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Education

B.S. (1966-1970) and M.S. (1975-1977) in Biochemical Sciences, National Taiwan University
Ph.D. in Chemistry (1979-1982), Department of Chemistry, MIT
Postdoctoral Fellow (1982-1983), Department of Chemistry, Harvard University

Academic Appointments

1983-1989: Assistant Professor (1983–1986), Associate Professor (1986–1987), and Professor (1987–1989) of Chemistry, Texas A&M University.

1989-2006: Professor and Ernest W. Hahn Chair in Chemistry, The Scripps Research Institute.

1991-1999: Head, Frontier Research Program on Glycotechnology, RIKEN, Japan.

1996-2006: Member, the Skaggs Institute for Chemical Biology, The Scripps Research Institute.

2003-2006: Director and Distinguished Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan.

2006-2016: President, Academia Sinica, Taipei, Taiwan.

2016-Present: Joint appointment as Distinguished Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan.

2019-Present: Scripps Family Chair Professor, Department of Chemistry, The Scripps Research Institute, La Jolla, California.

Awards

- Searle Scholar Award in Biomedical Sciences, USA (1985–1988).
- Presidential Young Investigator Award in Chemistry, USA (1986–1991).
- American Chemical Society Arthur C. Cope Scholar Award (1993).
- The Roy Whistler Award of International Carbohydrate Organization (1994).
- The ACS Division of Carbohydrate Chemistry Melville L. Wolfrom Award (1995).
- The Taiwanese American Foundation Prize in Science and Engineering (1997).
- The American Chemical Society Harrison Howe Award in Chemistry (1998).
- The American Chemical Society Claude S. Hudson Award in Carbohydrate Chemistry (1999).
- The International Enzyme Engineering Award (1999).

- The American Chemical Society San Diego Section Outstanding Scientist Award (1999).
- The Presidential Green Chemistry Challenge Award, USA (2000).
- NIH Merit Award, USA (2001).
- The American Chemical Society Award for Creative Work in Synthetic Organic Chemistry (2005).
- The Georges Smets Chair Award for Organic or Polymer Chemistry, Louvain-la-Neuve, Belgium (2006).
- Humboldt Research Award for Senior Scientists, Germany (2006).
- The F. A. Cotton Medal for Excellence in Chemical Research, USA (2008).
- National Science Council Science Professional Gold Medal, Taiwan (2009).
- The American Chemical Society Arthur C. Cope Award (2012).
- The Nikkei Asia Prize for Science, Technology and Innovation, Japan (2012).
- The Wolf Prize in Chemistry (2014).
- The Royal Society of Chemistry Robert Robinson Award, UK (2015).
- Elected Member of Academia Sinica, Taiwan (1994).
- Elected Member of The American Academy of Arts and Sciences (1996).
- Elected Member of the US National Academy of Sciences (2002).
- Elected Fellow of the American Association for the Advancement of Science (2005).
- Elected Member of the World Academy of Sciences (2007).
- Elected Associate Member of the European Molecular Biology Organization (EMBO) (2010).
- Elected Fellow of the U.S. National Academy of Inventors (2014).
- Elected Member of ITRI (Industrial Technology Research Institute) Laureates (2020)

Professional Honors and Activities

- The Chinese American Chemical Society Distinguished Research Achievement Award (1994).
- Member, NIH Biomedical Sciences Study Section (1993–1995), NIH Bioorganic and Natural Products Chemistry Study Section, USA (1995–1999).
- Visiting Professor, Chemical Center, University of Lund, Sweden (1995–1998).
- Distinguished Visiting Scholar, Institute of Chemistry (1999–2002) and Corresponding Research Fellow, Institute of Biological Chemistry, Academia Sinica, Taipei (1996–2002).
- Honorary Professor, Shanghai Institute of Organic Chemistry, The Chinese Academy of Sciences, (1999).
- Selected by ISI as one of the 100 most cited chemists in the world for the period (1981–1999), current H-Index: 145.
- Doctor, Scientiarum Honoris Causa, Technion – Israel Institute of Technology, Israel (2007).

