, Institute of Chemistry  
Beijing, 2009  
Yang Shi-Xian Lectureship, Nankai University, China, 2009  
Jortner Lecturer, Tel Aviv University, Israel, 2009  
Visiting Professor, Nanyang Technological University, Singapore 2010  
Reilly Lecturer, Notre Dame University, 2010  
Criegee Lecturer, Universität Karlsruhe, Germany, 2010  
Birch Lecturer, Australian National University, 2011

Distinguished Alumni Award Lecturer, University of Pennsylvania, 2013  
Max Tishler Prize Lecturer, Harvard University, 2013  
Wheeler Lecture, University College, Dublin, Ireland, 2013  
Visiting Professor, McGill University, 2013  
Vertex Pharmaceuticals Lecturer, UC-Irvine, 2014  
Gerhard and Liselotte Closs Memorial Lectureship, University of Chicago, 2015  
Linus Pauling Medal Award Symposium, Oregon State University, 2015  
Global International Summit on Innovative Biomedical Development, Shanghai, 2016  
Smith Broadbent Lecturer, Brigham Young University, 2016  
Eli Lilly Distinguished Lecturer in Organic Chemistry, Indiana University (Bloomington), 2017  
David Hart Symposium, Ohio State University, 2017  
BMS Lecturer, University of California-Berkeley, 2019

**Plenary Lectures:** Over 300 presented at national and international meetings

**Publications:** Over 990 scientific publications

**Membership:** Phi Beta Kappa  
Phi Lambda Upsilon  
Sigma Chi  
Pi Mu Epsilon  
American Chemical Society  
Royal Society of Chemistry, London  
National Academy of Sciences  
American Association for the Advancement of Science  
American Academy of Arts and Sciences  
American Institute of Chemists  
World Innovation Foundation

**Other Citations:**

List of 1000 Most Cited Contemporary Scientists, ISI  
List of World's 50 Most Cited Chemists, ISI  
List of ISI Highly Cited Researchers  
Marquis' Who's Who in America  
Cattell's American Men and Women of Science  
McGraw-Hill Modern Scientists and Engineers  
Marquis' Who's Who in Science and Technology  
Marquis' Who's Who in the Midwest  
Men of Achievement, International Biographical Center, Cambridge, England  
The International Who's Who  
America's Names and Faces  
Sterling Who's Who  
American Biographical's Institute's Five Thousand Personalities of the World  
One of the top ten most-requested articles listed in 2003 CAS-online  
H-index of 133 gives a rank of 16 among all living chemists

