Professor Emeritus Status to G. Malcolm Trout

G. Malcolm Trout was born near Birmingham, Iowa in 1896. He graduated there from high school in 1916, and attended Iowa State Teachers College during 1916-17. After teaching several months he entered the U. S. Army, serving in Battery D, 339th Field Artillery and in the AEF in France, 1918-1919.

Malcolm, as he is affectionately known, earned the B.S. and M.S. degree at Iowa State University in 1923 and 1924, respectively. The Ph. D. degree was conferred by Cornell University in 1936.

Students and staffs G. M. Trout at West Virginia University from 1923 to 1928 and at Michigan State University from 1928 to July 1966, have been the beneficiaries of Malcolm's outstanding talents as teacher, researcher, and counsellor. For meritorious research, he received the Borden Award in Dairy Manufactures in 1945 and the Michigan State University Sigma Xi Senior Award in 1956. His teaching competence was recognized in 1952 and again in 1956 by Michigan State University where he received the Distinguished Teacher Award and in 1957 the Distinguished Faculty Award. In 1957 Malcolm received the American Dairy Science Association Teaching Award in Dairy Manufactures.

Early in his career, Malcolm became a member of the American Dairy Science Association. He has participated in many activities in the Association, including secretary of the manufacturing section, journal management, and dairy products judging committees, director, vice president, president during 1949-50, and historian since 1953. In recognition for his innumerable contributions, he received the Award of Honor in 1964, the highest recognition given by the American Dairy Science Association.

Malcolm is a member and has participated in the activities of other organizations such as the International Association of Food and Milk Sanitarians, Dairy Society International, Institute of Food Technologists, Dairy Shrine Club, State Historical Society, Alpha Gamma Rho, American Legion, Lodge of Perfection, and the Peoples Interdenominational Church. His scientific and scholastic memberships include Alpha Zeta, Phi Kappa Phi, and Sigma Xi.

Malcolm's capabilities and qualifications have been recognized internationally. He served as official U. S. delegate to the 12th, 13th, and 14th World Dairy Congresses in Stockholm (1949), The Hague (1953), and in Rome (1956), respectively. He also served as special advisor to the American delegation for the 15th Congress, and attended the 16th and 17th Congresses. In 1964 he was a member of the American delegation to the Food and Agriculture Meeting on Dairy Education in Paris. He received a Fulbright-Hays fellowship to lecture during the summer of 1965 at the University of Helsinki in Finland.

Malcolm is author or co-author of over 200 papers and bulletins in bacteriology, chemistry, and technology. He has published two books, one on judging dairy products, with J. A. Nelson, and the other on homogenized milk.

G. Malcolm Trout's contributions to dairy science, to industry, and to dairy education are indelibly recorded for eternity. For future generations the printed pages that reflect his personality and integrity will be an inspiration to young Americans, and other nationals as well, who may select Dairy Science teaching and research as a career to serve the dairy industry which is as permanent as the Rock of Gibraltar.

Malcolm and his wife, the former Agnes Crain, whom he married in 1927, have a son and daughter and six grandchildren. Their plans for the future are somewhat indefinite. However, a trip to Hawaii, generously provided by the Michigan Dairy Industry and by former students, is on the Trouts' travelling schedule. Visiting former students and friends throughout the world, and fishing and canoeing in Canada will have high priority on the Trout family's time table for many years.

Foremost Opens New Research Center

Foremost Dairies, Inc., of San Francisco has opened its new $2,000,000 Research and Development Center 40 miles east of San Francisco, near Dublin in Alameda County.

The new Center consolidates all food products research and development work for plants in 22 countries. It is headed by Dr. Jerry T. Hutton, Director of Research and Product Development.

In one laboratory an accelerated research program is active to find new uses for lactose. Another laboratory is exploring new methods of utilizing electrodialysis to adapt whey for processed food products. Foremost has expanded its research program in packaging by installing the latest packaging
engineering equipment. Another laboratory establishes quality control processing procedures for company facilities throughout the world to guarantee that all products meet rigid standards. A laboratory is included where scientists explore flavor and taste qualities of foods under development.

