

SAN FRANCISCO SECTION THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

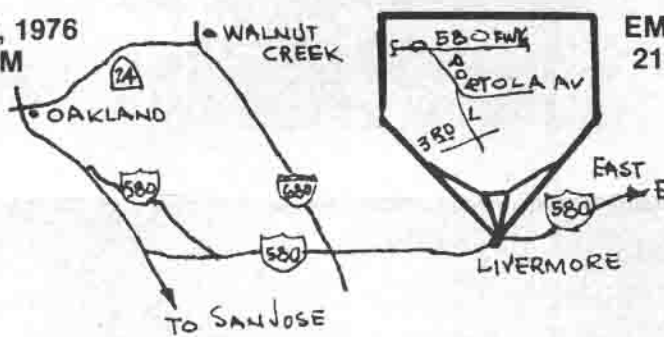


MAY—JUNE 1976

NEWSLETTER

PAUL H. GARBARINI 415-764-3310 Editor

THURSDAY, MAY 20, 1976
HAPPY HOUR 5:30 PM
DINNER (6:00 PM)
TOUR 7:30 PM



EMPEROR'S GARDEN RESTAURANT
2180 - 3rd STREET (NEAR L STREET)
LIVERMORE, CALIFORNIA
(US 580 WHICH INTERSECTS
L STREET)

FUSION REACTOR RESEARCH

DR. G.A. CARLSON

The goal of fusion reactor research is to generate electrical power through the exothermic fusing together of light atoms such as deuterium and tritium. The fusion reaction must be carried out at an extremely high temperature - hundreds of millions of degrees. In order to produce more power than is used to heat the fuel, an adequate density of fuel must be held together for an adequate length of time. This density-time requirement is the "confinement" problem of fusion research. There are, at present, two major approaches to fusion power: magnet confinement and initial confinement (laster fusion). The Lawrence Livermore Laboratory has major programs in both of these areas; and LLL study groups are developing conceptual reactor designs based on the experimental and theoretical results of these programs. Dr. Carlson will describe Livermore's program, emphasizing the overall design features of present and future fusion machines. This is a joint meeting with the mount Diablo Section.

Dr. Gustav A. Carlson is a staff member of the Fusion Reactor Studies Group at the Lawrence Livermore Laboratory. He holds BS in ME, MS in Nuclear Engineering and PhD in Mechanical Engineering from Carnegie Institute of Technology, Pittsburgh, Pennsylvania. He spent 1967-69 at NASA Ames Laboratory and has been at Livermore since 1969. He is presently the Secretary/Treasurer of the Controlled Nuclear Fusion Division of the American Nuclear Society.

**RESERVATIONS REQUIRED BY MAY 12 (MAY 5 NON-CITIZENS)
CALL DON CARTER 415-447-1100, EXT. 8156.**

Reservations are required early for clearance into Lawrence Livermore Laboratory.

SATURDAY, JUNE 19, 1976
TOUR 3:00 PM
TASTING 3:45 PM
DINNER 5:00 PM

WINE MASTERS GUILD WINERY
LODI, CALIFORNIA
(1/2 MILE EAST OF Lodi
ON HIGHWAY 12 AND THEN
TAKE MYRTLE AVENUE
NORTH TO WINERY)

ENERGY REQUIREMENTS FOR AGRICULTURE

DR. D.W. RAINS

This should be a very good joint meeting with the Sacramento Section. We understand the food is outstanding with the Sacramento Section frequently returning year after year. Dinner including wine will be approximately \$13.00 per person and we are limited to 18 individuals.

RESERVATIONS REQUIRED BY JUNE 7, CALL DEL WHIPPLE 415-835-3000.

MAY 12TH AND 13TH, 1976

STANFORD RESEARCH INSTITUTE
MENLO PARK, CA

"PRACTICAL ALTERNATIVES TO PRESENT URBAN LIFE"

FIFTH BAY AREA ENVIRONMENTAL SYMPOSIUM

This is jointly sponsored by ASME, ACS, AIAA, AIChE, ASCE, AND IES.

The conference will last two full days and will feature papers on energy, transportation, natural and unnatural hazards, land use, etc. Registration, forms and program details can be obtained by writing to: Shirley Radding, Stanford Research Institute, Menlo Park, CA 94025.

SECTION DUES

Enclosed you will find an envelope for section dues. Because of a printing error, the dues information was not on the back of last months ballot envelope.

THE ANNUAL DUES FOR JULY 1, 1975 - JUNE 30, 1976 IS \$3.00.

This is a statement of account. Kindly mail your check payable to: SAN FRANCISCO SECTION ASME. Your cancelled check is your receipt.

Your cooperation in paying section dues promptly will allow your officers to properly plan the coming years program.

Also we would appreciate donations to:

E.A.P. APR 28 '76

A. LEN FARBAR SCHOLARSHIP FUND:

This scholarship fund was named after the late Prof. Leonard Farbar, educator at U.C.B. and active participant in ASME affairs and functions.

Each year, the Dept. of M.E. selects an outstanding M.E. student at U.C.B. as the recipient of this scholarship. This award is usually made at an ASME MTG. Held at U.C.B.

The amount of the scholarship award is the interest received from the principal only. Presently the interest is approx. \$200/yr.

We have asked the S.F. Section membership each year, since the formation of this scholarship, for contributions in order to increase the principal amount and thus a greater award to our outstanding future M.E.'s.

