## People

#### Wiley award to Shotwell



AOCS member Odette L. Shotwell, research leader at the USDA's Northern Regional Research Center, was named to receive the 1982 Harvey W. Wiley Award from the Association of Official Analytical Chemists during the AOAC's annual meeting in late October.

Dr. Shotwell has led research on mycotoxin and aflatoxin since 1965 at the NRRC. The \$2,500 Wiley award is given annually for outstanding contributions to the development and validation of methods of analysis relating to food, drugs and cosmetics. It is named for Harvey W. Wiley, considered the father of the 1906 food and drug act.

Her research group has conducted international collaborative studies on analysis for aflatoxin in corn and soybeans, providing more than 1,000 reference standards for international use, according to Clifford Hesseltine, chief of the NRRC's fermentation laboratory.

Dr. Shotwell is a fellow of the AOAC as well as a member of the American Association of Cereal Chemists. She serves on numerous AOCS committees. A Peoria, Illinois, resident, she is a past president of the local League of Women Voters, active in the NAACP, and a commissioner of the Mayor's Advisory Board for the Handicapped.

#### Alfred N. Crane

AOCS has been informed of the Dec. 14, 1981, death of Alfred Nichols Crane, a member of the society since 1952. Mr. Crane had retired in 1980 as manager of capital budget and control for Armour Dial Inc. in Phoenix, Arizona. He had worked for Colgate-Palmolive and Theobald Industries before joining Armour and Company. He was a 1936 graduate of Virginia Polytechnic Institute.

#### Albert L. Schulerud

AOCS has been informed of the death of Albert A. Schu-

lerud, a retired research associate of Colgate-Palmolive. Mr. Schulerud received his bachelor's degree in 1930 from Washington State and his M.S. in 1934 from M.I.T. He was a group leader with Colgate-Palmolive in 1952 when he became a member of AOCS.

#### John C. Kohler

John C. Kohler has been promoted to vice president of operations for the Industrial Foods Group of Kraft Inc. in Memphis, Tennessee. In other promotions in Kraft's Industrial Foods Group, G.C. "Buddy" Hanson III has been named production manager at Memphis while Jack V. Thompson is the new plant manager at the edible oil refinery in Champaign, Illinois . . . ARCO Chemical Company has named Larry Lem as sales manager of light olefins and Wayne LeSage as sales manager of heavy olefins . . . Harry J. Stesco has been promoted to president and general manager of Fritzsche Dodge & Olcott Canada Ltd.... Fletcher E. Allen has been appointed director of business development for Velsicol Chemical Corporation's Specialty Chemicals Business . . . R. Kent Slaby has rejoined The French Oil Mill Machinery Company in Piqua, Ohio, as director of international marketing and manager of customer service . . . Julio Martinez Lopez has been named general manager of C.A. Grasas de Valencia, PO Box 349, Valencia, Venezuela ... The Arizona Chemical Company has apointed Joseph A. Schmidlein to be vice chairman and Donald E. Stiling as its president and chief executive officer . . . Richard Kulper has been promoted to general manager of Emery Industries' new Personal Care and Specialties Group, headquartered in Mauldin, South Carolina . . . Edward B. Bagley has been named chief of the Horticultural and Special Crops Laboratory at USDA's Northern Regional Research Center in Peoria, Illinois. He succeeds L.H. Princen, who earlier this year was named associate director at the center . . . David R. Lineback and Richard R. Hahn have been elected president and director, respectively, of the American Association of Cereal Chemists for the 1982-83 term. Dr. Lineback is professor and head of the Department of Food Science, North Carolina State University, Raleigh, North Carolina; Dr. Hahn is vice president of research, development and quality assurance for A.E. Staley Manufacturing Co., Decatur, Illinois. Meanwhile, Deborah Worcester has been promoted to advertising sales manager for the American Association of Cereal Chemists and the American Phytopathological Society ... AOCS member Steve Chen, Taiwan, country director for the American Soybean Association, has been named president of the Rotary Club of Taipei West for a one-year term. Dr. Chen is past president of the Chinese Institute of Food Science and Technology and the Chinese Agricultural Chemists Society . . . Donald T. Wetzel has been appointed vice president and general manager of Davy McKee Corporation's Chicago Food and Pharmaceutical Technical Center... James R. Fisher has been named to the new position of vice president, planning and technology for NL Chemicals in Hightstown, New Jersey.

### Rex Dawson is a Puzzie Solver



he puzzle he is trying to solve is why cell membranes function as they do. The membranes, consisting largely of phospholipid bilayers, act as gatekeepers-distinguishing between various substances within and without the cell wall, permitting some to pass, but restricting others. Why is it that such membranes are not completely destroyed by the powerful hydrolytic enzymes present in the cell? These phospholipases appear to be components of the phospholipid turnover system which is so essential for maintaining the viability of the cell as well as being involved in the response of the cell's membranes to physiological stimulation.

In his acceptance address upon receiving the 1982 Supelco AOCS Research Award in Toronto this past May, Dawson discussed a theory that the state and environment of membrane lipids somehow control and regulate phospholipid turnover. That address, "Phospholipid Structure as a Modulator of Intracellular Turnover," is published in this issue of JAOCS beginning on Page 401.

Dawson was first attracted to chemistry when he was a 15-year-old high school student in England's midlands, where his father was a newspaper editor. His father has been steering him

toward a career in advertising, Dawson says, but that all changed when Dawson read a book from a local library on the impact of chemistry upon everyday life. "It was quite catalytic," Dawson says. "I was so intrigued. I became fascinated and for a time totally obsessed with chemistry."

