Belgian National Film Library and is a voluntary officer of the International Federation of Film Archives and of the International Federation of Film Societies.

A Guide to Films, Kinescopes, and Videotapes Available for Televised Use–Winter, 1962–63 is published by the Instructional Television Library Project according to the terms of a contract with the U.S. Office of Health, Education and Welfare. It is available from Northeastern Regional Instructional Television Library Project, 238 Main St., Cambridge 42, Mass, at a price of $1.00. The 60-page paperbound book describes telcourses available through the project. Courses at elementary, intermediate, and adult levels are available. In addition a service called "The Sampler Library" is described. Sampler kits are designed to make available sample programs and study guides to those interested in previewing materials. The Samplers have not been evaluated and are not endorsed by the Library Project, but are available through the owners whose names and addresses are listed.

An illustrated brochure available from Southwest Film Laboratory, 3024 Fort Worth Avenue, Dallas 11, Tex., describes in detail services offered by the laboratory. The 28-page brochure includes an explanation of standards for preparation of original 16mm A & B rolls, and methods of marking work prints to indicate effects, as recommended by the Association of Cinema Laboratories. Also offered is a data sheet on Triad color control, described as automation in color printing.

Abstracts

Abstracts of papers appearing in other journals, chosen for their importance and timeliness, are published in the *Journal* from time to time. Most of these abstracts are translations, chiefly from the U.S.S.R., and are made available to the *Journal* by the Research Laboratories of the Eastman Kodak Company. As a rule, translations are made of the foreign language abstracts, not of the paper itself. The respective complete original texts can be consulted at some libraries. Current issues of *Tekh. Kino i Telev.* can be consulted at, or borrowed from, the Society's Headquarters Office.

Those requiring definitive and thorough searches of current literature and patents are referred to *ABSTRACTS of Photographic Science & Engineering Literature* (*APSE*), published monthly by the Department of Graphics, School of Engineering and Applied Science, Columbia University in the City of New York, with the editorial cooperation of the Society of Photographic Scientists & Engineers. The editorial and business office of *APSE* is at: 632 West 125th Street, New York 27, N.Y.

The subject areas are grouped below:
- Biography
- Cameras and Equipment (Except High-Speed)
- Cinematography (Underwater)
- Film and Its Properties
- Instrumentation and High-Speed Photography (Photogrammetry)
- Laboratory Practice
- Lighting (Light Sources and Screens)
- Projection
- Sound Recording and Reproduction
- Studios (Production)
- Television
- Tests and Measurements

BIOGRAPHY

Evseĭ Mikhaĭlovich Goldovskiĭ (in Russian), Anon., *Zhur. Nauch. i Priklad. Fotografii i Kinematografii, 8:* No. 2, 158–59, Mar.–Apr. 1963.

A biographical note on Goldovskiĭ is given on the occasion of his sixtieth birthday. He is one of the foremost Soviet workers on cinematographic technology.—S.C.G.

CAMERAS AND EQUIPMENT (Except High-Speed)

The Ekran 8mm Motion-Picture Camera (in Russian), R. M. Gaĭnullin and A. A. Usachev, *Tekh. Kino i Televideniya, 7:* 73–74, Mar. 1963.

The Ekran camera is a pocket size (105 by 98 by 38mm) 8 mm motion-picture camera made in the Soviet Union for amateurs. It uses quickly interchangeable magazines of film. Supplementary equipment includes a titling device and a watertight casing for underwater photography.—S.C.G.

The Exhibition of Photographic and Cinematographic Equipment of the Czechoslovak Republic (in Polish), R. Kreyser, *Fotografia, 10:* No. 7, 177, 1962; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 3.46.8, 1963.

A report is given of an exhibition of photographic and cinematographic equipment from Czechoslovakia, organized in Warsaw by the Czech Export Organization KOVO. A short account is given of the new Flexaret VI camera (a two-lens reflex camera taking a 6 by 6cm picture with a Belar *f*/3.5 80-mm objective). Improvements in the construction of enlargers are noticed. The growing interest of amateur photographers in color slides on reversal photographic materials is discussed. The Adior slide projector is briefly described.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Obtaining Exposure Time for Central Shutters, H. Bank and J. Sohn, *Photo-Technik und -Wirtschaft, 14:* 140, Mar. 1963.

One of the main tasks of the photo shutter is to produce exactly defined exposure times. To get an idea about the accuracy of the exposure time, it is necessary to consider the methods for determining it. This paper reviews measuring systems that have proved successful.

CINEMATOGRAPHY (Underwater)

Image Sharpness and Angular Dimensions of the Screen in Different Systems of Cinematography (in Russian), V. G. Komar, *Tekh. Kino i Televideniya, 7:* 9–14, Mar. 1963.