Salmonella strains and most of them produce gastro-nomical infections, some of which can be serious. Salmonellosis may affect two million persons annually. This high incidence is attributed to contaminated household pets, food processing operations and animals on farms. Salmonella can live in people and animals and have been found in a number of food products. The causative organisms are transmitted to dairy animals in contaminated foods, and to people through animal products. It is assuring to the consuming public to know that dairy companies recognize the seriousness of salmonellosis and are sparing no expense to find the sources of contamination and eliminate them.

Crucial Problems Face the Dairy and Food Industry

- The greatest problems affecting the health and well-being of our nation today are the ways we are poisoning the air we breathe and contaminating the water we drink and the soils on which we grow our crops. The smog in densely populated areas of our country and the death of wildlife along streams and lakes are evidence of how man and the industrial complex have made the environment more unhealthy with the passing of years. Nevertheless, late but in time to prevent a more catastrophic loss of biological life, the

Salmonella Problem Not Sensationalized

- It is very evident that news media reporting of salmonella bacteria in several brands of nonfat dry milk have been factual. Furthermore, there has been excellent cooperation between companies involved and the Food and Drug Administration. The Borden Company's rapid recall of dry milk powder, once the salmonella question arose, was commendable. The magnitude of the salmonella problem is tremendous. There are more than 1,200 salmon-
Federal Water Quality Act was passed in 1965. This law established standards of water quality and funds to correct or repair defective sewerage systems and to build adequate sewerage disposal systems. These standards will require an evaluation of methods of handling waste in dairy and food plants and in cities. If individual state standards are inadequate, the U. S. government has authority to establish standards.

Milk Fat Not Responsible for Heart Diseases

- A resolution was passed by the 17th International Dairy Congress at Munich, Germany concerning heart diseases and milk fat. It is quoted—,”Nutrition and dairy experiments from all over the world are satisfied that long term feeding experiments with both humans and animals have found that the consumption of high quantities of milk fat in a well balanced diet cannot be responsible for the development of atherosclerosis and heart disease.”

Objectives Shift for DSI

- Dairy Society International faces new circumstances at the beginning of its third decade. For 10 years DSI has cooperated with the Foreign Agricultural Service in promoting the objectives of Public Law 480 by disposing of surplus dairy products. The tasks of DSI have shifted from developing sales for surplus dairy products overseas to maintaining current markets with decreasing supplies.

DSI's long-range marketing plans are being studied. In Latin America, Chile continues to use more dairy products, most of which must be imported.

In the Middle East, breaking down prejudices against use of nonfat dry milk is being emphasized. Markets for good quality butter, cheese, and diet dairy foods are being developed.

California Dairy Council Reports on Imitation Milk

- Mr. W. B. Woodburn, manager of the Dairy Council of California, reported that imitation fluid milk consists of water, vegetable oil, non-fat dry milk, an emulsifying agent, and a stabilizer. Usually soy or cottonseed oil, or a blend of both, or cocoanut oil may be used. Some brands may be fortified with Vitamins A, D, B12, niacin, and with iodine and iron. Some brands have poor keeping qualities. The product separates after it has been on the shelf for several days.

Imitation milk usually is sold to the store at 29 cents and to the customer at 39 cents per half-gallon.

Blackleg Bacterin Test Discovered

- For the first time a guinea pig can be used to test the immunizing ability of blackleg bacterins. Dr. M. E. Macheak of the National Animal Disease Laboratory, USDA, Ames, Iowa, developed a method that produced blackleg in cattle and compared immunity tests with both guinea pigs and cattle. He proved that tests with guinea pigs are an accurate guide to immunity produced in cattle with bacterins. This technique will also be used to test other bacterins for certain animal diseases.