Since the English high school curriculum was quite structured, it meant Dawson had to reorient his courses from those aimed at a commercial career to one in science. Although he started later than other students in the science track, he caught up within six months and went on to receive his bachelor's degree in chemistry with 1st class honors from the University of London in 1948.

It was about this time researcher were publishing reports that phospholipids in cell membranes were in a constant state of turnover, rather than being rather static, dull constituents as previously had been believed. Dawson was further intrigued. After having had access to biochemistry as an undergraduate only through research journals, he decided to pursue his doctorate in biochemistry. He became a research biochemist at the Neuropsychiatric Research Centre in Cardiff and worked towards his Ph.D. degree which he received in 1952 from the University

of Wales. He then became a research fellow in Biochemistry at the University of Oxford working for four years under Sir Rudolph Peters and later Sir Hans Krebs. In 1956, Dawson joined the staff of the Agricultural Research Council in Babraham, where he is now head of the department of biochemistry and deputy director of the institute. Dawson received a doctor of science degree in biochemistry from the University of London in 1960 and was elected a Fellow of the Royal Society of London in 1981.

Dawson's primary task at the institute is research, with a limited amount of lecturing. He directs nine research groups, each composed of a senior scientist with two or three other investigators. His two main assistants have been at the institute 27 and 22 years, respectively, and Dawson quickly acknowledges their unique importance to the group's research accomplishments. Research projects are varied. One current effort, for example, seeks to determine why ruminant animals don't suffer from choline deficiency. Dietary choline, usually so necessary for the metabolism of fat, is destroyed by microbial action in the rumen vet the ruminants show no signs of choline deficiency. A large number of visiting research workers have collaborated in many of these projects. The mix of permanent staff, doctoral students and visiting researchers helps "to keep you on your toes," Dawson says.

If that were not a full enough work-load, Dawson has been active in numerous societies in England, acting as chairman of the Biochemical Society's Committee on Publications for nine years as well as serving on its finance and main committee. In addition, during the past three decades he has authored or co-authored more than 250 technical publications as well as three books.

A former postdoctoral fellow at the institute, however, said much research is accomplished "despite the seemingly unhurried pace of work. Under his (Dawson's) tutelage, a wasted experiment or an uninterpretable result was rare. I believe that this remarkable ability to convey by example how research should be conducted was highly beneficial to the professional development of those who trained in his laboratory." Dawson believes that this abil-

ity is derived by very adequate planning together with a certain instinct probably based on experience and common sense as to whether a given experiment is going to work and yield worthwhile results.

Dawson and his wife, Elizabeth, whom he met in Scotland "and is a source of constant counsel and help,' have two children and three grandchildren. Their daughter, Ann, has a doctorate in biology and has carried out medical research on diabetes and is the mother of a 4-year-old. Their son, John, is a cardiologist at St. Thomas' Hospital in London and father of two children, ages 1 and 3.

Dawson's active and passive avocation is the sea. He sails a ketch (with an auxiliary motor) in the North Sea, a pastime in which his son also participates when time permits. His passive interest is in mercantile marine history and especially maritime paintings of the 19th century when sailing ships were in their heyday as commercial vessels. Ships' officers would commission oil paintings of their craft and artists of varying ability were found in every major port to serve this need. Dawson enjoys visiting exhibitions of such works and tracing the history of vessels. He has a complete catalogue of the world famous collection in the Peabody Museum in Salem, Massachusetts.

The puzzle of how a cell membrane functions, however, remains. "The continual turnover of the phospholipids in mammalian tissue membrane fascinated me as a young biochemist and has done so ever since." Dawson told his audience in Toronto.

The results of that fascination were described by a Dawson admirer as follows:

When Dawson went to the Agricultural Research Institute, "the Institute was small, and relatively unknown. Dawson began working in this new environment, removed from the mainstream of academic life, without any intramural colleagues to provide a critical intellectual mass in his chosen area of phospholipid chemistry.

"The past 25 years have been attended by truly extraordinary growth and achievement. Babraham has become an internationally famous center of research excellence and Dawson has been one of the major architects of this development.

"Dawson has made seminal contributions to every aspect of phospholipid chemistry . . . It is a record of extraordinary productivity and creativity and his influence has had major impact upon peers from multiple disciplines and upon the large number of young scientists who have been privileged to train under him.

"He is a warm, gracious and unfailingly considerate human being as well as a generous colleague who given unstintingly of physical effort, inspiration an shared credit."

It is quite a record of accomplishment, based on a research puzzle that Dawson decided to investigate many years ago. But, as with any research puzzle, it is doubtful it will ever be completely solved. Research, after all, usually produces more questions that need answering than definitive solutions. JAOCS

# Polyunsaturated Fatty Acids

A monograph edited by Wolf-H. Kunau and Ralph T. Holman, 258 p. Hardbound-\$15 for AOCS members and students, \$25 for nonmembers. This monograph records the contributions of twenty noted researchers who contributed to the 1975 AOCS symposium on unsaturated fatty acids. The symposium was premised on the increasing need to combine separate disciplines in lipid research. Speakers thus were invited who specialized in chemical, physical and biochemical properties of lipids. Topics included biosynthesis, oxidation and regulation of metabolism, analysis, chemistry/physicochemistry, and experimental and clinical data. Illustrations and references enhance this collection.

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