- Honorary Doctorate, National Yang-Ming University, Taipei, Taiwan (2007).
- Honorary Fellow, the Chemical Research Society of India (CRSI), India (2007).
- Honorary Doctorate, National Sun Yat-sen University, Taiwan (2008).
- Honorary Doctorate, City University of Hong Kong, Hong Kong (2009).
- Honorary Doctorate, National Chung Hsing University, Taiwan (2010).
- Honorary Doctorate, Kaohsiung Medical University, Taiwan (2011).
- Honorary Doctorate, National Chiao Tung University, Taiwan (2011).
- Honorary Doctorate, National Tsing-Hua University, Taiwan (2011).
- Distinguished Fellow, University of Malaya (2012-present).

Advisory Activity

- Advisory Board Member: *Journal of Organic Chemistry* (1993–1997); *Journal of Chemical Society, Perkin Transaction 1* (1993–2002); *ChemBioChem* (2005–2015); *The Journal of the American Chemical Society* (2005–2011); *Chemistry—An Asian Journal* (2006–2017); *Angewandte Chemie* (2010–2017), *Advanced Synthesis and Catalysis* (2011–2013).
- Editorial Board Member: *Drug Discovery Today* (1996–1999); *Current Opinion in Chemical Biology* (1998–present); *Advanced Synthesis and Catalysis* (2000–2010).
- Founder, Combichem, Inc., San Diego, CA (1994); Founder, Board Member, and Chairman of the Scientific Advisory Board, Optimer Pharmaceuticals, Inc., San Diego (1999–2006).
- Consultant for Dow Chemical (1983–1988), W.R. Grace (1984–1987), Amgen (1991–1993), Dow Corning (1992–1994), Abbott Laboratories (1991–1994), Lilly Research Laboratories (1991–1993), Mitsubishi Chemical Group Science and Technology Research Center, Japan (2005–2006).
- Scientific Advisor for Amylin (1989–1993), Oncogene Science (1993–1998), Cytel (1991–1997), Affymax (1992–1995), ArQule (1994–1995), Kosan Biosciences (1997–2002), Pharmanex (1997–2006), Advanced Medicine (now Theravance) (1997–2000), Combichem (1994–1998), Momenta (2001–2003), Diversa (2001–2006), Institute of Chemistry (1992–2000; Chairman of the Board, 1994–2000) and Institute of Biological Chemistry (1994–2002), Academia Sinica, Taipei; Institute of Molecular and Cell Biology, National University of Singapore (1994–1997), Industrial Technology Research Institute (ITRI), Taiwan (2004–2006), Development Center for Biotechnology (DCB), Taiwan (2004–2006 & 2009-present); OBI Pharma, Taiwan (2017-present); CHO Pharma, Taiwan (2016-present).
- Member, Scripps/Novartis Joint Scientific Council (1993–2006).
- Editor-in-Chief, *Bioorganic & Medicinal Chemistry* (1993–2010).
- Member of Executive Board of Editors for the Tetrahedron Publications (1993–2010), Chairman of the Board (2006–2008).
- Scientific Advisor for Max-Planck Institute at Dortmund, Germany (2000–2008).
- Board member of the National Research Council on Chemical Sciences & Technology, USA (2000–2004).

- Member, 8th and 9th RIKEN Advisory Council (RAC) (2011 & 2014).
- Chief Science Advisor to Executive Yuan, Taiwan (2006-2011), Member, Board of Science and Technology (2012-2016), Executive Yuan, Taiwan.
- Member, Steering Committee of the Lilly TB Drug Discovery Initiative (2009 – 2017).
- Member, Board of Scientific Governors, The Scripps Research Institute (2009 – 2016).
- Member, Committee on Assessing the Importance of Glycoscience and Glycomics, National Research Council USA (2011-12). A report published in 2012 on “Transforming Glycoscience: A Roadmap for the Future”
- Member, High Impact Research (HIR) Advisory Council, University of Malaya (2012-2015).

Plenary and Named Lectures

1984: 188th ACS National Meeting.

1985: NATO Advanced Research Workshop.

1986: US/Japan Biotechnology Conference, Japan. International Symposium on “Biocatalysis in Organic Media,” Wageningen, the Netherlands; 5th International Symposium on Life Science: Prospects for Enzyme Technology, Kyoto.

