

# The American Physical Society

## Division of Electron and Atomic Physics

NEAL F. LANE, *Chairman*  
Department of Physics  
Rice University  
Houston, Texas 77001

HERBERT P. BROIDA, *Vice-Chairman*  
Department of Physics  
University of California, Santa Barbara  
Santa Barbara, California 93106

THOMAS M. MILLER, *Secy.-Treas.*  
Molecular Physics Center 106B  
SRI International  
Menlo Park, California 94025

May 1978

### To MEMBERS OF THE DEAP from Tom Miller

The DEAP committee meetings in April were held in an atmosphere of great sadness over the death of our vice chairman and friend, Herb Broida. Most of us were expecting an interesting year in 1979 when Herb would have been chairman of the DEAP, and we will miss him.

Neal Lane asked Bob Hill to help the DEAP by taking over Herb's duties as vice chairman. Herb and Bob had worked closely together in planning DEAP symposia for the coming year.

### REPORTS OF THE NOMINATING COMMITTEE

The nominating committee, appointed by Neal Lane earlier this year, consists of F. Pipkin (chairman), M. Mittleman, J. Park, and A. Russek. The slate of candidates which they submitted is as follows:

<u>Chairman</u>	Eugen Merzbacher	(1 year)
<u>Vice-Chairman</u>	Eugene M. Rudd	(1 year)
<u>Secretary-Treasurer</u>	Thomas M. Miller	(1 year)
<u>Executive Committeeman</u>	Ronald J. W. Henry	(one to be elected for a three-year term)
	Mitio Inokuti	
	Hugh P. Kelly ← <i>won</i>	
	Daniel J. Larson	

Under the Bylaws additional nominations for any of the above offices, by members of the DEAP, will be recognized and included on the ballot if the nomination is supported in writing by five percent (83) of the members. Such nominations duly signed must reach me no later than September 10, 1978. In the absence of a contest for any given office, the relevant nominee will be declared elected. Ballots for contested offices will be mailed in September.

The remainder of the executive committee is as follows: Neal Lane is currently Chairman and will remain on the committee for one more year as Most Recent Past Chairman, replacing Stephen Smith. King Walters will serve on the committee as Divisional Councilor until 4/79. The elected committeemen are Jose Garcia (until 12/78), Richard Deslattes (until 12/79), and Daniel Kleppner (until 12/80). Serving one-year terms appointed by the Chairman are Norman Bardsley and Bailey Donnally.

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## REPORTS OF THE EXECUTIVE COMMITTEE

The Executive Committee accepted an offer from the University of Southern California to host the DEAP annual meeting, December 1-3, 1980, at the University's Davidson Conference Center. G. L. Weissler will head the local committee. USC will be celebrating its 100th year in 1980.

The Executive Committee also accepted New York University's offer to host the 1981 annual meeting. Henry Stroke will head the local committee.

The possibility of changing the time of year of the annual DEAP meeting was discussed. It was decided that the question needs more input from the DEAP members, and will be put on the agenda for the November 1978 business meeting.

The following motion was passed unanimously: It is the policy of the DEAP that people be requested not to smoke in the meeting rooms during convened sessions at the annual DEAP meeting.

The duties of the Divisional Councilor were described by King Walters. Nominations for the next term (4/79-4/83) were made: Bailey Donnally and Ivan Sellin. Additional nominations may be made by DEAP members as specified above. The autumn ballot will include the contest for the Divisional Councilor's post.

