

Developments in the understanding of laser-plasma interactions, and of the necessary diagnostic techniques, are equally impressive. Various groups have experimentally investigated the absorption of laser light at wavelengths (λ) of $1/4$, $1/2$, 1 and 10 μm , and at intensities (I) within at least part of the range $I = 10^{10} - 10^{16}$ W/cm^2 ; there now appears to be universal agreement that strong density-profile modifications are induced by radiation pressure effects when $(I\lambda^2) \sim 10^{15}$ (W/cm^2) (μm)², and that resonance absorption increases the total absorption coefficient at the longer wavelengths significantly. Related measurements suggest that much of the absorbed radiant energy is then converted to hot, non-thermal, electrons. Developments in two and three-dimensional soliton theory, and in analytic modelling of strong turbulence by the Russian school, are equally impressive.

The main topic for controversy appears to be the computer optimisation of target designs, where the avoidance of unwanted core preheating by the "hot" electrons and of possible deviations from the desired symmetry of implosion (due to Rayleigh-Taylor instabilities) poses significant modelling problems in the hydrodynamic codes. The US prefer "thick" (lower aspect ratio) double-shell designs to obviate both of these problems.

Our hosts are to be congratulated on arranging a particularly topical meeting, on the excellence and individuality of the oral translation facilities, and on the warmth of their hospitality, which more than compensated for external temperatures of < 243 K! The next meeting will be organised by the DDR Physical Society, and will probably be held in December 1979 at Leipzig.

I. J. Spalding
(Culham Laboratory)

EPS Scholarships for 1979/1980

Second List - Federal Republic of Germany

Further to the list of scholarships available in Poland, Romania and Switzerland, published in the December issue of *Europhysics News*, EPS can now announce the availability of five scholarships in the Federal Republic of Germany.

These are at:

- the Deutsches Elektronen-Synchrotron centre DESY, Hamburg
- the Hahn-Meitner-Institut für Kernforschung, Berlin (2) and
- the Kernforschungszentrum, Karlsruhe (2)

Further details are given below.

DESY

DESY is the principal national and state high energy physics laboratory that has specialized in electron machines. A 7 GeV synchrotron was followed by DORIS, the 3+3 GeV e^+e^- rings and PETRA the 19+19 GeV e^+e^- rings where luminosity has just reached 10^{30} $\text{cm}^{-2}\text{s}^{-1}$. Associated with DORIS is a synchrotron radiation facility.

The Scholarship is for experimental or theoretical work in elementary particle physics connected with the use of DORIS or PETRA. Remuneration will be from 3000 to 4000 DM/month according to qualifications. Normal travel to Hamburg paid by the Centre.

Hahn-Meitner-Institute

The Institute is a State funded centre of fundamental nuclear research, specializing in heavy ion physics, radiation and photochemistry, solid state research and nuclear chemistry. Principal experimental machines include a 5MW reactor, a 200 MeV heavy ion accelerator and several electron accelerators.

Scholarships are for post-doctoral work in the following fields:

1. Nuclear physics and heavy ion research (Profs. Eichler, Lindenberger and von Oertzen)
2. Nuclear solid state physics (Profs. Dachs, Vogl, Wollenberger)
3. Radiation Chemistry (Prof. Henglein)

The salary paid will be between 2600 and 3500 DM/month depending on experience and responsibilities. Normal travel costs will be paid by the Institute.

The Karlsruhe Research Centre

The Karlsruhe Laboratory is one of the two national nuclear research establishments with a very broad programme of research on fundamental and applied topics, centred round a series of research and experimental reactors. The Laboratory is also host to the European Transuranium Institute.

Scholarships are for post-doctoral work in the following fields:

(Division headed by Prof. W. Klose)

1. Solid state physics
2. Nuclear physics
3. Nuclear chemistry

Remuneration is at the rate of 1800 DM/month plus 1000 DM for the first month and help with the purchase of books. Travelling is not reimbursed.

Applications should be made to the EPS Secretariat. It is helpful also if some direct contact is established between the applicant and the professor under whom he will be working.

STOP PRESS: A further Scholarship has been offered by the Gesellschaft für Schwerionenforschung in Darmstadt for research with the heavy ion accelerator UNILAC, in cooperation with an existing group. Details next issue.

EPS Divisions, Sections and Group

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Chemical Physics
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Molecular Physics

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Condensed Matter Division
Low Temperature Section
Macromolecular Physics
Magnetism
Metals
Semiconductors and Insulators
Surface and Interface

High Energy & Particle Physics Division
Nuclear Physics Division
Plasma Physics Division
Quantum Electronics Division

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