1987: The Pittsburg–Cleveland Catalysis Society Meeting: Frontiers in Catalysis. Gordon Research Conference on Organic Reactions and Processes; The 18th Annual NSF Workshop on Organic Synthesis and Natural Products Chemistry; The 87th American Society of Microbiology Meeting, Atlanta. 194th ACS National Meeting, New Orleans. Biotechnica ‘87, Hannover.

1988: Symposium on Biotransformation, The Society of General Microbiology, University of Southampton, UK (2/2); Symposium on Bioorganic Synthesis, Swedish Academy of Sciences (2/3). ACS Regional Meeting, 22nd MARM Symposium on Organic Synthesis (5/24); ACS central regional meeting, Symposium on New Synthetic Strategy, West Virginia (6/2); Gordon Research Conference on Stereochemistry, New Port (7/4); Conference on Biocatalytic Synthesis of Organic Compounds, New York (8/8); Symposium on Molecular Recognition Phenomena, Royal Society of Chemistry and Swiss Chemical Society (9/11).

1989: French–American Chemical Society 1st Meeting, Paris (6/5–6/8).

1990: University of Illinois, Frontier in Enzyme Chemistry (3/17); Texas A&M IUCCP Program (3/19); ACS National Meeting, Boston, Division of Carbohydrate Chemistry (4/25); Gordon Conference on Natural Products (7/22); IUMS Congress, Osaka (9/16); Society for Complex Carbohydrates, La Jolla (10/12).

1991: US–Japan Conference on Biotechnology, Hawaii (1/6); The 13th Annual Conference on Clinical Laboratory Molecular Analysis (2/14); Frontiers in Biomedical Research, Annenberg Center, Palm Springs (2/18); Merck lecturer, University of Alberta, Chemistry (3/18); US–Japan Conference on Selectivity in Synthetic and Bioorganic Chemistry, Tokyo (6/3); ASM Biotechnology Conference, New York (6/27); ACS National Meeting/Fourth North American Congress (8/28); European Peptide Society, Enzymes in Peptide Synthesis, IEC-Bogensee, Germany (9/2); Enzyme

- Engineering, Hawaii (9/25); International Biotechnology Conference, San Francisco (10/27); Rhone-Poulenc's 14th Scientific Sessions, Frontiers in Chemistry and Biology, Paris (11/19); International Symposium on Bioorganic Chemistry, University of Chicago (11/22).
- 1992: Symposium on Enzymes in organic synthesis, IUPAC meeting in New Delhi, India (1/6); NATO Meeting on Microbial Reagents in Organic Synthesis (3/23); Symposium on Enzymes in organic chemistry: Synthetic and mechanistic aspects, The Organic Chemistry Division, The Royal Netherlands Chemical Society (4/9); Monsanto lecturer, Purdue University (5/4); International Workshop on New Aspects of Biocatalysis, Kyoto University (6/12); 4th International SCBA Symposium, Singapore (6/14); IUPAC International Carbohydrate Symposium, Paris (7/5–7/10); Syntex lecturer, Colorado State University (11/19–11/20); Symposium on the Preparation of Enantiomerically Pure Compounds, Societe Royale de Chimie, Belgium (10/22–10/23); International Symposium on Gangliosides, Tokyo (11/5).
- 1993: Merck-Frosst lecturer, University of Victoria (1/21); International Symposium on Bioorganic Chemistry, Interlaken, Switzerland (3/31–4/2); the 28th ESF/EUCHEM Conference on Stereochemistry-Burgenstock (5/2–5/8); Harvard University Mini-Symposium in Organic Chemistry (5/17); Complex Carbohydrate for Drug Research, Denmark (6/6–6/10); Carbohydrate Gordon Research Conference (7/5–7/8); Chiron lecturer, UC-Berkeley (9/7).
- 1994: Bristol-Myers Squibb Distinguished Lecturer, Syracuse University, New York (4/5); Sino-American Symposium on Asymmetric Synthesis, Taiwan (4/8); New Perspective in drug design, Thurnberry, Scotland (4/11); CHI's Glycotechnology Conference, San Diego (5/16); Organizer and Plenary Lecturer, Table Ronde on Biomolecular Recognition and Catalysis, Paris (7/8–7/9); International Carbohydrate Award lecturer, International Carbohydrate Symposium, Ottawa (7/18); IASOC Conference, Ischia, Italy (9/25); W. S. Johnson Symposium in Organic Chemistry, Stanford University (10/7); 6th Annual Glaxo-UNC Frontiers in Chemistry and Medicine Symposium (11/7).
- 1995: International Symposium on Protein Structure and Function, U. Exeter, UK (4/19); Contemporary Challenges in Carbohydrate Chemistry, 1995 UM/PD Symposium, Ann Arbor (4/28); Merck lecturer, University of Cambridge, England (5/10); Tetrahedron Symposium, Kyoto (5/26); The 10th Nozaki Conference, Nagoya (6/15); International Heterocycle Chemistry, Taipei (8/7); Nobel Symposium on Catalytic Asymmetric Synthesis, Stockholm (9/3); The 7th International Symposium on Chiral Discrimination (ISCD), Jerusalem (11/12).
- 1996: Swiss Chemical Society (5/23); IUPAC Conference on Organic Synthesis, Amsterdam (6/30); Keynote speaker, the 4th International Symposium for Chinese Organic Chemists, Hong Kong (4/5); Wyeth-Ayerst lecturer, Columbia University (4/19); Keynote speaker, the Royal Society of Chemistry Annual Meeting, Perthshire, Scotland (9/12); ACS Princeton Organic Chemistry Symposium (9/27).
- 1997: Israel Chemical Society (2/3); Distinguished Visiting Professor, Department of Chemistry, University of Florida (2/12); the Royal Society of Chemistry Carbohydrate Division (3/24); ACS William Johnson Symposium (4/14); Keynote lecturer, 2nd Carbohydrate Bioengineering, La Rochelle, France (4/15); C. H. Li Memorial lecturer, Academia Sinica, Taipei (5/2); 9th European Carbohydrate Symposium (6/11); 35th ACS National Organic Chemistry Symposium (6/22); Sponsored lecturer, 6th International Symposium on the synthesis and application of isotopes and

