Vacuum News

of the 13th Conference will be Dr W Kollen, Owens-Illinois, Technical Center, PO Box 1035, Toledo, Ohio 43601, USA, phone (419)-242-6543.

Future Conferences on Vacuum Microbalance Techniques are planned 1976 in Switzerland, 1977 in the USA, 1978 in Budapest (Hungary). Information: E Robens (Chairman), Battelle-Institut eV, D-6 Frankfurt/Main, Postfach 900160, Germany, phone 0611 7908-415.

Thin films and solid surfaces

To be held at the Proctor Academy, Andover, New Hampshire, USA from 18 to 22 August 1975. Chairman: James F Freedman, Vice-Chairman: Eric Kay.

18 August. Mass transport I: T Tsong, 'Surface diffusion of single atoms and clusters'; J Gibbons, 'Ion implantation and controlled diffusion in semiconductors'. Mass transport II: P Turner, 'Thin film diffusion'; R S Sorbello, 'Driving forces for electromigration'.

19 August. Phase transformation I: K Tu, 'Kinetics of silicide formation'; T Reith, 'Metallurgical reactions of metal-silicon rectifying interfaces'. Phase transformation II: P Swann, 'MEV electron microscopy'; M Shatzkes, 'Dielectric breakdown in thin films'

20 August. Corrosion/oxidation I: T Madey, 'Recent experimental studies of chemisorption'; L Young, 'Oxidation studies of silicon'. Corrosion/oxidation II: J Silcox, 'Oxide structures in evaporated A1 films'. Contributed papers and open discussion.

21 August. Reliability physics I: C G Peattie, 'Elements of semiconductor device reliability'; E Philofsky, 'Factors affecting the reliability of thin films and interconnections in semiconductor devices'. Reliability physics II: P Petroff, 'Degradation phenomena in III-V compound semiconductors'. Election. Contributed papers.

22 August. Defect studies: B Berry, 'Internal friction studies of defects in thin films'; A Howie, 'Direct visualization of surface structures in the electron microscope'.

1976 Applied Superconductivity Conference

The 1976 Applied Superconductivity Conference will be held at Stanford University in Palo Alto, California on 17–20 August 1976. The meeting format will follow that of the recent highly successful meetings (Chicago, Illinois—1974 and Annapolis, Maryland—1972) including sessions devoted to:

- 1. Superconducting Materials and Composite Conductors
- 2. Electrical Rotating Machinery
- 3. Power Transmission
- Magnet Technology (Magnets for CTR, MHD, Energy Storage, etc.)
- 5. Accelerators and High Energy Physics Devices
- 6. Microwatt Applications (Josephson Junctions, etc.)
- 7. Other Topics

The Conference Chairman is Professor T H Geballe, Department of Applied Physics, Stanford University, Stanford, California 94305.

8th Atomic and Molecular Physics Conference

The 8th Atomic and Molecular Physics Conference organized by the Atomic and Molecular Physics Sub-Committee of the Institute of Physics will be held at the Queen's University, Belfast from 30 March to 2 April 1976.

Liquid Metals

The 3rd International Conference on the Properties of Liquid Metals already announced as being held at the University of

Bristol from 6 to 10 September 1976, will now be held from 12 to 16 July 1976.

The conference is being arranged by the Solid State Physics Sub-Committee of The Institute of Physics, in collaboration with the University of Bristol. It is hoped that the IUPAP will sponsor the Conference.

EMAG 75 Developments in Electron Microscopy and Analysis

To be held 8-11 September 1975 at University of Bristol.

The meeting, which will incorporate a Trade Exhibition and an Exhibition of electron micrographs, is aimed to cover all aspects of electron microscopy and analysis, except high voltage microscopy. It will, on the whole, be biased towards the physical sciencies, although biological work may be included where it has a physical emphasis, for example, in the special topics (1), (2) and (6) below. The scope of the meeting will embrace instrumentation, systems, data processing and control, specimen stages, detection and recording systems; electron optics, gun and lens design, specimen preparation; image processing and reconstruction, diffraction theory, imaging models; element analysis by electrons and X-rays, energy selecting microscopy. There will be particular emphasis on the following topics (organizers given in brackets).

- (1) High resolution microscopy (J A Eades, Bristol)
- (2) Beam sensitive materials (D T Grubb, Bristol)
- (3) Boundaries and interfaces (M J Goringe, Department of Metallurgy and Science of Materials, University of Oxford)
- (4) Crystallography (J W Steeds, Bristol)
- (5) Diffuse scattering (B Buxton, Bristol)
- (6) Quantitative analysis for high elements and thin films (H Bishop, AERE Harwell)

There will also be a special symposium on minerals, concentrating on phase transformation and plastic deformation, which is being organized by Dr J E Champness, Department of Geology, University of Manchester.

The invited speakers include Professor Reimer (Germany), Professor Lenz (Germany), Professor Amelinckx (Belgium), Dr Colliex (France), Mr Moodie (Australia (to be confirmed)), Dr Willasch (Germany), Professor Le Poole (Netherlands), Dr Swindells (Computer control of analysis systems), Dr Hutchinson (Lattice imaging), Mr Saxton (Theory of image formation and processing), Dr Unwin (Structure determination of unstained biological molecules), Dr Hobbs (Radiation damage of inorganic crystals).

The Proceedings of the meeting will be published as two or four page summaries (including micrographs) from authors whose contributions are accepted. The paper on which these summaries should be typed will be distributed to authors early in June and will be collected at the meeting.

Approximately 300 delegates are expected and a social programme has been organized including a Civic Reception, a dinner in the University Great Hall, a visit to Harveys Wine Cellar, and a block booking for a Bristol Old Vic production at the Theatre Royal.

Further information may be obtained from the Meetings Officer, The Institute of Physics, 47 Belgrave Square, London SW1X 8QX. The closing date for registration will be late July 1975.

Programme Committee Chairman: Dr J W Steeds (Bristol) Exhibition Committee Chairman: Dr D J Dingley (Bristol)