The topics covered in the meetings span a wide range of the physics of condensed matter as well as selected topics in atomic physics and spectroscopy, and solid-state chemistry. Already in 1970, shortly after its foundation, the society was attached to the European Physical Society as an Ordinary Member (category 4b). Many members have applied for Individual Ordinary Membership in EPS, and a considerable number of individuals have been participating actively in the organization of EPS at various levels.

Address and secretary: P. Lawaetz, Physics Laboratory III, Building 309-C, Technical University of Denmark, Lundtofte, DK-2800 Lyngby.

**Atomic and Molecular Physics of Ionized Gases**

*Versailles, 3-5 April 1973*

The first Europhysics Study Conference on Atomic and Molecular Physics of Ionized Gases was held at Versailles from 3-5 April 1973, and was attended by approximately 100 participants. The subject of the meeting was the elementary processes in ionized gases, together with the associated macroscopic plasma properties. With a total of 9 invited and 30 contributed papers, the latter being grouped according to subject matter (and some read by title only), ample time was available for discussions and no parallel sessions were necessary.

The conference got off to an invigorating start with papers by M.A. Blondi and J.N. Bardsley (Experimental and Theoretical Aspects of Electron-Ion Recombination), followed by J.L. Delcroix (Metastables), A.B. Phelps (Atomic Physics and Gas Lasers) and H.J. Kunze (Laser Scattering), together with several contributed papers, led to lively discussions. Papers by N.D. Twiddy (Flowing Afterglows), T. Mäk (Mass Spectrometric Probing of Gaseous Plasmas) and K. Suchy (Transport Phenomena in Ionized Gases) completed what could be described effectively as processes in weakly-ionized plasmas.

In the highly-ionized regime, papers by R.W.P. McWhirter (Spectral Line Intensities of Laboratory Plasmas and Atomic Collision Processes) and J. Richter (Departure from Local Thermodynamic Equilibrium in Arcs) showed the continuing interest in astrophysical and fusion machine plasma.

An 'audience reaction' discussion held towards the end of the conference showed enthusiasm for future meetings of this kind, provided that the number of participants was maintained sufficiently small for meaningful discussions to be possible. It is hoped that regular meetings on this topic, or on more specialized parts of it, will be held under the auspices of EPS.

A special word of thanks is due to the French organizing committee at Sacy — particularly M. Manus and M. Berlande — who not only had put forward the idea of such a meeting but those organization of both the scientific and social programmes left very little to be desired. M.C. Sexton

**Theoretical Physics**

*An Advanced Text*

by B.G. LEVICH, Institute of Electrochemistry, Academy of Sciences of the U.S.S.R., Moscow.


This is the first edition of the famous textbook of theoretical physics widely used in Russian universities. The work, which is updated and expanded, is published in four volumes. The text is intended as an introduction to theoretical physics and is written in such a way that all material necessary for understanding the later sections is covered earlier in the work.

Just published

**Volume IV: Quantum Statistics, Physical Kinetics**

1972. about 430 pages
Dfl. 47.00 (about US $16.50)
ISBN 0 7204 0026 6

Volume 4 covers quantum statistics and the essential concepts of physical kinetics, which are not usually presented in a general course on theoretical physics. The rapid development of physics and the present wide interest in non-equilibrium and non-stationary processes has necessitated the expansion of the section on physical kinetics in this edition.


Already published

**Volume I: Theory of the Electromagnetic Field, Theory of Relativity**

1970. 415 pages
Dfl. 47.00 (about US $16.50)

**Volume II: Statistical Physics, Electromagnetic Processes in Matter**

1971. 668 pages
Dfl. 75.00 (about US $26.30)

**Volume III: Quantum Mechanics**

1973. 642 pages
Dfl. 120.00 (about US $42.16)

**NORTH HOLLAND**

P.O. Box 211, Amsterdam, The Netherlands


---

*Figure 3 The 600kV universal heavy-ion accelerator at the Institute of Physics, University of Arhus. Since 1964, when this machine became operational, a substantial amount of the atomic collision studies at the Institute have been performed at this facility. The studies have included channeling and energy-loss measurements, beam-foil experiments, and investigations of single and multiple atomic collisions.*