

## LOUISE SLADE & HARRY LEVINE -- BIOGRAPHIES/VITAE -- 5/23/2019

**Dr. Louise Slade** heads her own consulting business, Food Polymer Science Consultancy. Dr. Slade retired in 2006 as a Kraft Foods Fellow in Nabisco Biscuit & Snacks R&D of Kraft Foods. Prior to Kraft's acquisition of Nabisco in late 2000, Dr. Slade had been a Nabisco Research Fellow since 1997, after having become Nabisco's first Research Fellow (Fundamental Science Group) in 1990. She was, until 1987, a Research Scientist in the Central Research Dept. of General Foods. Dr. Slade joined GF in 1979 after 5 years at the University of Illinois in the lab of Dr. Gregorio Weber as an NIH Postdoctoral Fellow in biochemistry. Since 1980, Dr. Slade, in partnership with Dr. Harry Levine, has developed an innovative research program in the new Food Polymer Science discipline they created. Drs. Slade and Levine were honored at a 2018 Division of Agricultural and Food Chemistry, 3-day-long "Water in Foods Symposium in honor of Louise Slade & Harry Levine", held at the 255th American Chemical Society Spring National Meeting in New Orleans, for their contributions to understanding water relationships in foods, based on the Food Polymer Science approach they created. In 1999, Drs. Slade and Levine received the IFT Industrial Scientist Award for their major technical contributions to the advancement of the food industry. In 2004, Drs. Slade and Levine were honored with the prestigious 42<sup>nd</sup> Fred W. Tanner Lecture Award from IFT's Chicago Section. And in 2016, Dr. Slade was elected an IFT Fellow. In 2007, Drs. Slade and Levine received the John C. Halverson Memorial Lectureship Award from the Milling and Baking Division of AACC International. In 2008, Drs. Slade and Levine were honored with AACCI's prestigious Phil Williams Applied Research Award, which brought along with it AACCI Fellow status. And in 2019, Drs. Slade and Levine were once again honored as a unique cereal science partnership, this time with AACCI's prestigious Alsberg-French-Schoch Memorial Lectureship Award for having made distinguished contributions to fundamental starch science. Dr. Slade has 44 granted U.S. and 3 European patents (36 of which have been industrially commercialized) for novel food ingredients, products and processes, including two for soft-from-the-freezer ice creams. For her research contribution to that development effort, Dr. Slade was awarded GF's coveted Chairman's Award in 1986. She was also awarded Nabisco's prestigious FIAT Award in 1989 for her outstanding technical contributions to Nabisco's Biscuit Company, and in 2001, she became the first Nabisco scientist to win Kraft's Technology Leadership Award. Since 1982, she and Dr. Levine have jointly published and/or presented internationally 260 papers in the areas of food polymer science, starch, gluten and cereal grain science and technology, cryostabilization technology, baking science and flour technology, and water relationships in foods. These papers have been cited over 8000 times in publications by other workers. Dr. Slade has been honored, for her leadership in the polymer science approach to research on food carbohydrates, by an invitation to present the 1987 Belfort Memorial Lecture at the Whistler Carbohydrate Research Center at Purdue University. In 2004, Dr. Slade was remarkably honored by having a new wheat cultivar named "Louise" after her, by the wheat's breeder. "Louise" is a high-quality, biscuit-friendly, Washington Soft White Spring wheat, whose breeding development was guided by new flour quality testing methodology that Dr. Slade had created at Nabisco in 1988, and which was adopted by the American Association of Cereal Chemists (AACC) as Official Method #56-11 in 1999. In 2013, 25 years after Dr. Slade originally created her manual SRC method, it was transformed, in collaboration with, and at the initiative of, instrument maker CHOPIN Technologies (Paris), into an automated instrument (the SRC-CHOPIN) for flour SRC testing. Dr. Slade was honored in 2008 with an appointment as an Affiliated Scientist, in 2011 as an International Advisory Council member, and then in 2014, she was elected to the Board of Directors of the Monell Chemical Senses Center in Philadelphia. Drs. Slade and Levine developed a short course on Food Polymer Science, which they have presented 28 times since 1987, to nearly 800 attendees in the US, Europe, Australia and Asia, under the sponsorship of six different professional organizations; their short course manual is available at [www.foodpolymerscience.com](http://www.foodpolymerscience.com). This partnership has also edited a book on Water Relationships in Foods (Plenum, 1991), developed from an international symposium they organized for the American Chemical Society, and has guest-edited a special issue for the Journal of Thermal Analysis on the Thermal Analysis of Foods (1996). Dr. Slade is a Fellow of AACCI and IFT, a member of ACS, AchemS, AAAS, Society of Biomolecular Science, NY Academy of Sciences, Phi Tau Sigma, and Phi Beta Kappa, and has served on the Editorial Board of Carbohydrate Polymers journal and on the International Advisory Committee of ISOPOW. She received her PhD in Chemistry from Columbia University, NY in 1974 and her BA in Biology from Barnard College, NY in 1968. [Louise's ORCID 0000-0002-1100-5355]

