

## Laser Physics in its Fifth Year

A.M. Prokhorov, the Editor-in-Chief of *Laser Physics* and Director of the Institute of General Physics, Moscow, describes how the journal has developed within five years as a successful international venture which is published in Russia.

Establishing the journal *Laser Physics* was decided quite a long time ago because it was realized that there existed an urgent need for an international publication covering laser physics as well as the numerous applications of lasers in science. Moreover, new laser technologies required adequate attention. I was also concerned that information about the latest work of Russian scientists in laser physics was only available in English after a considerable delay. They could obviously publish in international journals, but this was hampered by language barriers and by the difficulties encountered in mailing materials to the West. I wanted an international journal that could publish the work of leading scientists from all over the world, and at the same time would be much more accessible to Russian-speaking authors, who could submit their manuscripts in Russian.

In the initial stage, my efforts were supported by a group from Moscow that included P.P. Pashinin, K.A. Prokhorov, V.M. Yermachenko, and I.V. Yevseyev. They joined the editorial board, beginning with the first issue, and I.V. Yevseyev became the Deputy Editor-in-Chief. It was decided to publish original papers, reviews, letters to the editor, and proceedings of conferences and symposia. Several well-known scientists from Russia and abroad were involved in preparing the first issue, and I would like to acknowledge the assistance of A.M. Dykhne (Moscow), J.H. Eberly (Rochester), M.V. Federov (Moscow), D.N. Klyshko (Moscow), E.D. Protzenko (Moscow), V.V. Smartsev (Kazan), A.P. Shotov (Moscow), D.A. Wiersma (Groningen), and V.I. Yukalov (Dubna), all of whom joined the first editorial board (see insert).

The creation of such a journal only became possible in 1991 when *perestroika* allowed collaboration with US publishers. From the very first issue, *Laser Physics* occupied an honourable place among international physics journals: Russian authors began to sub-

mit their best articles, being attracted by the short delay to publication, the high quality of the translation into English, and the absence of petty restrictions on the form of an article; more and more top physicists from various countries followed suite. The situation did not change with the dismantlement of the Soviet Union starting in 1992. Currently, we receive the best articles on laser physics from throughout the former Soviet Union (FSU), and the number of articles from the world's leading scientific centres continues to increase. One of the main outcomes of the venture is that top specialists in the field of laser physics from around the world are involved.

Reviews on various aspects of laser physics, written by widely recognized authorities, provide a detailed description of the physics making them useful not only for specialists but also for scientists who wish to apply recent achievements. A large number of original papers have also been published, including papers devoted to novel laser technologies and to the application of lasers in chemistry, biology, medicine, and ecology. Submitted manuscripts, including texts in Russian, are reviewed by the editorial board to ensure rapid publication of high-quality, original papers.

In the second year, we began to organize annual *Workshops on Laser Physics*. The first two were held in Russia and the third in the USA; a fourth is planned for Russia (4-9 August 1995). These workshops give top scientists working in the field of laser

physics the opportunity to discuss work carried out in the past year, to exchange new ideas, and to determine possible directions for future research, tasks that we feel need workshops held annually.

Another important activity is the publication of special issues on urgent problems in laser physics. The first, published in 1993, was entitled *Atoms, Ions, and Molecules in a Strong Laser Field*. Renowned specialists such as N.B. Delone (Moscow), J.H. Eberly (Rochester, USA), M.V. Federov (Moscow), and G. Mainfray (Saclay) were invited to be Guest Editors. The issue achieved considerable importance in helping develop the physics of the interaction of high-power laser radiation with atomic and molecular systems, and became a reference source. We published three special issues in 1994 (*Honouring V.P. Chebotayev; Laser Cooling and Trapping; Non-classical Light*) and early-1995 saw a special issue called *Induced Gamma-Ray Emission and Related Topics* where the Guest Editors (C.B. Collins, Dallas, USA, and L.A. Rivlin, Moscow) worked with leading scientists from several countries involved in research which had not been widely discussed up to then.

One of the unexpected and rather useful outcomes is that our journal helps establish relations between physicists in the FSU and other countries. These are promoted since we publish the contributions of scientists who have never before published abroad. In addition, the mailing addresses of FSU scientists became available (information about authors was often missing in the Soviet era).

A stable group of contributing authors has developed over the last four years. It includes scientists from almost all the centres conducting investigations in laser physics. We are naturally happy to see new names among our authors so all specialists in laser physics are invited to submit articles.

## Soundings



### ● EurophysNet Launched

The EPS has consolidated World-Wide Web server sites provided by NIKHEF, Amsterdam, and the EPFL, Lausanne, under the title EurophysNet with a common welcome page and managed by a new Internet Coordinators Group reporting to the EPS Executive Committee. Information and services will be increased in stages. For instance, *europysics news extra*, an extended on-line version of *Europhysics News*, is being developed. Links are also being established to WWW sites working in close collaboration with EPS, including: – A list of WWW pointers to physics departments operating servers available at <http://www.physik.uni-oldenburg.de/Docs/physics-links/europe-phys-links.html>

– The titles and abstracts of Letters accepted for publication in *Europhysics Letters* offered by Les Editions de Physique at <http://www.ed-phys.fr/epl/>

– The information database for the European Mobility Scheme for Physics Students which

will be converted from telnet (130.88.20.113) access to WWW.

### ● Nuclear Physics News

*Nuclear Physics News* has added "International" (NPNi) to its title to testify that an agreement has been reached with the US Department of Energy and the National Science Foundation for distribution in the US. Some 1000 copies are being distributed in the US through the Argonne National Laboratory and two, new members from the US may be appointed to the Editorial Board. NPNi is published by Gordon and Breach on behalf of NuPECC and the Board of the EPS Nuclear Physics Division. It is hoped to extend participation to the Far East. The American Physical Society is not involved owing to a long-standing legal dispute following the publication of a citation ranking.

### ● Physics Around the World

An extremely useful WWW source of information about physics is Physics Around the World based at the Technical University of Vienna (<http://to.tuwien.ac.at/physics-services/>). Subscribers registering on-line are e-mailed a weekly list of additions and changes.

### Laser Physics

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