

Materials Research Society

NEWSLETTER

SEPTEMBER 1978

ANNUAL MEETING

Interest is running high in the 1978 Annual Meeting to be held in the Boston-Sheraton Hotel, Boston, November 28 - December 1. One indication of this fact is the necessity to add that extra day (November 28) to the original dates in order to accommodate the large number of high quality papers submitted. Another is the rate of inquiries for information on the meeting received to date.

Rudy Voorhoeve, his colleagues on the Program Committee, and the chairmen of the ten symposia have done an excellent job in arranging sessions dedicated to disseminating up-to-date information on goal-oriented materials research.

The program and registration information will be sent to all members and inquirers next month. Additional copies will be available on request from the office (see below).

MEMBERSHIP DUES

Current membership in the Society stands at 274. Ninety-three (about one-third) of these persons have sent in their 1978 dues. [This is LARGELY DUE TO THE DISORGANIZATION IN THE (PREVIOUS!!) M.R.S. OFFICES.] We encourage those of you who are not in this "select group" (!) to please do so now (see blank below for your convenience). 1979 dues are also now being received (see same blank below); you may, if you wish, take care of the latter matter at the Annual Meeting. If you are not sure about your status, a call to the office will get you the information. You may also wish to use the duplicate of the form below to encourage a colleague(s) to join the Society. Remember, this is a fledgling society which has 100% volunteer help so far, and needs now as we enter the growth phase the "front money" of members dues just to operate.

MAILING ADDRESS

General Secretariat, M.R.S.
102C Materials Research Laboratory
University Park, PA 16802
Telephone (814) 865-3424

VON HIPPEL AWARD

Pioneering contributions to the cause of interdisciplinary materials research are recognized through this award of the Society. The award consists of a 6-inch single crystal ruby and a cheque for \$1000.

Nominations for the 1979 award, consisting of a one-page description of the candidate's accomplishments, may be sent to the Chairman of the Award Committee, c/o The Secretariat. The data should stress the contributions to interdisciplinary materials research which would tend to be missed by disciplinary societies.

EDUCATION COMMITTEE

The President, upon invitation of the Educational Modules in Materials Science and Engineering (EMMSE) project, has agreed to appoint a committee consisting of a representative from each symposium to serve as the EMMSE Topic Area Team to cover new fields. This will be a continuing committee, with some rotating members.

Expenses for their functioning will be provided by EMMSE. It will provide a unique and rapid opportunity of getting the subject matter of our symposia into an educational format, for universities and industry. Members interested in working on this committee should write the President and/or the symposium chairman in his/her area of expertise.

ELECTION RESULTS

Balloting for offices and council members turned out as follows: President - K. A. Jackson (Bell Labs.); President-elect and Program Chairman - R. Voorhoeve (Bell Labs.); Secretary - R. E. Newnham (Penn State); Treasurer - S. E. B. Petrie (Kodak); Councilors - T. W. Barbee, Jr. (Stanford); G. E. Brock (IBM), J. W. Mayer (Cal Tech), H. Poppa (NASA-Ames), K. C. Taylor (General Motors); Past Presidents - Rustum Roy and H. C. Gatos. Terms run two years, except President and President-elect. Elections are held in the spring of each year, with terms of service beginning the following January 1.

MATERIALS RESEARCH SOCIETY

I enclose \$15.00 as dues for calendar year 1978 1979. \$25.00 for both years . (Student membership, \$5.00; enclose evidence of University registration.)

Name _____

Address _____

Disciplinary Background _____

Highest Degree _____

Present Interests: _____

(use matrix overleaf; select one or more numbers such as B3, C12, etc., not more than five)

Educational
Modules for
Materials
Science and
Engineering

SUBJECT AREA			MATERIALS (COMPOSITION)												
			ALL SOLIDS IN GENERAL	METALS & ALLOYS		CERAMICS, incl. cement	POLYMERS	ELECTRONIC MATERIALS	NON-CRYST. SOLIDS	WOOD & PAPER	COMPOSITES	BIOMATERIALS	OTHER		
				FERROUS	NON-FERROUS										
			A	B	C	D	E	F	G	H	I	J	K		
BASIC SCIENCES	THERMO-DYNAMICS	SOLID STATE PHYSICS	1												
		CRYSTAL CHEMISTRY	2												
		PHASE EQUILIBRIUM	3												
		THERMOCHEMISTRY	4												
		KINETICS	DIFFUSION	5											
			REACTIONS: MECHANISMS	6											
CHARACTERIZATION	STRUCTURE	CRYSTAL	7												
		MICRO	8												
		DEFECT	9												
		SURFACES, INTERFACES	10												
	CHEMICAL COMPOSITION	BULK	11												
		TRACE	12												
		NON-DESTRUCTIVE TESTING	13												
		INSTRUMENTATION	14												
	PROCESSING	PREPARATION	MIN. PROCESSING	15											
			EXTRACTION: HYDRO, PYRO, ELECTRO	16											
			ULTRAPURIFICATION	17											
			PARTICULATES	18											
			SINGLE CRYSTALS	19											
		FORMING	THIN FILMS	20											
SOLID: FORGING, SINTERING			21												
FLUID: CASTING, EXTRUDING, CVD			22												
FINISHING: GRINDING, COATING			23												
JOINING			24												
PROPERTIES	THERMAL	25													
	MECHANICAL: ELASTIC, PLASTIC, FRACTURE	26													
	ACOUSTIC	27													
	OPTICAL	28													
	ELECTRICAL: DIELECTRIC	29													
	MAGNETIC	30													
	CHEMICAL: CORROSION, ADHESION	31													
	NUCLEAR: RADIATION EFFECTS	32													
	BIOLOGICAL	33													
	RHEOLOGICAL	34													
APPLICATIONS	FUNCTIONS	MATERIALS SELECTION	35												
		DESIGN WITH MATERIALS	36												
		STRUCTURAL	37												
		ELECTRICAL, MAGNETIC, OPTICAL	38												
		SURFACE: FRICTION, WEAR, CORROSION	39												
		OTHER: THERMAL, NUCLEAR, BIOLOGICAL	40												