An IUTAM Symposium on

LIQUID METAL MAGNETOHYDRODYNAMICS

will be held in Riga, Salaspils, USSR (16-20 May 1988) under the auspices of the Latvian SSR Academy of Sciences.

The Symposium will be chaired jointly by :

- Prof. J. LIELPETERIS (Inst. of Physics, Riga 229021, USSR)
- Prof. R. MOREAU (MADYLAM, ENSHMG, BP 95, F. 38402 SAINT MARTIN D'HERES)

and the Scientific Committee is as follows :

- the two co-chairmen
- Prof. S. ASAI (Nagoya Univ., Japan)
- Dr. F.R. BLOCK (Inst. für Eisenhütten kunde, Aachen, FRG)
- Prof. U.A. GLUKHIKH (Efremov Res. Inst., Leningrad, USSR)
 Prof. A. Yu. ISHLINSKY (USSR Nat. Comm. on th and Appl. Mech., Moscou)
- Prof. P.S. LYKOUDIS (Purdure Univ. USA)
- Prof. P. MINCHEV (Univ. of Sofia, Bulgarie)
- Prof H.K. MOFFATT (DAMTP, Univ. of Cambridge, England)

The Symposium will cover the following topics :

- 1 Flow at high magnetic interaction parameter (MHD Stokes flow) and in nonuniform magnetic fields; applications to fusion reactors.
- 2 Effects of non-uniform and/or unsteady (AC) magnetic fields on turbulence.
- 3 Active control of flows using AC and DC fields : applications to stirring, pumping, braking, shaping and melting in the processing of liquid metals; application to crystal growth.
- 4 Flows driven by electric current and its self-field ; applications to welding, vacuum are remelting, etc...
- 5 Self-excitation of magnetic field , particularly on laboratory scale, and in context of fast breeder reactors ; thermo-electric effects.
- 6 Instabilities (e.g. interface instabilities) induced by electromagnetic forces; application to aluminum reduction cells and other industrial problems.
- 7 Electromagnetic diagnostic techniques.
- 8 MHD of two-phase flow ; effects associated with bubbles or particles in suspension in liquid metal.

The program will include review lectures and contributed papers. Interested scientists are invited to contact any member of the Scientific Committee, which has responsibility for inviting participants. Scientists interested in attending are asked to inform the two chairmen and send the title and a brief abstract (about 100 words) by August 1, 1987. Those who feel not being able to attend are requested to forward this to colleague(s) interested in the Symposium. Those expected to attend will be sent further information. December 31, 1987 will be the date by which camera-ready abstracts on a single A4 list sheet are expected. The Proceedings will be most likely published by Martinus Nijhoff Publ..

Limited IUTAM funds may be available to help with travel and subsistence. It should be noted that payment cannot be made before arrival at the Symposium. Alternative approaches should be made (when appropriate) to the Committee on Science and Technology in Developing Countries (COSTED). (Secretary : Dr. S. Radhakrishna, Dept. of Physics, Indian Institute of Technology, 600 036 Madras, India).