### Vitae of the Nominees

MERZBACHER, EUGEN, 57, Licentiate 1943, University of Istanbul, Ph.D. 1950, Harvard University. High school teacher, Ankara, Turkey, 1943-47. Postdoctoral Fellow, Institute for Advanced Study, Princeton 1950-51. Visiting faculty member: Niels Bohr Institute, Copenhagen, 1959-60; University of Washington, 1967-68; University of Frankfurt, 1977. Faculty member, University of North Carolina at Chapel Hill since 1952. Kenan Professor 1969-. Chairman of Department of Physics and Astronomy 1977-. NSF Science Faculty Fellow 1959-60. U.S. Senior Scientist Humboldt Award 1977. Thomas Jefferson Award 1972. APS Councillor-at-large 1972-76. Member, Executive Committee of DEAP 1973-76. Member, Advisory Board, International Conference on Inner Shell Ionization Phenomena 1972 and 1976. Associate editor ATOMIC DATA AND NUCLEAR DATA TABLES. Coauthor of NRC report on Accelerator-related Atomic Physics Research 1976. Member, NRC Committee on Atomic and Molecular Science 1977-80. Quantum mechanics and its foundations, atomic collision theory, inner-shell ionization phenomena, atomic effects in nuclear processes, beta decay, nuclear level densities.

RUDD, M. EUGENE, 50, B.A. 1950, Concordia College, M.A. 1955 University of Buffalo, Ph.D. 1962 University of Nebraska. Asst. Prof. 1954-56, Assoc. Prof. 1956-64, Prof. 1964-65, Concordia College. Assoc. Prof. 1965-68, Prof. 1968-, Acting Chairman, Dept. of Physics and Astronomy, University of Nebraska-Lincoln. NSF Science Faculty Fellow 1960-61, Visiting Physicist, University of Aarhus, Denmark, summer 1972. Member, General Committee 1971-75, Executive Committee 1973-75, Nominating Committee 1975, Coordinator of Student Travel Grants 1973-75, ICPEAC. Member, Program Committee 1973-74, Nominating Committee 1973, Chairman, Local Committee 1976, DEAP. Electron ejection cross sections in ion-, electron-, and atom-atom collisions, autoionization, Auger effect.

MILLER, THOMAS M., 37, B.S. 1962, M.S. 1964, Ph.D. 1968, Georgia Institute of Technology. Asst. Prof. 1969-74, New York University. Physicist, 1974- , Stanford Research Institute. Visiting Fellow, summer 1977, University of Birmingham. Program committee, IXth ICPEAC. Electron-atom/molecule scattering, electric dipole polarizabilities, ionic photodetachment and dissociation, ion-ion neutralization, excited atom-atom collisions.

HENRY, RONALD J.W., 38, B.Sc. 1961, Ph.D. 1964, Queens University Belfast. Assistant Lecturer QUB 1964-65, NAS-NRC Resident Postdoctoral Fellow, Goddard Space Flight Center, 1965-66. Assistant Physicist, Kitt Peak National Observatory, 1966-69. Associate Professor 1969-73, Professor 1973- , Chairman 1976- , Louisiana State University. Member of CCP International Advisory Panel, University of Western Ontario. Electron-ion/atom scattering, rovibrational excitation of molecules, photoionization, atoms in strong magnetic fields.

INOKUTI, MITIO, 45, B.S. 1956, M.S. 1958, Ph.D. 1962, University of Tokyo. Instructor, 1960-65, University of Tokyo, Research Associate, 1962-63, Northwestern University. Research Associate, 1963-65; Associate Physicist, 1965-73; Senior Physicist, 1973- , Argonne National Laboratory. Head, 1970- , Fundamental Molecular Physics and Chemistry Section (formerly Radiation Physics Section), Radiological and Environmental Research Division, Argonne National Laboratory. Visiting Fellow, 1969-70, Joint Institute for Laboratory Astrophysics. Member, General Committee, 1973-77; Adjunct Officer, Executive Committee, 1977- , International Conference on the Physics of Electronic and Atomic Collisions. Member, Committee on the Average Energy Required to Produce an Ion Pair, 1973- ; Vice-Chairman, Committee on Stopping Power, 1976- , International Commission on Radiation Units and Measurements. Associate Editor, Radiation Research, 1976- . Theoretical Molecular Physics. Collisions of charged particles with atoms and molecules. Spectral distribution of the dipole oscillator strength. Elementary processes in the action of ionizing radiations on matter. Transfer of electronic excitation energy between molecules. Kinetics of radiation chemistry of high polymers.