STUDENT SECTION FUNDS:

To support student section activities such as programs, conferences, dinners for students at parent section meetings. S.F. Section has two (2) student sections u.C. Berkeley and S.F. State Univ. to support.

CHAIRMAN'S CLOSING REPORT TO THE SECTION.

The May newsletter will be the last until September. My term (1975-76) as chairman will end in June. Your newly (1976-77) Elected chairman is Mr. Erland Persson, senior mechanical engineer, P.E., employed by EBMUD, 2130 Adeline St., Oakland, CA 94623. Erland is a highly qualified person to serve as your new chairman and I ask that you give him your support in promoting our society... ASME ... in all its functions and endeavors.

So what have we done during the 1975-76 term besides spending money? Well, we've held monthly meetings... Some very good... some Ho-Hum... and some not too good. The good meetings were (1) tour of the U.S.S. Enterprise aircraft carrier, (2) tour of the M.E. Lab facilities at Univ. of Calif., (3) Joint technical divisions conference, (4) and joint meetings with other societies such as IEEE (PES). Our May meeting looks very promising.

As for section meetings, tours always seem to attract our membership moreso than technical meetings. Also meetings on current issues attract our membership, such as, energy resources and the nuclear initiative - proposition 15.

So if this is the trend, we should have more tours and more meetings of general interest and more joint meetings. We should try to organize our section technical divisions for meetings of a technical nature which draw only a limited number of members. Thus, we satisfy the general interest group and the technical group. Sounds easy but believe me, it's a difficult task.

So what else did we do? The S.F. Section has worked with the Santa Clara Valley Section in efforts to organize a new sub section in San Mateo County. Both parent sections are involved because SMC has members from both sections - a very unique situation. At this moment the gears are rolling to finalize our efforts. Both sections feel that the provisional sub section (SMC) is ready for recognition and a letter will be presented to Mr. W.J. Warren, V.P. Region 9, reflecting our feeling.

Another activity worth mentioning was our technical divisions conference which was held in February. This year our section hosted this conference. The theme was "Calif. energy future-options and implications." We have received reports that this conference was very well presented, thanks to the efforts of the confr. co-chairman, Messrs. Frank Comprelli and John Larson. However, we were disappointed with the turnout; we expected 300 and we got 200. Next year, Mt. Diablo Section will host this conference. Perhaps thru better coordination between the sponsoring societies, we will have even a better conference in 1977.

Another activity of honorable mention is the society's efforts in disseminating information to the general public on the pros and cons of the Calif. Nuclear Initiative, Proposition 15. If you would like to know more about this activity, please call Mr. Lynn Redman (415-435-3855), our section's professional affairs chairman.

So much for reporting on our activities. Only the Hi-Lites were given herein. I don't want to write a book.

In closing, I'd like to mention one thing and that one thing is membership participation. Our section membership is 1200! Where is everybody? Only a handful, say 50, participate in committee affairs and two handful's come to section meetings. Another five handful's register complaints and the rest are hiding in the hills. We need help in our committees; we need new faces; so if you want to help, call Erland Persson at 835-3000 x359. If you want something out of ASME, other than literature, code, and standards, you've got to, first, help ASME.

Thanks to the officers and committee people who served this section during my chairmanship. A chairman doesn't stand a ghost of chance without the unselfish time and effort given to him by his officers and committee chairmen. For this I express my gratitude. In wishing Erland and his staff a successful term for 1976-77, I remain, respectfully yours,

PHIL NISHIKAWA
SECTION CHAIRMAN, 1975-76

NUCLEAR INITIATIVE — JUNE 8, 1976 BALLOT

The following is a summary of the Nuclear Initiative prepared by The Attorney General of California:

Nuclear Power Plants. Initiative Statute. After one year, prohibits nuclear power plant construction and prohibits operation of existing plants at more than 60% of original licensed core power level unless Federal liability limits are removed. After five years, requires derating of existing plants 10% annually unless legislature by two-thirds vote, has confirmed effectiveness of safety systems and waste disposal methods. Permits small-scale medical or experimental nuclear reactors. Appropriates \$800,000 for expenses of fifteen-person advisory group and for legislative hearings. If the proposed initiative is adopted, undirected additional financing from State sources will be required in the amount of at least \$800,000. However, if this initiative should restrict the operation of existing nuclear power plants, and the courts should uphold such action, there is a potential for substantial State damage claims from the owners of the plants.

The Public Affairs Committee of this region is assembling a packet of information from various sources regarding this initiative. There is a need for concerned members who are willing to convey this information to the general public. If you would be willing to be part of the team disseminating this information, we would like to send you copies of the literature thus far assembled.

MAIL YOUR REQUEST TO: Lynn Redman

17 Nelson Avenue, Mill Valley, CA 94941 OR CALL 415-383-0821

ATTENTION: ASSOCIATE MEMBERS OVER 30

You may be eligible for promotion to full member status with no increase in dues. If you have at least five years of experience in "responsible charge of engineering work", you may qualify. Responsible charge is interpreted to mean supervising other engineers or making decisions on materials, specifications, etc.

Contact Jack Darnell 415-768-2274 for further information on Membership Development.

ASME - San Francisco Section Officers 1975-76.

Chairman Phil Nishikawa, Ph. (415) 562-2773
Vice Chairman Earl Persson, Ph. (415) 835-3000, x 359
Secretary John Sale, Ph. (415) 781-4211, x 1896

Treasurer Dan Mote, Ph. (415) 642-2544
Members-at-Large Jerry Fischenich, Ph. (415) 635-4742
Al Thurman, Ph. (415) 271-5268