## Plenary Lectures:

Gordon Research Conference on Medicinal Chemistry, 1967  
ACS Great Lakes Regional Meeting, Milwaukee, WI, 1968  
National Meeting, Minneapolis, MN 1969  
Canadian Institute of Chemistry Joint Meeting, Toronto, 1970  
Gordon Research Conference on Natural Products, 1970  
ACS Great Lakes Regional Meeting, Fargo, ND, 1970  
ACS National Meeting, Los Angeles, CA, 1970  
Gordon Research Conference on Organic Reaction, 1970  
Gordon Research Conference on Heterocyclic Compounds, 1971  
ACS National Meeting, Washington, DC, 1971  
15th Conference on Organic Chemistry, Natick Laboratories, 1972  
Gordon Conference on Hydrocarbon Chemistry, 1973  
23rd National Organic Chemistry Symposium, Tallahassee, FL 1973  
US-Japan Joint Seminar on Natural Products, 1973  
Societe Chemie de France, Orsay, 1973  
VIth International Conference on Organosulfur Chemistry, Bangor, Wales, 1974  
1st IUPAC Conference on Organic Synthesis, Louvain-Laneuve, Belgium, 1974  
14th National Medicinal Chemistry Symposium, Durham, NH, 1974  
Chemical Society (London), Stirling, Scotland, 1974  
13th Industrial Affiliates Symposium, Stanford University, 1975  
Gordon Conference on Natural Products, 1975  
1st North American Chemical Congress, Mexico City, 1975  
ACS Central Regional Meeting, Morgantown, WV, 1975  
ACS Midwest Regional Meeting, Carbondale, IL, 1975  
Workshop on Organic Synthesis and Natural Product Chemistry, Gatlingburg, TN, 1975  
Vth International Symposium on Medicinal Chemistry, Paris, 1976  
International Symposium on Present and Potential Uses of Transition Metals in Organic Synthesis, St. Raphael, France, 1976  
ACS Great Lakes Regional Meeting, Evanston, IL 1976  
ACS Northeast Regional Meeting, Albany, NY, 1976  
Yugoslav Symposium on Organic Chemistry, Belgrade, 1977  
ACS Middle Atlantic Regional meeting, Newark, DE, 1977  
ACS National Meeting, New Orleans, LA 1977  
Gordon Research Conference on Organic Reactions and Processes, 1977  
Gordon Research Conference on Natural Products Chemistry, 1977  
11th IUPAC Symposium on Natural Products, Varna, Bulgaria, 1978  
ACS North Jersey Section meeting, Newark, NJ, 1978  
Workshop on Stereoselective Synthesis of Natural Products, Ulm, West Germany, 1978  
ACS Japanese Chemical Society Joint Meeting, Honolulu, HI, 1979  
ACS Middle Atlantic Regional Meeting, W. Long Beach, NJ, 1979  
6th International Symposium on Organic Synthesis, Cambridge, England, 1979  
Conversations in the Disciplines, Symposium on Creativity in Organic Synthesis, Buffalo, NY 1979  
1st International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto, Japan, 1979  
Gordon Conference on Heterocycles, 1980  
2nd North American Chemical Congress, San Francisco, CA 1980  
1st Sino-US Symposium on the Chemistry of Natural Products, Shanghai, China, 1980  
ACS National Meeting, Las Vegas, NE, 1980  
27th National Organic Chemistry Symposium, Nashville, TN, 1981

International Conference on the Chemistry of the Platinum Group Metals, Bristol, England, 1981

International Symposium on the Chemistry of Carbocations, Bangor, Wales, 1981

1st IUPAC Symposium on Organometallic Chemistry Directed Toward Organic Synthesis, Fort Collins, CO, 1981

US-Japan Joint Seminar on Asymmetric Synthesis, Stanford, CA, 1981

Royal Society of Chemistry Symposium, London, 1982

Sheffield Symposium, Sheffield, 1982

Royal Dutch Chemical Society Symposium, Wageningen, 1982

4th IUPAC Symposium on Organic Synthesis, Tokyo, 1982

Highlights in Organic Synthesis, Sapporo, 1982

3rd International Symposium on Homogeneous Catalysis, Milan, 1982

Oesper Symposium, University of Cincinnati, 1982

Esther Humphrey Symposium, University of Vermont, 1982

Chemical Institute of Canada Symposium, Montreal, 1983

Royal Society of Chemistry Annual Congress, Lancaster, England, 1983

2nd Symposium on Organic Chemistry of Natural Products in Industrial Chemistry. Structure and Synthesis, Pisa, Italy, 1983

Organic Chemistry Conference, Pietermaritzburg, South Africa, 1983

GECO XXIV, Cap d'Agde Herault, France, 1983

I. Cappuccini Symposium, S. Miniato, Pisa, Italy, 1983

American Institute of Chemists, Atlantic City, 1983

Bachmann Symposium, University of Michigan, 1983

International Symposium on Heteroatoms for Organic Synthesis, Montreal, 1983

Royal Australian Chemical Institute, 1984

Chemical Society of Zurich, 1984

Gordon Conference on Natural Products, 1984

Sixth Annual ACS Fall Organic Chemistry, Italian Chemical Society, 1984

ISCHIA Advanced School of Organic Chemistry, Italian Chemical Society, 1984

International Chemical Congress of Pacific Basis Societies, 1984

Symposium on Natural Products

Symposium on Transition Metals in Organic Synthesis

Ninth Biannual Meeting of the Society of Chemical Engineers and Croatian Chemical Society, Zagreb, Yugoslavia, 1985

ACS National Meeting, Miami, FL, 1985

Ninth International Symposium on Synthesis in Organic Chemistry, Oxford, England, 1985

