

Editorial Board:

Zygmunt Bodnar — Chairman, Miron Gaj, Bedřich Havelka, Roman Ingar-den, Bohdan Karczewski, Joachim Klebe, Jan Matysiak, Maksymilian Pluta, Zbigniew Puzewicz, Antoni So-jecki, Szczepan Szczeniowski, Bogu-sława Trzebiatowska

Editor in Chief — Miron Gaj

Associate Editor — Ireneusz Wilk

Editorial Office:

Institute of Physics, Technical Uni-versity of Wrocław, 50-370 Wrocław, Wybrzeże Wyspiańskiego 27, Poland.

Publisher:

Technical University of Wrocław (Poli-technika Wrocławska) 50-370 Wrocław, Wybrzeże Wyspiańskiego 27, Poland

In addition to larger original papers brief reports will be published of the authors, own research work. The report should be set out according to the above guide lines.

The Editorial Board invites the readers to send over any remarks or observations referring to the publications which will appear in the *Optica Applicata*. The corre-spondence of essential importance will be published in a separate column dealing with Letters to the Editor.

Review of matter

Application of the diffraction theory, quantum optics, problems in radiation coher-ence, light sources, holography and its appli-cation, scientific photography, methods of image reconstruction, optical application of Fourier transforms, theory of optical systems, criteria of optical image evaluation, optical materials, technology of manufacturing optical elements, aspheric optics, optical properties of solids and thin films, lasers and their application, photo- and radiometry, problems in spectroscopy, non-linear optics, optical data processing, optical measurements, fibre optics optical instrumentation, interferometry, mic-roscopy, nonvisible optics, automation of optical computing, optoelectronics, colorime-try, optical detectors, ellipsometry and photo-elasticity.

OPTICA VIII APPLICATA 1

Contents

F. KACZMAREK, A. JENDRZEJCZAK, Second harmonic generation (SHG) and frequency mixing (FM) in in-ffrared He-Ne laser beams in KDP crystal	3
F. FIRSZT, H. L. OCZKOWSKI, Efficiency measurements on electroluminescent devices	9
Z. CHORVATOVA, R. HAJOSSY, On measurement of neutral gas temperature in the plasma of a spark plug . . .	15
P. BECLA, J. F. KASPRZAK, J. M. PAWLIKOWSKI, PEM-effect in graded up $Cd_xHg_{1-x}Te$ layers	21
M. GAJ, The influence of the layer thickness on the coupling efficiency of plane waveguide with periodical-ly variable refractive index	29
S. KUSCH, R. GUTHER, Classification of structures by thick holograms	35
J. KEPRT, M. HRABOVSKÝ, P. VEJBOR, Usage of materials with low resolving power in holographic interferometry	37
E. DOBIEZIEWSKA-MOZRZYMAS, Surface-roughness influ-ence on the optical properties of aluminium films .	43

Содержание

Ф. Качмарек, А. Енджейчак, Генерирование второй гармоника и оптическое смещение инфракрасных пучков лазера He-Ne,	3
Ф. Фиршт, Х. Л. Очковски, Измерение производи-тельности в электролюминесцентных приборах	9
З. Хорватова, Р. Хайоссы, Измерение температуры инертного газа в плазме запальной свечи	15
П. Бецля, И.Ф. Каспшак, И. М. Павликовски, Фотомат-гнитный фомоэффект в слоях $Cd_xHg_{1-x}Te$ со ступенчатым энергетическим промежутком . . .	21
М. Гай, Влияние толщины слоя на эффективность связи плоских волноводов с периодически пере-менным коэффициентом преломления,	29
С. Куш, Р. Гутхер, Классификация структур при ис-пользовании толстых голограмм	35
И. Кепрт, М. Храбовски, П. Вейбор, Применение материалов с низкой разрешающей способностью в интерферометрической голографии	37
Э. Добежевска-Мозржимас, Влияние шероховатости поверхности слоев Al на их оптические свойства	43

Short Announcements

The fourth Polish-Czechoslovak Optical Conference

will be held on September 19–22, 1978 in Rynia near Zalew Zegrzyński (25 km from Warsaw).

The Conference purpose is:

1. A review of newest achievements in the field of design and technology of optical instruments.

2. An exchange of opinions on the state of theoretical and experimental research in applied optics.

3. Widening of personal contacts and deepening the cooperation between scientific and industrial institutions of both the countries.

The debate will be held in two sections:

— section A: physical and laser optics,

— section B: instrumental optics and new technologies.

The conference will be accompanied by an exhibition of optical instruments and devices produced or prepared for production by Polish Optical Works and scientific institutions of Warsaw.

The conference organizers are:

1. Institute of Design of Precise and Optical Instruments Technical University of Warsaw,
2. Industrial Union "Omel",
3. Central Optical Laboratory,
4. Optical section of SIMP with collaboration of Professional Training Section of SIMP,
5. Polish Optical Works.

The 11th Meeting of the International Commission for Optics and the Associated International Conference "Optica hoy y Mañana"

will be held at the Consejo Superior de Investigaciones Científicas (National Research Council) in Madrid, Spain, from 10 to 17 September 1978.

The Conference is sponsored by the International Commission for Optics and organized by the Spanish National Committee, with the collaboration of Instituto de Optica "Daza de Valdes" and Sociedad Española de Optica.

General items of the meeting

Election of the Bureau,

Examination of the Financial Statement presented by the Bureau,

Agreement on a provisional budget for future years,

Discussion of questions submitted by the different National Committees, the Bureau or the Executive Committee of IUPAP.

General fields of the Conference

Vision,

Image Formation and Processing,

Optical Physics.