- isotopically labeled compounds, Philadelphia (9/14); Frontier in Chemical Research Program, Texas A&M University (10/13).
- 1998: Allelix lecturer, Department of Chemistry, University of Toronto, (5/7); 26th National Medicinal Chemistry Symposium, Richmond, Virginia, (6/15); 20th Japanese Carbohydrate Symposium (7/15); ACS Symposium on Asymmetric synthesis of Fluoroorganic Compounds, Boston (8/23); Tetrahedron Prize Symposium, Boston (8/26); The 17th International Symposium on the Life Sciences, Kyoto (11/4).
- 1999: Paul Gassman lecturer, Department of Chemistry, University of Minnesota, Minneapolis (6/1); The 37th IUPAC Congress, Berlin (8/14); The 1999 Naff Symposium on Carbohydrates and Cell Recognition (4/16); Enzyme Engineering XV (10/10). Frontiers in Bioorganic Chemistry 2000, Taipei (10/29).
- 2000: The Knud Lind Larsen Symposium on Chirality, Danish Academy of Technical Sciences (1/27); The Eighth International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-8), Kyoto (7/11); the Gordon Conference on Green Chemistry, Connecticut (7/18); International Carbohydrate Conference, Hamburg (8/22); The Novartis lecturer, Budapest (10/22); International Chemical Congress of Pacific Basin Societies, Honolulu (12/18).
- 2001: the Royal Society of Chemistry Carbohydrate Group, Dublin, Ireland (4/4); the International Conference on Green Chemistry, Wales Swansea, UK (4/6); Gordon Research Conference on Bioorganic Chemistry, New Hampshire (6/17); Enzyme Engineering XVI Conference, Potsdam, Germany (10/7); Robert A. Welch Foundation Conference on Chemistry for the 21st Century, Houston (10/29); Merck lecturer, Wayne State University (11/4).
- 2002: International Conference on Industrial Applications of Biocatalysis, San Diego (3/21); Health Care Ventures Scientific Advisory Board Retreat, Palm Beach (4/10); First ICI Conference on Contemporary Asymmetric Catalysis (9/12); The Merck lecturer, University of Cambridge, UK (9/22). IUPAC Conference on Natural Products, Florence, Italy (7/29).
- 2003: Treat B. Johnson Lecture, Yale University (2/19); International Bioinspiring Conference, Haifa, Israel (12/8); International Enzyme Engineering Conference, Santa Fe, New Mexico (11/9).
- 2004: 3rd International Proteomics Conference, Taipei, Taiwan (5/17); Ralph and Helen Oesper Symposium, University of Cincinnati (10/15); The 4th Tateshima Conference in Organic Chemistry, Tokyo, Japan (11/12); Yousei University lectureship, Seoul, Korea (11/16); International Symposium on Current Therapeutics Development for Infectious Diseases, Taipei, Taiwan (12/16).
- 2005: Keynote lecturer, 3rd Annual Conference on Glycomics–Carbohydrates in Drug Development, San Diego (3/21); American Society for Biochemistry and Molecular Biology (ASBMS), San Diego (4/2); Wyeth Ayerst lecturer, University of Pennsylvania (4/12); Arnold O. Beckman lecturer, California Institute of Technology (5/18); Commissariat a L'energie Atomique u Centre de Saclay, Paris, France (6/27); Tetrahedron Symposium, Bordeaux, France (6/28); Tetrahedron Prize Symposium, 2005 American Chemical Society Meeting, Washington D.C. (8/29); Royal Society of Chemistry-Fluorine Group, Oxford, UK (9/1–9/2); Harry Day lecturer, Indiana University (9/14).