51st Annual meeting of the Chemical Society of Japan, Kanazawa, 1985

Chemical Society of Basel, Switzerland, 1985

XX Organosilicon Symposium, Tarrytown, NY, 1986

ACS Lexington Section, 1986

Syntex Synthetic Chemistry Symposium, Boulder, Colorado, 1986

Gordon Conference on Organic Reactions and Processes, 1986

Workshop on Stereochemistry of Bioorganic and Organic Transformations at Reisenburg, West Germany, 1986

600th Anniversary of University of Heidelberg, West Germany, 1986

Meeting of Grant-in-aid Special Research, Japanese Ministry of Education, 1986

U.S.-Swedish Joint Seminar on Synthetic Selectivity: A Time of Opportunity Tynningo, Sweden, 1986

Hirschmann Symposium, Merck Sharp & Dohme-West Point, 1987

NSF Workshop on Organometallic Chemistry, 1987

JUC Pharm Sci 87 Symposium, Honolulu, HI, 1987

The First Princess Chulabhorn Science Congress, Bangkok, Thailand, 1987

The Royal Society Discussion Meeting on the Influence of Organometallic Chemistry on

Organic Synthesis, London, England, 1988  
7th IUPAC Conference on Organic Synthesis, Nancy, France, 1988  
Rochester Fall ACS Symposium 1988  
Journées Scientifiques of Rhone-Poulence, 1988  
NATO Workshop on Strain and Its Implications in Organic Chemistry, 1988  
Gordon Research Conference On Natural Products, 1889  
ACS National Meeting, Miami, FL, 1989  
The 1989 International Chemical Congress of Pacific Basin Societies, Honolulu, HI  
AAAS National Meeting, San Francisco, CA, 1989  
New York Academy of Sciences, 1989  
The Royal Society Symposium on the Application of Transition Metals in Synthesis, St. Andrews, Scotland, 1989  
13th Conference on Isoprenoids, Poznan, Poland, 1989  
5th Nozaki Conference, Okayama, Japan, 1990  
Ficini Memorial Workshop, Nemur, Belgium, 1990  
4th International Symposium on Natural Products, Karachi, Pakistan, 1990  
ACS Symposium on "New Science and Homogeneous Transition Metal Catalyzed Reactions," Boston, 1990  
Belgium Organic Synthesis Symposium, Louvain-La-Neuve, Belgium, 1990  
EUCHEM Meeting on "Theoretical Chemistry and Organic Synthesis," Avignon, France, 1990  
Goering Symposium, University of Wisconsin-Madison, 1990  
John K. Stille Memorial Symposium, ACS Fall Meeting, Washington, D.C., 1990  
EUCHEM Conference on Palladium in Organic Synthesis, Sigtuna, Sweden, 1990  
French-American Chemical Society Meeting, Captiva Island, Fla., 1991  
International Conference on Chemical Sciences in Development, Colombo, Sri Lanka, 1991  
6th IUPAC Symposium on Organometallic Chemistry Directed Towards Organic Synthesis, Utrecht, Netherlands, 1991  
33rd IUPAC Congress, Budapest, Hungary, 1991  
Second Annual Organic Chemistry Symposium, Rhone-Poulenc Ag Co., 1991  
Glaxo-UNC Conferences on the Frontiers of Chemistry and Medicine, Chapel Hill, 1991  
3rd EUCHEM Symposium on the Total Synthesis of Antibiotics, Franken, Germany, 1992  
5th Brazilian Meeting on Organic Synthesis, Campinas, Brazil, 1992  
75th Canadian Chemical Conference, Edmonton, Canada, 1992  
Gordon Conference on Heterocyclic Chemistry, 1992  
Hirschmann Symposium, University of Pennsylvania, 1992  
Searle Symposium, 1992  
A.I. Meyers Symposium on Organic Chemistry, 48th Southwest ACS Regional Meeting, Lubbock, Texas, 1992  
Gordon Conference on Stereochemistry, 1992  
Organic Chemistry Day, University of Missouri-Columbia, 1993  
Frontiers in Biomedical Research, Annenberg Center at Eisenhower, 1993  
Society of Chemical Industry, London, 1993  
Cycloaddition Chemistry in Synthesis, London, 1993  
3ème Cycle en Chimie, Champéry, Switzerland, 1994  
French Chemical Society, Lyons, 1994  
XVI International Conference on Organometallic Chemistry, Sussex, England, 1994  
19th IUPAC Symposium on the Chemistry of Natural Products, Karachi, Pakistan, 1994  
Chemistry as a Life Science, Newark, 1994  
Zeneca Excellence in Chemistry Symposium, Wilmington, 1994  
4th International Conference of Heteroatom Chemistry, Seoul, Korea, 1995  
Royal Society of Chemistry Conference on Organic Synthesis, Cambridge, England, 1995  
34th National Organic Chemistry Symposium, Williamsburg, VA, 1995