Cooperation Sought by FDA

- Dairy and food industry leaders met at the Food Law Institute in Washington on November 28. Discussions included the present salmonella problem, pesticides, and antibiotics. General agreement was expressed that close cooperation between industry and all public health officials was needed to solve the problem of salmonellosis.

More Training Needed for Executives

- Business leaders of the future will need much more scholastic training for business management than do present executives, states Lawrence A. Appley, president of the American Management Association. In 15 years, he believes, applicants for top positions will be required to have an MBA, Master of Business Administration, or Master in Leadership. Those with doctorates will have a distinct advantage.

Land-grant colleges of agriculture in the United States might give more serious consideration to developing curricula to train students for the increasing numbers of specialized agricultural industries.
H. C. Ingerson Joins DeLaval

• Harry C. Ingerson has joined the De Laval Separator Company as engineering manager for the milk plant and food equipment division. For the last five years he has operated an industry consulting business in New York City. Prior to that time he was chief engineer for the Borden Company for 15 years. He is a member of the American Society of Professional Engineers.

Mr. Ingerson received a B.S. degree in civil engineering from Syracuse University and the same degree in mechanical engineering from Cornell University.

Department of Biochemistry Moved at Minnesota

• The Department of Biochemistry, a department in the Institute of Agriculture, recently became affiliated with the new College of Biological Sciences at the University of Minnesota. Members of the resident department are Stanley

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Dairy Industry Conference at Ohio State

• The Ohio State University 34th Annual Dairy Industry Conference is scheduled for February 14-16 with the theme, Prospecting for Profits. The conference program will have seven sections: milk supplies, manufactured products, management and operations, engineering and processing, frozen dairy desserts, cultured dairy products, and laboratory control. Approximately 50 educators and industrialists will participate in the program, including the following: G. H. Watrous, Jr., R. T. Marshall, W. C. Winder, and H. V. Atherton.

One feature will be a session on Modified and Imitation Dairy Foods, with presentations by D. E. Miller, Andre Bolaffi, and J. E. Long.


The Engineering and Processing Section will include discussions on Keeping Automation in Perspective, Equipment Maintenance Programs for Automated and Mechanized Systems, Instrumentation Innovations, Waste Prevention and Control, and a panel discussion on Packages, Packaging and Aseptic Filling. Among the speakers will be W. S. Taylor, R. Kresge and R. A. Carlson.


A major session will deal with Fieldman's Responsibilities in Changing Times, by R. M. Cook and R. T. Rintelmann.

The Frozen Desserts Program will feature two major sessions: one on Selection and Uses of Ingredients and the second on Packaging Advances in Materials, Methods, and Equipment. Speakers will be A. J. Leo, who will discuss stabilizers; and W. C. Winder, who will deal with physical principles in ice cream manufacturing.

The Sections on Laboratory Control and Cultured Products will include discussions on ef-
fective quality control programs, the salmonella situation, instrumental methods of analyzing milk, stabilizers for cultured products, economic aspects of cultured and acidified cream production, and fortification of cultured products with solids-not-fat. Speakers will be P. Klokkorn, H. V. Atherton, R. T. Marshall, R. W. Mykleby, G. H. Watrous, Jr., and J. E. Long.

Artificial Insemination Course at Connecticut
- The University of Connecticut College of Agriculture will present the 16th annual Artificial Insemination Short Course March 20–24. The tuition-free course is open to anyone 18 years or older who is interested in learning more about reproduction of farm animals. Instructors will be university staff members in the Animal Industries Department and invited lecturers. Instruction will cover theory and practice in insemination techniques; the collection, preparation, and handling of frozen semen; reproductive physiology; disease control and sanitation; and ways of maintaining reproductive efficiency.

Persons interested in taking the short course may obtain course description and registration forms by writing to Professor W. S. Gaunya, University of Connecticut, Storrs, Conn. 06268.