**Dr. Harry Levine** is an associate of Food Polymer Science Consultancy, Dr. Louise Slade's consulting business. Dr. Levine retired in 2006 as a Kraft Foods Fellow in Nabisco Biscuit & Snacks R&D of Kraft Foods. Prior to Kraft's acquisition of Nabisco in late 2000, Dr. Levine had been a Nabisco Research Fellow since 1997, after having been promoted in 1991 to Research Fellow in the Fundamental Science Group of Nabisco. He was, until 1987, a Research Scientist in the Central Research Dept. of General Foods. Dr. Levine joined GF in 1976 as a Sr. Polymer Chemist, after 2 years of post-doctoral research on polymeric cancer drugs in the Biophysics Dept. of Roswell Park Memorial Institute in Buffalo, NY. Since 1980, Dr. Levine, in partnership with Dr. Louise Slade, has developed an innovative basic research program and group in the area of Food Polymer Science, a new discipline they created that emphasizes glass transitions and water plasticization in foods as two of its central themes. Drs. Slade and Levine were honored at a 2018 Division of Agricultural and Food Chemistry, 3-day-long "Water in Foods Symposium in honor of Louise Slade & Harry Levine", held at the 255th American Chemical Society Spring National Meeting in New Orleans, for their contributions to understanding water relationships in foods, based on the Food Polymer Science approach they created. In 1999, Drs. Levine and Slade received the IFT Industrial Scientist Award for their major technical contributions to the advancement of the food industry. In 2004, Drs. Levine and Slade were honored with the prestigious 42<sup>nd</sup> Fred W. Tanner Lecture Award from IFT's Chicago Section. And in 2018, Dr. Levine was elected an IFT Fellow. In 2007, Drs. Levine and Slade received the John C. Halverson Memorial Lectureship Award from the Milling and Baking Division of AACCI International. In 2008, Drs. Levine and Slade were honored with AACCI's prestigious Phil Williams Applied Research Award, which brought along with it AACCI Fellow status. And in 2019, Drs. Levine and Slade were once again honored as a unique cereal science partnership, this time with AACCI's prestigious Alsberg-French-Schoch Memorial Lectureship Award for having made distinguished contributions to fundamental starch science. Dr. Levine has 42 granted U.S. and two European patents (33 of which have been industrially commercialized) for novel food ingredients, products and processes, including two, from his research on moisture management in frozen foods (cryostabilization technology), for soft-from-the-freezer ice creams. For his contribution to that development effort, Dr. Levine was awarded GF's coveted Chairman's Award in 1986. And in 2004, Dr. Levine received Kraft's Global Technology Leadership Award. Since 1982, he and Dr. Slade have jointly published and/or presented internationally 250 papers in the areas of food polymer science, moisture management, water-polymer interactions, cryostabilization technology, and baking science. These papers have been cited over 8000 times in publications by other workers. Drs. Levine and Slade developed a short course on Food Polymer Science, which they have presented 28 times since 1987, to nearly 800 attendees in the US, Europe, Australia and Asia, under the sponsorship of six different professional organizations; their short course manual is available at [www.foodpolymerscience.com](http://www.foodpolymerscience.com). This partnership has also edited a book on Water Relationships in Foods (Plenum, 1991), developed from an international symposium they organized for the American Chemical Society, and has guest-edited a special issue of the Journal of Thermal Analysis on the Thermal Analysis of Foods (1996). Dr. Levine has also edited a book on Amorphous Food and Pharmaceutical Systems (Royal Society Chem., 2002), developed from an international conference he co-organized for the BioUpdate Foundation. Dr. Levine is a Fellow of AACCI, IFT, and the American Institute of Chemists, a member of American Chemical Society, Society for Cryobiology, American Biophysical Society, NY Academy of Sciences, Phi Tau Sigma, and Sigma Xi, and has served on the Editorial Boards of the journals Cryo-Letters, Comments on Agricultural & Food Chemistry, and Food Hydrocolloids. He received his PhD in Polymer Chemistry (1975), under Prof. Fred Billmeyer, and his BS in Chemistry (1968) from Rensselaer Polytechnic Institute in Troy, NY. [Harry's ORCID 0000-0003-1013-6481]