**Biography H. N. Cheng Ph.D.**

**Immediate Past President of National ACS**

* ACS Volunteer Service Award, 2016
* Cultural Diversity Award, USDA/ARS/SRRC, 2017
* Chair of ACS International Activities Committee, 2013-2015
* Chair of Combined Federal Campaign, USDA, 2013
* Chair of Asian Pacific American Heritage, USDA, 2011-2021
* oster Chair, Int’l Carbohydrate Conference, 2016

**Summary**:  H. N. Cheng obtained his B.S. from UCLA and his Ph.D. from the University of Illinois at Urbana-Champaign.  In his R&D work, he has been active in developing and promoting green polymer chemistry as a platform to produce eco-friendly and sustainable products.  As part of this work, he has been involved with the use of biobased materials, biocatalysis, green processing, and green methodology.  He has also done a lot of work on polymerization theory and polymer NMR.  He is currently a Research Chemist at USDA Southern Regional Research Center in New Orleans.  Prior to 2009, he was Senior Research Fellow at Hercules Incorporated in Wilmington, Delaware, where he held various R&D and managerial positions. He has authored or co-authored over 290 papers and 26 patent publications.  He has organized 45 symposia at national meetings since 2000 and edited 23 books.

He was selected a Fellow of the American Chemical Society (ACS) (2009), a Fellow of the ACS Polymer Chemistry Division (2010), and a Fellow of the ACS Agricultural and Food Chemistry (2018). He was selected as the Outstanding Scientist of the Year at USDA Southern Regional Research Center in 2014 and in 2019. He was the recipient of ACS Volunteer Service Award (2016), Tillmans-Skolnick Award for Outstanding Service from the ACS Delaware Section (2006), Distinguished Service (2005) and Special Service (2015) Awards from ACS Polymer Division, and ACS Delaware Section Award for research excellence (1994).

H. N. Cheng has been active in ACS for many years and has served in numerous ACS committees and task forces.  At the national level, he served as ACS President in 2021 and ACS President-Elect in 2020. He is currently the ACS Immediate Past President. He was Chair of International Activities Committee (2013-2015), Chair of Committee on Economic and Professional Affairs (2006), Co-Chair of Presidential Task Force on “Vision 2025: Helping ACS Members Thrive in the Global Chemistry Enterprise” (2012-2013), Assoc Chair of Board-Presidential Task Force on “Multidisciplinarity” (2004-2005), and Chair of CEPA Task Force on “Globalization Issues” (2004-2005). He has also been very active in local sections and technical divisions, serving in many functions.

On the personal side, he is married and has two grown children. In his spare time, he enjoys studying history and poetry, and he does some volunteer work for his local church.

**Professional Experience**

**U.S. Department of Agriculture, Agricultural Research Service,  Southern Regional Research Center, New Orleans, LA 70124**

* Research Chemist, 2009 – present
* New or improved utilization of agricultural commodities.  Exploration of new technologies, new reactions, or new uses involving agricultural materials, including polysaccharides, triglycerides, and proteins.  Studies of cottonseed products, such as cottonseed oil, protein, cellulose and hemicellulose.

**Hercules Incorporated (now part of Ashland Inc.), Wilmington, DE 19808**

* Senior Research Fellow (highest technical rank at Hercules), 2002 – 2009
  + R&D on paper pulp.  Initiated and coordinated major R&D programs.  Personally developed four new products in 2005-2008.  Helped grow the business.
* Research Fellow / Program Manager, 1990 – 2002
  + R&D management of a biotechnology research group.  Initiated and managed research programs in these areas.
  + Evaluation of new business opportunities.
  + Scouting work in nutrition and food science, including animal models and clinical trials.
* Research Supervisor, Analytical Science Division, 1983 – 1990
  + R&D management of spectroscopy and surface analysis group.  Group included 12 exempts and 16 non-exempts, covering NMR, ESR, IR, UV, NIR, optical and electron microscopy, ESCA, and X-ray diffraction.  Personally carried out R&D and analysis projects.
* Research Staff, 1979 – 1983, Analytical Science Division
  + NMR analysis, methods development, in-depth studies of organic reaction mechanisms and polymer microstructure; also structure/properties relationship

**GAF Corporation (now part of Ashland, Inc.), Wayne, New Jersey 07470**

* Senior Research Chemist, 1976 – 1979, Analytical Chemistry Department
* Duties included problem solving and analytical coordination.  Handled a large number of technical and field problems.  Also conducted special research projects

**Bell Laboratories, Murray Hill, New Jersey 07974**

* Visiting Member of Technical Staff, 1974 – 1976
* Research in NMR studies of polymers, oxidation and degradation studies of polymers, and kinetic studies of peptides in solution.