Congress of Refrigeration in Madrid
- The 12th International Congress of Refrigeration will be held in Madrid, Spain, August 30 to September 6, 1967. Scientific and technical papers pertaining to cooling and storage refrigeration of milk and other food products are being solicited. Further information may be obtained from Manuel Estada Girauta, Carrera de San Jeronimo 36, Madrid, Spain 14.

Symposium on Mammalian Oviduct
- A symposium on the fundamental aspects of the oviduct in animals and man will be held July 31–August 4, 1967, at Washington State University in Pullman. Special housing for individuals and families will be available on the campus of the university. For information write to E. S. E. Hafez, Reproduction Laboratory, Washington State University, Pullman, Wash. 99163.

Today’s Achievements—Tomorrow’s Targets
- The 52nd annual meeting of the National Dairy Council will be held in the Ambassador Hotel in Los Angeles, California, January 30 to February 1, 1967. The theme for the 1967 meeting is, Today’s Achievements—Tomorrow’s Targets. W. D. Knox, well-known editor of Hoard’s Dairyman, will discuss the Changing Agricultural Picture. Nutritional Research Challenges will be presented by G. M. Briggs, University of California. W. R. Schmitt of the University of California, an authority on oceanography, has been assigned the topic, Exploiting the Treasures of the Sea.
The Eastern and Western Sections of the Virginia Dairy Technology Society met November 16–17 at Hampton and Natural Bridge, Virginia. Attendance at both meetings totaled 107. Featured speaker was Mr. Harry E. Daume, Jr., of Klenzade Products, Beloit, Wisconsin. In his discussion of psychrophilic bacteria, Mr. Daume stressed the need for strict sanitation to prevent post-pasteurization contamination of milk and other dairy products.

The Chicago Dairy Technology Society met on December 14th in the Florentine Room, Pick Congress Hotel in Chicago. Dr. E. O. Herreid, Professor of Dairy Technology, University of Illinois, spoke on the topic, Comparison of the Dairy Industry Here and Abroad.

The Oklahoma Dairy Technology Society held its December meeting in Oklahoma City on December 9. Music and dancing was featured as the evening’s entertainment.

**New Products**

- The patented Polytrip returnable milk bottle system, marketed by U. S. Industrial Chemicals Co., was in operation at the DFISA Show in Atlantic City. Polytrip's unique contaminant detection device operated over a filling line sampling atmosphere in the Polytrip bottles. The contaminant-detection system is already used in production by more than 30 dairies that have changed from glass bottles to high-density polyethylene for their multi-trip milk containers.

- Advanced Instruments, Inc., has developed a new automatic cryoscope which completely relieves the technician of routine duties previously required when running multiple samples. The new Advanced Multi-Sample Cryomatic Milk Cryoscope, designated the Model 30CM, measures up to 29 samples automatically following insertion of the sample tray and the push of a button. The Cryomatic Milk Cryoscope then takes the sample tray and into each successive test tube lowers the freezing head, cools the sample automatically, stirs it, freezes it, reads it, prints out the sample number and the results obtained, raises the head, and repeats the entire operation in the next test tube until all on the tray are run.

  The Advanced Cryomatic Milk Cryoscope, Model 30CM, comes complete with everything necessary to run determinations of freezing points on 2 cc milk samples. All sample results obtained are printed and indexed. Test time is approximately 3 minutes per determination. Repeatability is ±1° in the range of milk freezing points. The Cryomatic Cryoscope includes a vibrationless, high-speed, air-cooled, thermoelectric refrigerator. Also included is the new 2-point calibration system and built-in calibration aid. Purchase price also includes the Advanced Precision Thermometer; Spare Probe; Calibration Dials; Test Tubes, Standards; Bath Liquids; Sample Tray; Factory Calibration; and detachable User's Guide to Milk Cryoscopy. Training for one technician is also provided within the purchase price. Utilities: 115 v, 60 c.

  For further information, contact Mr. Robert J. Goldson, Jr., Sales Manager, Advanced Instruments, Inc., 45 Kenneth Street, Newton Highlands, Massachusetts.

**Literature**


**Meetings**

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