KELLY, HUGH P., 46, A.B. 1953, Harvard College; M.S. 1954, UCLA; Ph.D. 1963, University of California, Berkeley. Electronic engineer, Hughes Aircraft Co., 1952-54. Lt., USMC, 1954-57. Post-doctoral fellow Univ. of California, San Diego, 1963-65. Assistant Professor 1965-67, Associate Professor 1967-70, Professor 1970-77, Commonwealth Professor of Physics 1977- , University of Virginia. Chairman, Department of Physics, University of Virginia, 1974-78. Member of NSF Committee for Review of Theoretical Physics Program, 1977. Advisory board of International Conference on Inner Shell Ionization Phenomena 1976-. Theoretical atomic physics, many-body methods applied to atoms and molecules, photoionization cross sections and Auger rates.

LARSON, DANIEL J., 33, B.A., 1966. St. Olaf College, M.A., 1967, Ph.D., 1971, Harvard University. Assistant Professor, 1970-75, Associate Professor, 1975- , Harvard University. Experimental atomic, molecular and nuclear physics. Atomic resonance physics, g-factors and hyperfine structure, precision laser spectroscopy, trapped ions, photodetachment.

4  
1978 ANNUAL MEETING  
APS DIVISION OF ELECTRON AND ATOMIC PHYSICS

MADISON, WISCONSIN  
NOVEMBER 29 - DECEMBER 1, 1978

REGISTRATION FORM

NAME \_\_\_\_\_

AFFILIATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_  
(Area Code)

_____	Registration Fee, November 6 or before @ \$18.00	_____
_____	Registration Fee after November 6 @ \$25.00	_____
_____	Registration Fee - Student @ \$ 3.00	_____
_____	Banquet Tickets @ \$10.00	_____
<b>TOTAL</b>		=====

MAKE CHECK PAYABLE TO DEAP-MADISON

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HOTEL RESERVATION FORM

1978 Meeting of DEAP-Madison, Wisconsin, November 29-December 1, 1978

Please reserve a room for me in the hotel indicated below. I have indicated my preferences and type of room. (State preference 1 to 4.)

_____	WISCONSIN CENTER GUEST HOUSE	_____	Single \$16.00	
	610 Langdon Street	_____	Double \$10.00/person	
_____	TOWN/CAMPUS MOTOR INN*	_____	Single \$20.00	*Add 4% State
	441 North Frances Street	_____	Double \$12.00/person	and
_____	MADISON INN*	_____	Single \$22.00	6% City
	601 Langdon Street	_____	Double \$13.00/person	Sales Tax.
_____	HOWARD JOHNSON'S*	_____	Single \$22.50	
	525 West Johnson Street	_____	Double \$15.25/person	

\_\_\_\_\_ I wish to share a room with \_\_\_\_\_

\_\_\_\_\_ I will share a room with another member of this group selected by you.

Arrival Date \_\_\_\_\_ Time \_\_\_\_\_

Departure Date \_\_\_\_\_ Time \_\_\_\_\_

\*\*\*\* SEND NO MONEY FOR HOTEL ACCOMMODATIONS \*\*\*\*

Mail completed form to: DEAP-MADISON  
The Wisconsin Center  
702 Langdon Street  
Madison, WI 53706

For registration/housing information contact: Ms. Patricia Gaitan, The Wisconsin Center, 702 Langdon Street, Madison, WI  
Phone: (608) 262-1122

DONNALLY, BAILEY, 47; B.S., 1950, M.S., 1951, Auburn University; Ph.D., 1961, University of Minnesota. Asst. Professor 1955-61, College of St. Thomas; Chairman of Physics Department, 1959-61. Asst. Professor-Professor 1961- , Lake Forest College; Dean of Faculty, 1977- . Visiting Fellow, Yale University 1966-67. Member, AIP Governing Board 1970-73. Member, Commission on College Physics 1969-71. Distinguished Service Citation, AAPT, 1970. President, AAPT 1971. Member, Council of the AAAS 1972-76. Research Corporation Advisory Committee 1972-78. Davisson-Germer Award Committee 1973, Chairman 1975. Advisory Committee for 4th Conference on the Use of Small Accelerators, 1976. Chairman of subcommittee to review the Atomic and Molecular Physics Program for the NSF Advisory Committee, present. Member of DEAP Executive Committee, present. Atomic collisions, atomic structure, polarization phenomena.