**Education**

**University of California, Los Angeles (UCLA), California**

* B. S. degree, Department of Chemistry
* Honors:  Phi Beta Kappa, University Scholarship, William Homan and Non-Resident Scholarships, NSF Undergraduate Research Participant
* Graduated *summa cum laude* (from the university) and with Highest Honors (from the chemistry department).

**University of Illinois, Urbana-Champaign, Illinois**

* Ph.D. degree, Department of Chemistry (Thesis Advisor: Professor H.S. Gutowsky)
* Honors:  University Fellow, Sigma Xi, Phi Kappa Phi Honor Society, and Phi Lambda Upsilon Honorary Chemical Society.

**Publications**

* About 290 [publications](https://hncheng-acs.org/publications/).
* 26 [patent](https://hncheng-acs.org/publications/#patents) publications.
* Edited 23 [books](https://hncheng-acs.org/publications/#books).

**Presentations**

* Approximately 170, given variously at local, national, and international meetings.

**Honors and Awards**

**Scientific:**

* Elected Fellow of ACS Division of Agricultural and Food Chemistry, 2018
* Awarded Outstanding Scientist of the Year at USDA Southern Regional Research Center, 2019, 2014
* Elected Fellow of ACS Polymer Chemistry Division, March 2010
* Elected inaugural Fellow of the American Chemical Society (ACS), in recognition of scientific contributions and outstanding service, July 2009
* Delaware Section Award (in recognition of research excellence), ACS Delaware Section, November 1994.
* Hercules Research Fellow Award, April 1990
* Spectroscopist-of-the-Year Award given by the Society of Applied Spectroscopy, Delaware Valley Section, 1986
* Hercules High Achievement Award, 1984, 1987; Accountability Award, 1997

**Professional:**

* Presented with Extraordinary Service Award by Chinese American Chemical Society, August 2021
* Presented with New Orleans Chinese-American Distinguished Service Award by New Orleans Chinese Association, September 2018
* Presented with ACS Volunteer Service Award, March 2016 (giving the Keynote Speech at the ACS ChemLuminary Award Ceremony at ACS National Meeting in August 2016)
* Awarded Special Service Award by ACS Polymer Chemistry Division, March 2015
* Awarded twice as Outstanding Contributor to Cultural Diversity at USDA Southern Regional Research Center, 2011, 2017
* Honorable Mention for the 2011 Equal Employment Opportunity Leadership Award, New Orleans Federal Executive Board
* Tillmans-Skolnick Award for Outstanding Service, ACS Delaware Section, January 2006
* Distinguished Service Award, ACS Polymer Chemistry Division, August 2005

**Professional Affiliations and Activities**

1. American Chemical Society (ACS) – See [here](https://hncheng-acs.org/acs-activities/)
2. Other Professional Activities
   * Associate Editor: *International Journal of Polymer Analysis & Characterization* (1996 – 2020).
   * Member of Editorial Board, *Carbohydrate Polymers* (2014 – present); *Polymers* (2018 – present).
   * Member of Governing Board, International Symposium on Polymer Analysis and Characterization (2007-2020).
   * Member of the Advisory Board for the Department of Chemical and Biological Engineering, Polytechnic University, New York (2006-2008).
   * Taught a graduate level course, “Multinuclear NMR”, given at the University of Delaware, Fall 1980 and Fall 1981.
   * Taught a senior/graduate course, “Carbon-13 NMR”, given at the University of Delaware, Fall 1985 and Spring 1989.
   * Served on two Ph.D. Committees at the University of Delaware, 1988 – 1989, 1997 – 1999.
   * Reviewer for:  NSF, ACS Petroleum Research Fund, *Macromolecules*, *Journal of Polymer Science*, *Journal of Applied Polymer Science*, *European Polymer Journal*, *Polymer, Polymer Bulletin*, *Polymer News, Polymers, Analytical Chemistry, TAPPI Journal,* Univ. of Delaware Foundation, *Carbohydrate Polymers, Carbohydrate Research, Cellulose, Biomacromolecules, J. Amer. Oil Chemists Society, Industrial Crops and Products, PlosOne, Polymers for Advanced Technologies, Textile Research Journal, BioResources, Polymer Chemistry, Wood Science and Technology, ACS Omega*
   * Also gave invited lectures at the Univ. of Delaware, Univ. of Waterloo, Polytechnic Univ. (New York), City Univ. of New York, Univ. of Alabama at Birmingham, Univ. of Georgia, Univ. of Miami, Wayne State Univ., Rochester Institute of Technology, Univ. of Central Florida, CUNY College of Staten Island, DuPont Central Research Laboratory, USDA NCAUR Peoria, Univ. of Guanajuato (Mexico), UNAM (Mexico), Louisiana State Univ., Southern Mississippi Univ., University of Alabama at Huntsville, Loyola Univ., Oklahoma State Univ., Dow Chemical Company, National Taiwan University, National Chi Nan University, Kaohsiung Medical University, National University of Singapore, and elsewhere.