In an earlier paper (*Tekh. Kino i Televideniya, 6:* 1, Oct. 1962) the author proposed a criterion of sharpness for evaluating different systems of cinematography, based on the critical spatial frequency. This criterion has now been used to evaluate the image quality of a number of systems at present in use, including 8mm, 16mm, normal 35mm, anamorphotic 35mm, 70mm, 3 by 35mm panoramic and a proposed 3 by 70mm panoramic. Quality is discussed, giving consideration to the main factors in image formation, image sharpness, angular dimensions of the screen and quantity of information.—S.C.G.

Let a Camera Take Your Field Notes, R. B. Earl, *Consult. Engr.* (*U.S.A.*), *18:* No. 5, 99–103, 1962; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 2.46.303, 1963.

Constructional and electrical engineering work on different sites requires sketches of the interconnection of objects. A significant gain in time and maximum accuracy of recording are obtained by the use of photography. The practical use of photography on sites with industrial equipment is discussed. In the absence of special wide-angle lenses, photographic recording can be carried out by photographing the sites in parts with subsequent combination of the separate pictures into a whole (photomontage). The photographic equipment used must be transportable, and adequate accuracy in enlarging the photographs must be ensured. In those cases where the color of the objects may be important, color pictures must be taken. Photographic recording makes it possible to carry out documentation of constructional changes as they are made, as well as all kinds of damage, and also to obtain illustrated material from inspection visits.—S.C.G.

(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Optics for Underwater Photographers (in German), H.-U. Richter, *Neptun, 2:* No. 7, 192–193, 1962; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 3.46.125, 1963.

Changes in the optics of photography produced by the refractive index of water (which is higher than that of air) are discussed for the benefit of the underwater photographer.—S.C.G. (Abridged from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Underwater Close-Ups with the Rolleimarin Camera (in German), P. H. Krauser, *Neptun, 2:* No. 7, 199–200, 1962; *Referativnyĭ Zhur., Fotokinotekhnika,* Abstract No. 3.46.124, 1963.

Some recommendations are given for carrying out photography on objects at a distance of less than 1m. The Rolleiflex two-lens reflex camera used with the waterproof Rolleimarin coating is recommended. Electronic flash or single-flash lamps are recommended as light sources. Recommended diaphragm settings are

given for photography with the latter at distances of 1m and 30cm. The light source should be fixed to the camera with the aid of a hinged bracket and turned to correspond with the distance of the subject. Much use can be made of a supplementary incandescent lamp, the beam from which cuts the optical axis of the objective at exactly 30cm. In this case the inclined beam of light makes an ideal viewfinder.—S.C.G.
(Adapted from *Referativnyĭ Zhur., Fotokinotekhnika.*)

FILM AND ITS PROPERTIES

The Problem of the Character of Forces Applied to a Motion-Picture Film in Contact Printing on a Sprocket (in Russian), G.Yu. Prosvirnin, *Trudy Leningrad. Inst. Kinoinzh.*, No. 8, 25–36; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 3.46.234, 1963.

A theoretical analysis is given of the forces applied to a motion-picture film under different conditions of engaging with the teeth of the printing sprocket. From the results of the analysis, the most appropriate type of sprocket is chosen.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

INSTRUMENTATION AND HIGH-SPEED PHOTOGRAPHY

(Photogrammetry)

The Sixth International Congress on High-Speed Photography (in Russian), M. P. Vanyukov, *Zhur. Nauch. i Priklad. Fotografii i Kinematografii, 8:* No. 2, 157–158, Mar.–Apr. 1963.

A brief account is given of the contributions to the Sixth International Congress on High-Speed Photography held at Scheveningen, Holland, Sept. 17–22, 1962.—S.C.G.

The Method of Using High-Speed Cinematography for the Study of the Vertical Fluctuation and Changes in Rotational Velocity of the Driving Wheels of Automobiles (in Russian), L. I. Korotkov, *Zhur. Nauch. i Priklad Fotografii i Kinematografii, 8:* No. 2, 123–128, Mar.–Apr. 1963.

High-speed cinematography has been used to study the vertical motion of the driving wheel of an automobile traveling at high speed, including take-off of the wheel from the road surface and landing, and its effect on the rotational velocity of the wheel. The photography is simple but the subsequent analysis of the frames is complicated partly owing to the difficulty in obtaining a consistent frame frequency. Speeds of 2,000 to 3,000 frames/second were obtained with a variation of 10 to 15% between the beginning and end of a run. The cinematographic method could not exclude the influence of high-frequency vibrations in the transmission shaft, which also affects the angular velocity of the wheels.—S.C.G.

Motion-Picture Camera for Studying Suspension-Carrying Currents (in Russian), M. D. Pechenkin, in "Novye metody izmereniĭ i priborȳ dlya gidravlicheskikh issledovaniĭ" ("New methods of measurement and apparatus for hydraulic studies"), Moscow, Akadamiya Nauk SSSR, 1961, pp. 169–175; *Referativnyĭ Zhur., Fotokinotekhnika*, Abstract No. 3.46.231, 1963.