SELLIN, IVAN A., 39; B.S., 1959, Harvard University; M.S., 1960, Ph.D., 1964, University of Chicago. Postdoc, Enrico Fermi Institute, Chicago. Instructor, 1964-65, University of Chicago. Asst. Professor 1965-67, New York University. Research Physicist 1967-70, Oak Ridge National Laboratory. Assoc. Prof.-Prof., 1970- , University of Tennessee. Organization of American States Guest Prof., Centro Atomico Bariloche, Argentina, 1972. Alexander von Humboldt Foundation Senior US Scientist Award, 1977. Senior Fulbright-Hays Grant, 1977-78. Swedish National Science Research Council and Nobel Institute Guest Prof., 1977-78, Forskinings Institutet für Atomfysik. Organization and advisory committees, 3rd, 4th, and 5th Conference on the Use of Small Accelerators, 1974-79. Charter Committee, Holifield Heavy Ion Lab Users Group, 1975. Chairman, 4th International Conference on Beam-Foil Spectroscopy and Heavy Ion Atomic Physics Symposium, 1975. NAS-NRC Advisory Committee on Atomic and Molecular Science, 1973-76. Chairman, DEAP Publications Committee, 1974-76. Member, DEAP Program Committee, 1976-78. Current research interests involving the atomic structure of highly ionized heavy ions and their modes of formation and destruction in collisions with atoms and molecules.

#### XIth ICPEAC

The XIth International Conference on the Physics of Electronic and Atomic Collisions will be held in Kyoto, Japan, 29 August-4 September 1979. Mitio Inokuti of Argonne National Laboratory is working to arrange group air flights from the USA to Japan and will notify DEAP members later of the choices available.

## TENTH ANNUAL MEETING OF THE DEAP

The Tenth Annual Meeting of the Division of Electron and Atomic Physics will take place at the Wisconsin Center in Madison, Wisconsin on 29 November-1 December 1978. The scientific program will consist of contributed papers, invited papers, and symposia. The Department of Physics of the University of Wisconsin at Madison will act as hosts. We wish to acknowledge the efforts of L. W. Anderson and C. C. Lin for making the local arrangements.

The scientific sessions will be held at The Wisconsin Center at 702 Langdon St., Madison, Wisconsin. The participants will be housed at the Wisconsin Center Guest House (\$16.00 single - \$20.00 double), the Madison Inn (\$22.00 single - \$26.00 double), the Town and Campus Motel (\$20.00 single - \$24.00 double), and the Howard Johnson's Motel (\$22.50 single - \$30.50 double). All the above hotels are within easy walking distance of the Wisconsin Center. Participants are urged to make their reservations early. A block of rooms has been reserved for the conference for which requests must be received by 6 November 1978. Taxi and limousine service is available at the Madison Airport. Registration will take place in the lobby of the Wisconsin Center from 6 PM to 8 PM on Tuesday 28 November and throughout the conference.

On Tuesday evening from 7 PM to 9 PM there will be an informal reception with beer and snacks. The traditional banquet will be held on Thursday 30 November 1978 at 7 PM at the Wisconsin Center Guest House. The banquet will be preceded by a cash bar. The cost of the banquet is \$10.00.

Preregistration will greatly facilitate the planning and functioning of the meeting. The registration fee will be \$18.00 up to 6 November and \$25.00 thereafter. The fee for unsupported students and unemployed is \$3.00. Please use the enclosed preregistration form, indicate whether you plan to attend the banquet and fill in the questions concerning room reservations.

Abstracts for contributed papers (one original and two duplicates for each paper), in Bulletin format, should be sent to Dr. R. M. Hill, SRI International-106B, Menlo Park, California 94025, and must be received by September 6, 1978. The program committee requests that you indicate whether or not you would like to have your contributed paper considered for a poster session. Although it probably won't be possible to accommodate everyone, the information will be useful to the committee.