- 2006: Smets Chair Award, Louvain-la-Neuve, Belgium (3/13-3/14); Keynote speaker, CHI's 4th Annual Glycomics and Carbohydrates in Drug Development, San Diego (3/23-3/24); Keynote lecturer, CACS 25th Anniversary Symposium, Atlanta (3/27); Trends in Organic Chemistry: Enzymatic Synthesis, Stockholm (9/4); Keynote speaker, Joint third AOHUPO and Fourth International Structural Biology and Functional Genomics Conference, Singapore (12/4-12/7).
- 2007: Novartis Lecturer, Columbia University (1/29); Claude S. Hudson Award Symposium, 233th ACS National Meeting, Chicago (3/25); Organic Chemistry—Present & Future, International Symposium Organized in Honor of Prof. Léon Ghosez, Louvain-la-Neuve, Belgium (4/10-4/13); 24th Herbert C. Brown Lecture, Purdue University (4/19); Gordon Research Conferences—Carbohydrates, Tilton School, New Hampshire (6/17); Tetrahedron Symposium, Berlin (6/28); International Symposium on Molecular Immunology of Complex Carbohydrates, Academia Sinica, Taipei (7/9); Eli Lilly Lecture, Yale University (9/19); The 4th Takeda Science Foundation Symposium on Pharma Sciences, Tokyo (12/3).
- 2008 The 10th CRSI (Chemical Research Society of India) National Symposium—Honorary Fellow Award & Lecture, Bangalore, India (2/1-2/3); Monte Jade Annual Conference—Dinner Keynote Speech, Santa Clara Convention Center, CA (3/8); The 4th Symposium: Innovation COE Program for Future Drug Discovery and Medical Care, Hokkaido University, Japan (3/14); Cotton Medal Symposium, Texas A & M University (3/24-3/26); Joint 7th Human Genome Organization-Pacific Meeting and the 8th Asia Pacific Conference on Human Genetics, Cebu, the Philippines (4/2-4/5); ASBMB Meeting, San Diego (4/5-4/9); International Congress on Bioactive Molecules and the 3rd International Symposium on Medicinal and Aromatic Plants, Oujda, Morocco (5/28-5/29); IUPAC ICOS-17, the 17th IUPAC International Conference on Organic Synthesis, Daejeon, Korea (6/24-6/26); Tetrahedron Symposium, Berkeley, California (7/22-7/26); Howard Lectures, University of Sydney, Sydney, Australia (8/6-8/8); Tetrahedron Prize Symposium and the 236th ACS Meeting, Philadelphia (8/17-8/22); NRC-NSC Eminent Researchers Program (9/2-9/6); EMBL Conference on Chemical Biology 2008, Heidelberg, Germany (10/8-10/11); 50th Anniversary of Microbial Chemistry Research Foundation, Tokyo (10/30); ISOR-2008, International Symposium on Organic Reactions, Taiwan (11/23).
- 2009 Harvard Business School Asia Business Conference, Boston (2/14-2/15); Scripps Scientific Governors Inaugural Symposium, Florida (2/26-2/27); The 237th ACS Meeting and Claude Hudson Award in Carbohydrate Chemistry Symposium, Salt Lake City (3/22-3/26); SAPA-Monte Jade Annual Conference, New England and 11th SAPA-NE (Sino-American Pharmaceutical Professionals Association) Annual Conference, Philadelphia, (5/16); TAITA 2009 Annual Conference, San Francisco (5/23); Merck KGaA, Darmstadt, Germany (5/26-5/27); Final Symposium of the SFB 470: From Glycobiology to Glycochemistry, University of Hamburg (5/28-5/29); The 238th ACS Meeting, Washington D.C. (8/16-8/20); 11th Conference on Chitin and Chitosan, Taiwan (9/7); The 1st Hokkaido University-Academia Sinica Joint Symposium and The 7th Symposium for Future Drug Discovery and Medical Care, Hokkaido, Japan (10/7-10/8); The 3rd International Symposium on Bio-Inspired Engineering, Taiwan (10/21-10/23), Peiking University (10/22-10/26); City University of Hong Kong and Chinese University of Hong Kong (11/9-11/11).
- 2010 7th International Symposium for Chinese Medicinal Chemists (ISCMC-2010), Kaohsiung, Taiwan (2/1-2/5); XII International Symposium on Respiratory Viral Infections, Taipei (3/11-3/14); Conference of Presidents of Academies and Scholarly Societies: in celebration of the 50th

