Editoral Board:

Zygmunt Bodnar — Chairman, Miron Gaj, Bedřich Havelka, Roman Ingarden, Bohdan Karczewski, Joachim Klebe, Jan Matysiak, Maksymilian Pluta, Zbigniew Puzewicz, Antoni Sojecki, Szczepan Szczeniowski, Bogusława Trzebiatowska

Editor in Chief — Miron Gaj

Secretary — Grażyna Mulak

Associate Editor — Ireneusz Wilk

Editoral Office:

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

Publisher:

Technical University of Wrocław (Politechnika 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 correspondence 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 coherence, light sources, holography and its application, 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 photo- and radiometry, problems in spectroscopy, non-linear optics, optical data processing, optical measurements, fibre optics, optical instrumentation, interferometry, microscopy, nonvisible optics, automation of optical computing, optoelectronics, colorimetry, optical detectors, elipsometry and photoelasticity.

OPTICA V APPLICATA 1

Contents

Non-linear Electro- and Magnetooptic Effects	
in Light Modulation, R. ZAWODNY	3
Some Properties of a Single-Frequency He-Ne	
Laser and Laser Interferometer, F. Petrů.	7
Optical and Electrical Properties of Au and	
Ag in Relation to Free Electron Theory,	
M. H. EL-NABY, A. F. A. EL-SHAZLY	1.7
The Optical Constants of Au and Ag in the	
Wavelength Range 0.4-2.5 µm, M. H. El-	
NABY, A. A. IMAM, F. S. HAMMAM	21
On the Possible Role of Surface States in	
Optical Properties of Aluminium, M. Toma-	
ŠEK, G. H. TALAT	25
Influence of Acoustical Nonlinearities on Stim-	
ulated Brillouin Scattering, F. J. Shüтте .	29
On Stimulated Mandelstam-Brillouin Scattering,	
Z. Chorvátová	35
On Interpretation of the Plasma Beam Holo-	
graphic Interferograms, K. Musiol	41
Fourth Luneberg Apodization Problem in Part-	
ially Coherent Light, T. ASAKURA, T. UENO.	49