Symposium for the 80th Anniversary of Pharmaceutical Education in Korea, Seoul, 1995  
International Symposium on Selectivity in Basic & Applied Organic Chemistry, Jerusalem,  
1995  
ACS National Meeting, Anaheim, CA 1995  
Pure Chemistry Award Symposium  
Environmentally Benign Synthesis Symposium  
1995 International Chemical Congress of Pacific Basin Societies, Honolulu, HI  
Vth Konigstein/Kreuth Conference on Organometallic Chemistry, Wildbad Kreuth, Germany,  
1995  
ARCO Chemical Fall Symposium, 1995  
First Annual Proctor and Gamble Lectures in Organic Chemistry, Cincinnati, OH, 1995  
7th Biennial Lilly Grantee Symposium, Indianapolis, 1996  
International Symposium in Chemistry, Mexico City, 1996  
Chiral USA '96 Symposium, Boston, MA, 1996  
Tenth International Symposium on Homogeneous Catalysis, Princeton, NJ, 1996  
Gordon Research Conference on Heterocycles, 1996  
Gordon Research Conference on Environmentally Benign Organic Synthesis, 1996  
Welch Foundation Conference, 1996  
ACS National Meeting, New Orleans, 1996  
30th Sheffield Stereochemistry Conference, England, 1996  
Chira Tech, 96, Brussels, Belgium, 1996  
ACS National Meeting, San Francisco, 1997  
William S. Johnson Memorial Symposium  
Symposium on Recent Advances in Organopalladium Chemistry  
Symposium on Design and Optimization of Organic Synthesis  
French-American Chemical Society Meeting, Tuscon, AZ, 1997  
1997 Green Chemistry and Engineering Conference, Washington, D.C.  
Gordon Research Conference on Organic Reactions and Processes, 1997  
Gordon Research Conference on Environmentally Benign Synthesis, 1997  
7th International Kyoto Conference on Organic Chemistry, Japan, 1997  
2nd International Forum on Chemistry of Functional Organic Chemicals, Japan, 1997  
1997 Otsuka Symposium, Japan  
3rd Hiroshima International Symposium on Organic Chemistry, Japan, 1997  
Princeton Fall Organic Chemistry Symposium, 1997  
Gordon Research Conference on the Chemistry of Natural Products, 1998  
Ernst Schering Research Foundation Workshop, Germany, 1998  
2nd Annual Green Chemistry and Engineering Conference, Washington, D.C., 1998  
ACS National Meeting, Dallas, 1998  
ACS National Meeting, Boston, 1998  
1998 Heidelberg Symposium  
Ischia Advanced School of Organic Chemistry, Italy, 1998  
Chiral Europe '98, Nice, France, 1998  
New Synthetic Methods for Effective Drug Design, Sanibel Is., 1998  
Société Française de Chimie, Paris, 1998  
ACS National Meeting, Anaheim, 1999  
International Symposium on Chirality, Cambridge, England, 1999  
Accademia dei Lincei Fondazione Donegani, Rome, 2000  
Herbert C. Brown Symposium, Purdue, 2000  
Nichols Award Symposium, 2000  
Belgium Organic Synthesis Symposium, 2000  
Interuniversity Consortium Chemistry for the Environment, Venice, 2000  
36<sup>th</sup> ACS Western Regional Meeting, San Francisco, 2000  
11<sup>th</sup> Quebec/Ontario Symposium in Synthetic and Bioorganic Chemistry, 2000