anniversary of The Israel Academy of Sciences and Humanities, Israel (3/14~3/20); EMBL Conference, Hamburg (5/5~5/7); The 21st Banyu Life Science International Sendai Symposium, Sendai, Japan (6/5); Konstanz Symposium Chemical Biology, Konstanz, Germany (6/16~6/18); Humboldt University, Germany (6/24); The Inaugural (1st) International Conference on Molecular and Functional Catalysis, Singapore (7/11~7/15); 25th International Carbohydrate Symposium(ICS 2010), Tokyo, Japan (8/1~8/6); the 240th ACS National Meeting, Boston (8/22~8/26); Taiwan Swiss Biomedical Symposium, Taiwan (8/31~9/2); Univ. of Notre Dame Reilly Lectureship (9/13~9/15); UCSD/Taiwan Symposium on Frontiers in Biosciences, San Diego (9/16~9/17); 11th Int'l Symposium for Chinese Organic Chemists, Taiwan (10/24~10/26); RIKEN Chemical Biology Symposium (10/26~10/28); UC Berkeley Green Chemistry Seminar (12/6).

- 2011 The 76th ICS (Israel Chemical Society) Meeting, Israel (2/9~2/10); Frontiers in Biomedical Research Symposium, Palm Spring (2/20~2/23); Infectious Disease Research Institute, Seattle (3/1); 2011 R. Bryan Miller Symposium, University of California at Davis (3/3~3/4); The 241st ACS Meeting and the Claude S. Hudson Award Symposium, Anaheim (3/27~3/31); University of Namur, Belgium (4/8); European Young Investigator Workshop on Carbohydrate Chemistry: From Synthesis to Applications, Lyon, France (4/11~4/15); The 9th Carbohydrate Bioengineering Meeting (CBM9), Lisbon, Portugal (5/15~5/18); 2011 Keystone Symposium on Pathogenesis of Influenza: Virus-Host Interactions, Hong Kong (5/23~5/28); The 21st International Symposium on Glycoconjugates, Vienna, Austria (8/21-8/26); The 31st Naito Conference on Glycan Expression and Regulation, Sapporo, Japan (9/13~9/16); International Symposium on Cancer Translational Research, Taipei (11/19~11/20); The 8th AFMC International Medicinal Chemistry Symposium, Tokyo, Japan (11/29~12/2).
- 2012 The 243rd ACS Meeting, San Diego (3/25~3/29); The 244th ACS Meeting, Philadelphia (8/19~8/23); Taiwan-UK Conference on Life Sciences, Oxford, England (9/1~9/2); Sialoglyco 2012 International Symposium, Taipei (9/9); 13th FAOBMB Congress, Bangkok (11/25~11/26).
- 2013 7th Glycan Forum, Berlin, Germany (3/20~3/22); 2013 Boston Taiwanese Biotechnology Symposium, Boston, USA (6/15); The 17th European Carbohydrate Symposium (EuroCarb 17), Tel Aviv, Israel (7/7~7/11); The Solvay Conference, Brussels, Belgium (10/16~10/19); 4th Asian-Oceanian Conference on Green and Sustainable Chemistry (AOC-4 GSC), Taipei, Taiwan (11/4); From Molecules to Medicine, the first Israel – Taiwan Life Science Conference, Taipei, Taiwan (12/9~12/11).
