# Short Course on

# Behavior of Membrane Lipids at Surfaces

A three-day short course entitled "Behavior of Membrane Lipids at Surfaces" will be held at The Graduate Center of the State University of New York, October 5 to 7, 1970. The program will present recent progress in the application of mono- and bilayer techniques to biomembrane systems.

Giuseppe Colacicco, program chairman, has invited outstanding scientists to take part in this short course and bring valuable information on membrane techniques in lipid research. For the past seven years he has been associated with the Albert Einstein College of Medicine, where he has conducted extensive investigations on lipids and lipid-protein interactions in monolayers.

Other members of the staff include T. Haines, Co-chairman (City University of New York, N.Y.), I.T. Tien (Michigan State University, Lansing), R.M. Burton (Washington University, St. Louis), D.A. Cadenhead and D. Papahadjopoulos (State University of New York, Buffalo), G. Rouser (City of Hope Medical Center, Duarte, Cal.), N. Pelick (Supelco, Inc., Bellefonte, Pa.) and H.L. Rosano (City University of New York, N.Y.).

This is the first course of its kind. It is meant to establish some standards in the application of surface science to biochemical and biophysical problems of lipids in membrane arrangements. The emphasis will be on fundamentals of colloid and surface chemistry that must be brought to bear on the discussion of purity of lipids, structure and function of lipid-water interfaces. The course is addressed to investigators, students and technicians who like to learn the techniques, become conversant in and critical of the growing literature of surface science of biological systems. The interest extends to academic, medical and industrial laboratories of lipid and membrane biochemistry

The course will provide valuable information on monolayer techniques, such as:

(1) Ionic impurities in lipid preparations,
(2) Charge on a lipid or lipid-protein surface,
(3) Revealing and measuring some specific lipid-ion and lipid-protein interactions, and
(4) Studying and testing systematically the interactions of antibodies, vaccines, viruses, hormones with lipid-protein model systems.

Methods of formation and characteristics of bimolecular layers (single lamellae at water-oil-water bifaces) will be demonstrated, along with:

(1) Determination of film thickness,
(2) Bifacial tension,
(3) Electrical properties, photoelectric effects, and
(4) Experimental techniques.

It is recommended that students with little training in bilayers read Chapter 11, a review article on Black Lipid Membranes, "Biological Interfaces: Flows and Exchanges," in *Recent Progress in Surface Science*, Academic Press, 1964.

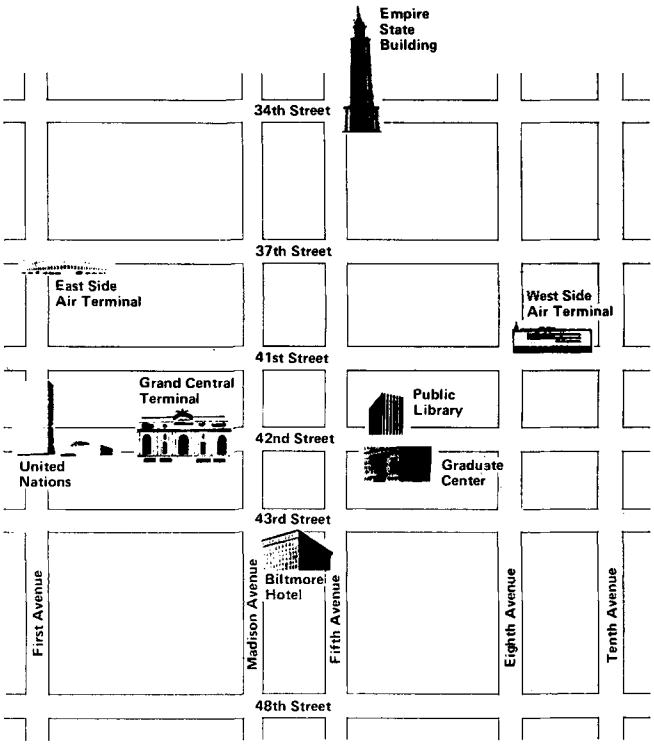
The purification of lipids and their chromatographic analysis will be discussed in detail. Good membranes require good lipids.

The course registration will be at the Graduate Center on Monday at 8:00 to 9:00 AM. Registration fee will be $100.00 for the three-day course. Preregistration may be directed to Carl H. Hauber, The American Oil Chemists' Society, 35 E. Wacker Drive, Chicago, Illinois 60601.

Hotel reservations should be made at the Biltmore Hotel. The rates are $26 to $39 for singles and $28 to $48 for doubles. Doubling up would run $32 and $38, respectively. The hotel management has set aside a block of rooms for the Course. October is convention time in New York City and we urge that reservations be made as early as possible. The address for the hotel is Madison Avenue and East 43rd Street.

The Graduate Center is west off 5th Avenue on 42nd Street, in front of the Public Library. The Biltmore Hotel is east off 5th Avenue on 43rd Street.

Air Terminals: (a) For people arriving at Kennedy or La Guardia take bus to East Side Air Terminal on 37th Street and 1st Avenue, then take taxi to the Biltmore Hotel. (b) For people arriving at Newark Airport take bus to West Side Air Terminal on 41st Street and 8th Avenue, then take taxi to the Biltmore Hotel.




## • *Referee Applications*

### Second Notice

Diane J. Fomby, Southern Testing Laboratories, Inc., P.O. Box 15209, 824 Marengo St., New Orleans, La. 70115 has applied for a Referee Certificate on Oil Cake and Meal, Protein Concentrates, Cottonseed Oil Soybean Oil & Other Fatty Oils and Tallow and Grease. The Chairman of the Examination Board should be contacted by interested parties wishing to comment on this certification. Please write to Edward R. Hahn, Chairman of the Examination Board, HAHN LABORATORIES, P.O. Box 1177, Columbia, S.C. 29202.

William H. Jennings, Jennings Laboratories, P.O. Box 851, 118 Cypress Ave., Virginia Beach, Va. 23451 has applied for a Referee Certificate on Oil Cake and Meal and Protein Concentrates. The Chairman of the Examination Board should be contacted by interested parties wishing to comment on this certification. Please write to Edward R. Hahn, Chairman of the Examination Board, HAHN LABORATORIES, P.O. Box 1177, Columbia, S.C. 29202.

Michael L. Valletta, Bureau of Chemistry, A Division of Superintendence Co., Inc., 42 Stone Street, New York, N.Y. 10004 has applied for a Referee Certificate on Oil Cake and Meal, Protein Concentrates, Tallow and Grease, Cottonseed Oil and Soybean Oil. The Chairman of the Examination Board should be contacted by interested parties wishing to comment on this certification. Please write to Edward R. Hahn, Chairman of the Examination Board, HAHN LABORATORIES, P.O. Box 1177, Columbia, S.C. 29202.