5<sup>th</sup> Loughborough Synthesis Symposium, 2000  
 UCSD/DuPont Pharma Symposium on Organic Chemistry, 2000  
 Pacificchem 2000 Congress, Honolulu, HI, 2000  
 Royal Society of Chemistry Green Chemistry Symposium, Swansea, Wales, 2001  
 First Spring Festival of Chemistry, Bristol, UK, 2001  
 Johnson-Matthey Catalysis in Organic Synthesis Symposium, New Jersey, 2001  
 2<sup>nd</sup> Symposium on Selective Synthesis Mediated by Organometallic Compounds, Oviedo, Spain, 2001  
 12<sup>th</sup> European Symposium on Organic Chemistry, Groningen, Netherlands, 2001  
 2<sup>nd</sup> European Catalysis Symposium, Pisa, Italy 2001  
 18<sup>th</sup> International Congress of Heterocyclic Chemistry, Yokohama, Japan, 2001  
 Organic Division, Danish Chemical Society, Copenhagen, 2001  
 Kjell Undheim Symposium, Oslo, 2001  
 Heidelberg Forum of Molecular Catalysis, Germany, 2001  
 Mesilla Conference on Asymmetric Catalysis, New Mexico, 2002  
 ACS National Meeting, Orlando, 2002  
 First PERCH Annual Scientific Conference, Pattaya, Thailand, 2002  
 Société Française de Chimie Congress, Toulouse, France, 2002  
 ACS National Meeting, Boston, 2002  
 First International SPECS and BioSPECS Symposium on the New Chemistries, Delft, The Netherlands, 2002  
 Symposium on Organic Synthesis, Irvine, CA, 2002  
 ACS Perspectives on Catalysis Symposium, Boston, MA, 2003  
 123<sup>rd</sup> Annual Meeting of the Pharmaceutical Society of Japan, Nagasaki, Japan, 2003  
 Korean Chemical Society, Seoul, 2003  
 Chiral Europe Symposium, London, UK, 2003  
 Komppa Centenary Symposium, Helsinki, Finland, 2003  
 Gordon Conference on Medicinal Chemistry, New London, NH, 2003  
 Blue Danube Symposium on Heterocyclic Chemistry, Vienna, Austria, 2003  
 Danish Academy of Technical Sciences Symposium on Synthetic Efficiency, Copenhagen, Denmark, 2004  
 International Conference on Modern Synthetic Methods - Reaction to Reality, Messe Berlin Germany, 2004  
 La Jolla Green Chemistry Symposium, 2004  
 7<sup>th</sup> International Symposium on Carbanion Chemistry, Alicante, Spain, 2004  
 21<sup>st</sup> International Symposium On the Organic Chemistry of Sulfur, Madrid, Spain, 2004  
 Gordon Conference on Organic Reactions and Processes, Bristol, RI, 2004  
 Gordon Conference on Natural Products, Tilton, NH, 2004  
 Cope Award Symposium, ACS Meeting, Philadelphia, PA, 2004  
 Visions Symposium in Chemistry, Aventis, New Jersey, 2004  
 Horizons Symposium on Charting Chemical Space: Finding New Tools to Explore Biology, Portland, ME, 2004  
 Grabowski Symposium, Merck – Whitehouse Station, 2004  
 Fifth International Symposium on Transition Metals in Organic Synthesis, Glasgow, UK, 2004  
 2<sup>nd</sup> Brazilian Symposium on Medicinal Chemistry: Current Trends in Drug Discovery and Development, Rio de Janeiro, 2004  
 Seventh International Symposium on Process Development Chemistry and Technology, Amelia Island, FL, 2005  
 Merck Chemistry Council Conference, La Sapiniere, Quebec, Canada, 2004  
 GDCh/DphG Frontiers in Medicinal Chemistry, Leipzig, Germany 2005  
 Chiral Europe, Cambridge, UK, 2005  
 Gordon research Conference on Heterocyclic Compounds, Newport, RI 2005