- 2014 27th International Carbohydrate Symposium, Bangalore, India (1/12~1/17); 7th General Assembly and International Conference of Asian Pacific Organization for Cancer Prevention, Taipei (3/21); Sialoglyco 2014 Meeting, Australia (9/7~9/10); 15th IUBMB-24th FAOBMB-TSBMB International Conference, Taipei (10/21~10/26); 2014 Joint Meeting of Society for Glycobiology and Japanese Society of Carbohydrate Research, Honolulu, Hawaii (11/16~11/19)
- 2015 The 249th ACS Meeting, Denver, Colorado, USA (3/22~3/26); SCBA Symposium, Taipei, Taiwan (6/26~6/29); The 250th ACS Meeting, Boston, USA (8/16~8/20); Glyco23 Congress, Croatia (9/15~9/20); 2nd Shanghai Tech-SIAIS Bioforum, Shanghai (11/10~11/12); ASCB (American Society for Cell Biology) Annual Meeting, San Diego (12/12).
- 2016 The Einstein Lecturer, Israel Academy of Sciences (3/14); The 251st ACS Meeting, San Diego (3/16~3/17); The 251st ACS Meeting, San Diego, USA (3/16~3/17); AAI (American Association

of Immunologists) Satellite Meeting, Seattle (5/14); ASCO Annual Meeting, Chicago, USA (6/3~6/7); 23rd Pacific Science Congress, Taipei, Taiwan (6/13~6/17). ACBC (4th Asian Chemical Biology Conference), Kaohsiung, Taiwan (11/28). Special IUBMB Meeting: Frontiers in Glycoscience: Host-Pathogen Interactions (12/12).

- 2017 Academia Sinica-Osaka Bilateral Symposium, Taipei, Taiwan (10/12). EMBO Event, Taipei, Taiwan (11/20); IUBMB Special Meeting on “Frontiers in Glycoscience: Oncology”, Taipei, Taiwan (12/4).
- 2018 2018 Bowei Science Conference (BSC): From Chemistry to Material Design, Hsin-Chu, Taiwan (1/5~1/7). Israel-Taiwan Life Science Conference, Taipei, Taiwan (11/14~11/15). 10th ACGG Conference, Tainan, Taiwan (11/18~11/21).
- 2019 2019 Gordon Research Conference (GRC) on Carbohydrates (6/23~6/28), Hong Kong; The 8th Asian Chemical Conference, Taipei (Dec 8-12).
- 2020 Asia-Pacific Federation of Pharmacology (APFP) Meeting (5/3~5/6) (Canceled). PacifiChem, Hawaii (Dec 15-20) (Canceled).
- 2021 Gordon Research Conference on Carbohydrates USA; International Glycoconjugate Symposium, Taipei (Aug 29-Sept 3)

Principal areas of research interest

Chemical Biology and Synthetic Chemistry: development of new tools and methods for understanding the role of glycosylation in biology and disease progression; chemo-enzymatic synthesis of complex carbohydrates and glycoproteins; design of small-molecule probes for the study of carbohydrate-mediated biological recognition; programmable one-pot oligosaccharide synthesis and glycan microarray development; vaccine design and drug discovery against infectious diseases and cancers. H-index 145.