The elements of the technique of photographing currents of liquid containing suspended matter are considered. Included are visualization of the current; lighting; taking frequency, exposure and image size; and the influence of particles disposed between the objective and the object plane. The basic requirements of the motion-picture camera are set out. It is observed that these requirements are satisfied completely by the VNIIK motion-picture unit with electronic flashlight source. The operation of a device that controls the operation of the electronic flash lamp is described.—S.C.G.
(Translated from *Referativnyĭ Zhur., Fotokinotekhnika.*)

Photography in Mapping, J. J. Klawe, *Graphic Arts Focal Point*, No. 6, 2–16, 1962.

Describes the sequence of operations from carrying out the original survey to making a set of plates for printing a multicolored contour map. This comprehensive article discusses methods and equipment used in photographic surveying, the technique and instruments required in photogrammetry and the photomechanical processes used in map reproduction.—J.L.

Evaluating the Interception of an Aircraft by a Guided Missile: The Development and Use of a Camera System, P. B. N. Nuttall-Smith, *The Photogrammetric Record, 3:* 466–482, Oct. 18, 1961.

The camera system used in Great Britain for assessment of the interception of a target aircraft by a guided missile is described and its development recounted. (Author's abstract.)

A Note on Exposure in Air Photography of Desert Areas, G. C. Brock, *The Photogrammetric Record, 3:* 530–538, Oct. 18, 1961.

It has been shown by controlled photography of a desert area that for vertical air photography of such terrain the effective photographic light intensity is proportional to the ground illuminance. Exposure tables based on the luminous density law, as used in tables for ground photography, give serious overexposure when applied to desert conditions, where the ground approximates to an unbroken plane.
(Author's abstract.)

LABORATORY PRACTICE

The Hardening of Color Positive Motion-Picture Film with Potash Alum (in Russian), I. D. Golovatenko, R. M. Maĭstrovoĭ and S. A. Titov, *Tekh. Kino i Televideniya, 7:* 64–66, Mar. 1963.

A hardening fixer solution containing potash alum gives adequate hardening of color positive film for the subsequent processing and is preferred to one containing chrome alum. The acidity of the bath requires adjusting to prevent the precipitation of aluminum hydroxide. Recommended formulas for the fixer are given.—S.C.G.

PROJECTION

Carbons for Motion-Picture Projection (in Russian), T. V. Derbisher, *Tekh. Kino i Televideniya, 7:* 76–79, Mar. 1963.

Information on high-intensity carbons available in the U.S.A. and Europe.—S.C.G.

Technical Characteristics of Interlocking and Three-Link Speed Stabilizers in Motion-Picture Projectors, (in Russian), A. V. Solomonik, *Tekh. Kino i Televideniya, 7:* 15–23, Mar. 1963.

Technical characteristics are calculated for interlocking speed stabilizers and Davis drives used in new motion-picture projection apparatus, and it is shown that block stabilizers with a flexible rocking shaft have the best characteristics.—S.C.G.
(Translation of Author's Abstract.)

SOUND RECORDING AND REPRODUCTION

The Tone—the Third Dimension, B. H. Kettelhack, *Photo-Technik und -Wirtschaft, 14:* 148, Mar. 1963.

The addition of sound effects to diapositive series and movie films adds something like a third dimension to the projection: the pictures become more alive, clearer and—in a general sense—more real to the viewer. This article reports approved and new methods of sound recording for diapositive series and movie films with the aid of the sound tape.

Magnetic Tape Track for 8mm Films, F. Frese, *Photo-Technik und -Wirtschaft, 14:* 158, Mar. 1963.

As in the United States, interest in the tone setting for films will increase in Europe with the growing popularity of amateur movie films. Compared with the two-tape method (projector connected to tape recorder), the one-tape method (magnetic track on the film) has the advantage of being simple and easy. This paper deals with the soundtrack setting machines of several German manufacturers. These comparatively reasonably priced machines give the photo dealer the chance to undertake the soundtrack setting for his amateur clients himself and thereby to obtain a new source of income.

Improving the Quality of Sound Reproduction in the Cinema (in Russian), A. N. Kacherovich, *Tekh. Kino i Televideniya, 7:* 24–29, Mar. 1963.

Discussion of results of experiments for improving the quality of the reproduction from soundtracks with the aid of delayed signals.—S.C.G.
(Translation of Author's Abstract.)

STUDIOS
(Production)

The "Soyuzmul'tfil'm" Studios (in Russian), Ya. I. Belyaev, *Tekh. Kino i Televideniya, 7:* 1–8, Mar. 1963.

The premises and work of one of the main centers for the production of Soviet animated films are described.—S.C.G.