Gordon research Conference on Organometallics, Newport, RI 2005  
International Conference on the Chemistry of Antibiotics and Bioactive Compounds,  
Bordeaux, France, 2005  
Asymmetric Syntheses with Chemical and Biological Methods, Aachen, Germany, 2005  
Singapore International Chemical Conference, 2005  
Green Chemical Processes, Pacificchem, Hawaii, 2005  
7<sup>th</sup> Florida Heterocyclic Conference, Gainesville, 2006  
Conference on Multi-Component Reactions, Amsterdam, 2006  
Novel Chiral Chemistries Japan 2006, Tokyo  
Fall 2006 American Chemical Society Meeting, San Francisco  
Symposium on Modern Acetylene Chemistry  
Herbert C. Brown Legacy Symposium  
Gordon Research Conference on Green Chemistry, Oxford, UK, 2006  
OMCOS 14, Nara, Japan, 2007  
ACS Organic Symposium, North Carolina, 2007  
Forum on Asymmetric Synthesis and Technology, Cambridge, UK, 2007  
8<sup>th</sup> International Symposium on Green Chemistry in China, Beijing, 2007  
Canadian Society for Chemistry 90<sup>th</sup> Annual Conference, Winnipeg, Canada, 2007  
Modern Synthetic Methods and Chiral USA, Philadelphia, 2007  
Tishler Symposium, Kitasato Institute, Tokyo, 2007  
7<sup>th</sup> Tateshina Conference on Organic Chemistry, Japan, 2007  
ACS ProSpectives: Process Research in the Pharmaceutical Industry, Boston, 2007  
BOSS Symposium, Ghent, Belgium, 2008  
Gordon Research Conference on Stereochemistry, Newport, RI, 2008  
Microbial Chemistry Research Foundation 50<sup>th</sup> Anniversary Symposium, Tokyo, 2008  
Molecular Design and Synthesis Award Symposium, North Jersey ACS, 2008  
Fourth Mitsui International Symposium on Catalysis Science, Japan, 2009  
20<sup>th</sup> Banyu Sendai Symposium, Japan, 2009  
Tetrahedron Letters 50<sup>th</sup> Anniversary Symposium, Paris, France, 2009  
Chiral USA, Chicago, IL 2009  
Gordon Conference on Organic Reactions and Processes, Bryant College, RI, 2009  
Gordon Conference on Natural Products, Tilton, NH, 2009  
SKLEOC Meeting, Nankai University, China, 2009  
14<sup>th</sup> Biannual Lilly Grantee Symposium, Indianapolis, 2010  
Lilly Annual Award Symposium, Surrey, UK, 2010  
Pacificchem 2010, Pacific Basin Chemical Societies, Honolulu, HI, 2010  
Cooperative Catalysis Symposium  
New Dimensions of Green Sustainable Chemistry: Novel Reactions and Catalysis  
Symposium  
19<sup>th</sup> Lilly Symposium, Organic Synthesis in the International Year of Chemistry, Madrid 2011  
Symposium on Green Chemistry and Catalysis, 94<sup>th</sup> Canadian Society for Chemistry  
Conference, Montreal, 2011  
Symposium on Recent Advances in Natural Products Chemistry, 94<sup>th</sup> Canadian Society for  
Chemistry Conference, Montreal, 2011  
Symposium on Catalysis Needs for Drug Discovery, Development, and Commercialization  
ACS National Meeting, Denver, CO, 2011  
Australian Annual Synthesis Symposium - Brisbane, Sydney, Melbourne, Adelaide - 2011  
Reaxys Prize Symposium, ACS National Meeting, Philadelphia, PA 2012  
XXXIV Convegno della Divisione di Chimica Organica, Pavia, Italy, 2012  
Israel Chemical Society, Excellence in Medicinal Chemistry Symposium, Rehovot, Israel,  
2013  
Sackler Prize Zymposium, Tel Aviv, Israel, 2013  
Reinhard Hoffmann 80<sup>th</sup> Birthday Symposium, Marburg, Germany, 2013