Published Papers

The following 12 publications are earlier work in the area of peptide and protein chemistry: J. Chin. Biochem. Soc., 2, 64–69, (1973); 4, 24, (1975); 5, 1–6, (1976); 9, 25, (1980); J. Chin. Chem. Soc., 23, 155, (1976); 24, 129–133, (1977); 25, 209–214, (1978); 26, 75–78, (1979); 25, 215, (1978); 26, 11, (1979); Toxicon, 14, 420, (1976); Proc. Natl. Acad. Council R.O.C., 2, 346–351, (1978).

13. C.-H. Wong, S.W. Chen, C. L. Ho, K. T. Wang, “Synthesis of cobra neurotoxin”, Proc. Natl. Sci. Council R.O.C., 2, 149–153, (1978).
14. C.-H. Wong, Y. H. Chen, M.C. Hung, K. T. Wang, C. L. Ho, T. B. Lo, “Regeneration of a reduced cobra cardiotoxin”, Biochim. Biophys. Acta, 533, 105–111, (1978).
15. C.-H. Wong, C. L. Ho, K. T. Wang, “Purification of synthetic cardiotoxin by affinity chromatography”, J. Chromatogr., 154, 25–32, (1978).
16. C.-H. Wong, K. T. Wang, “Electrochemistry in organic synthesis: large-scale preparation of cysteine from cystine”, J. Chin. Chem. Soc., 25, 149–152, (1978).
17. C.-H. Wong, S.-T. Chen, C.-L. Ho, K.-T. Wang, “Synthesis of a fully active snake venom cardiotoxin by fragment condensation on a solid polymer”, Biochim. Biophys. Acta, 536, 376–389, (1978).
18. C.-H. Wong, M. F. Ho, K. T. Wang, “Preparation of optically pure *N*-*tert*-butyloxycarbonyl-*O*-benzyl-L-serine and its antipode”, J. Org. Chem., 43, 3604, (1978).
19. C.-H. Wong, K. T. Wang, “Mutual resolution of (\pm)-ephedrine and *Z*-DL-amino acid induced by seeding chiral salt”, Tetrahedron Lett., 40, 3813–3816, (1978).
20. C.-H. Wong, S.T. Chen, K. T. Wang, “Enzymic synthesis of opioid peptides”, Biochim. Biophys. Acta, 576, 247–249, (1979).
21. C.-H. Wong, S.D. McCurry, G. M. Whitesides, “Practical enzymatic synthesis of ribulose-1,5-bisphosphate and ribose-5-phosphate”, J. Am. Chem. Soc., 102, 7938–7939, (1980).
22. C.-H. Wong, G. M. Whitesides, “Enzyme-catalyzed organic synthesis: NAD(P)H cofactor regeneration using glucose-6-phosphate and the glucose-6-phosphate dehydrogenase from *Leuconostoc mesenteroides*”, J. Am. Chem. Soc., 103, 4890–4899, (1981).
23. C.-H. Wong, L. Daniels, W. H. Orme-Johnson, G. M. Whitesides, “Enzyme-catalyzed organic synthesis: NAD(P)H cofactor regeneration using dihydrogen and the hydrogenase from *Methanobacterium thermoautotrophicum*”, J. Am. Chem. Soc., 103, 6227–6228, (1981).
24. C.-H. Wong, J. Gordon, C. L. Cooney, G. M. Whitesides, “Regeneration of NAD(P)H using glucose-6-sulfate and glucose-6-phosphate dehydrogenase”, J. Org. Chem., 46, 4676–4679, (1981).
25. R. DiCosimo, C.-H. Wong, L. Daniels, G. M. Whitesides, “Enzyme-catalyzed organic synthesis: electrochemical regeneration of NAD(P)H from (NAD(P) using methyl viologen and flavoenzymes”, J. Org. Chem., 46, 4622–4623, (1981).
26. C.-H. Wong, A. Pollak, S. McCurry, J. Sue, J. R. Knowles, G. M. Whitesides, “Ribulose-1,5-bisphosphate: routes from glucose-6-phosphate (via 6-phosphogluconate and ribose-5-phosphate) and from adenosine monophosphate (via ribose-5-phosphate and ribulose-5-phosphate)”, Method. Enzymol., 89, 108–121, (1982).
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