6<sup>th</sup> International Conference on Green and Sustainable Chemistry, Nottingham, UK, 2013  
Canada-China Symposium on Green Chemistry, Montreal 2013  
15<sup>th</sup> Asian Chemical Congress, Singapore, 2013  
French-American Chemical Society, Avignon, France, 2014  
Organikerdagarna, Swedish Chemical Society, 2014  
5<sup>th</sup> EuCheMS Chemistry Congress, Istanbul, Turkey, 2014  
80<sup>th</sup> Israel Chemical Society, Tel Aviv, 2015  
249<sup>th</sup> American Chemical Society Meeting, Denver, CO, 2015  
2015 Cal Meyers Memorial Organic Chemistry Symposium, University of Southern Illinois  
IUPAC Congress, Busan, South Korea, 2015  
250<sup>th</sup> American Chemical Society Meeting, Boston, MA, 2015  
Pacifichem 2015, Pacific Basin Chemical Societies, Honolulu, HI, 2015  
Sino – US Biomedical Innovations Summit, Shanghai, China, 2016  
136<sup>th</sup> Pharmaceutical Society of Japan Meeting, Yokohama, Japan, 2016  
Pharmaron Symposium Beijing, 2017  
The 10<sup>th</sup> Singapore International Chemistry Conference, 2018

**Patents:**

"Conversion of Organic Carboxylic Acid to Corresponding Ketone with Loss of Carbon Atom"  
B.M. Trost and Y. Tamaru  
US Patent 4,007,211 February 8, 1977

"Allylic Alkylation"  
B.M. Trost and T.R. Verhoeven  
US Patent 4,051,157 September 27, 1977

"Ring Expansion and Chain Extension Process and Reagents"  
B.M. Trost  
US Patent 4,307,241 December 22, 1981

"New Process for Five Member Ring Compound"  
B.M. Trost  
US Patent Application March 10, 1986

"Process for 1,4-Dihydropyridine Compounds Using a Titanamine Catalyst"  
S.M. Pitzenberger and B.M. Trost  
US Patent 4,789,538 October 25, 1988

"Palladium Catalyzed Alkylative Cyclization Useful in Syntheses of Vitamin D and Analogs"  
B.M. Trost and J. Dumas  
US Patent 5,292,977 March 8, 1994, U.S. Patent 5,446,225 August 29, 1995

"Asymmetric Ligands Useful for Transition Metal Catalyzed Bond Forming Reactions"  
B.M. Trost, D.L. VanVranken, and R.C. Bunt  
US Patent 5,739,396 April 14, 1998

"Method for Extraction of Essential Oils from Plant Material"  
L.L. McKellip, P. Bing, and B.M. Trost  
US Patent 5,891,501 April 6, 1999

"Asymmetric Ligands Useful for Transition Metal Catalyzed Bond Forming Reactions and Epoxide Reactions Therewith"  
B.M. Trost and R.C. Bunt

US Patent 5,919,948 July 6, 1999

"Enantiomerically Enriched  $\alpha,\alpha$ -Disubstituted Amino Acids and Method"

B.M. Trost and J. Ariza Piquer

US Patent 6,130,337 October 10, 2000

"Catalytic Composition and Methods for Asymmetric Allylic Alkylation"

B.M. Trost and I. Hachiya

US Patent 6,130,349 October 10, 2000; US Patent 6,541,655 April 1, 2003; US Patent 6,747,152 June 8, 2004

European Patent EP 1 049 537 B1 December 21, 1998

"Palladium and Boron Co-Catalyzed Addition of Oxygen Nucleophiles to Vinyl Epoxides"

E.J. McEachern, F.D. Toste, B.M. Trost

US Patent 6,307,067 B1 October 23, 2001

"Asymmetric Ligands Useful for Transition Metal Catalyzed Bond Forming Reactions and Epoxide Reactions Therewith"

B.M. Trost and R.C. Bunt

European Patent )782577 B1 June 12, 2002

"Catalytic Compositions and Methods for Asymmetric Aldol Reactions"

B.M. Trost and H. Ito

US Patent 6,610,889 August 26, 2003

"Catalytic Compositions and Methods for Asymmetric Aldol Reactions"

B.M. Trost and H. Ito

US Patent 6, 919,456 B2 July 19, 2005