12th International Congress on High-Speed Photography

The 12th International Congress on High-Speed Photography will be held 1-7 August 1976 at The Inn on the Park in Toronto, Ont., Canada. Co-sponsors include the SMPTE, Canadian Science Film Assn., National Research Council of Canada, Ontario Science Centre and the Society of Photo-Optical Instrumentation Engineers. The 12th Congress will be the first to be held in Canada and the fourth to be held in North America since the series began under the auspices of the SMPTE in 1952. The other eight meetings have been held in European cities.

Delegates from more than 20 nations will attend the 12th Congress and will participate in a program of some 120 papers. Subjects to be covered will include: (1) High-Speed and Ultra-High-Speed Cameras; (2) Electro-Optical Cameras and Shutters; (3) Holography and Interferometry; (4) Schlieren, Shadowgraph and Time-Resolved Spectroscopy; (5) Data Reduction and Image Analysis; and (6) Applications. An exhibit of technical equipment will accompany the papers program.

Call for Papers

The *Preliminary Announcement and Call for Papers* has been issued. The brochure is available upon request from the 12th International Congress on High-Speed Photography, c/o Ontario Science Centre, 770 Don Mills Rd., Don Mills, Ont., Canada M3C 1T3. **(See US address given above.)** Prospective authors have been asked to submit before 31 December a (typewritten) one-page summary of each paper proposed for the Congress. The summaries are for use by the Papers Committee in selecting papers to be included in the program. The summaries will not be published. Reference to related work and to the author's previous publications may be included with suitable photographs and diagrams.

Authors will receive further instructions for submission of a precis of 200 to 400 words which must be submitted before 15 March 1976. The precis, if accepted will be issued as a preprint. Full texts of accepted papers will be required by 15 June 1976.

During the last 10 years, officials of each High-Speed Congress have found it necessary to decline regretfully an average of some 40 otherwise acceptable papers for each Congress because of the limitations of available program time. For this reason, early submission of the summaries and precis is suggested by the Congress officials.

Congress Officials

W. G. Schneider, President of the National Research Council of Canada, is *Honorary President* of the Congress. *Congress Chairman* is Brian Thompson, Dean of the University of Rochester's College of Engineering and Applied Science. The *Treasurer* is Jacques Parent, Directeur, Office du Film, du Quebec. Richard L. Hummel, President of the Canadian Science Film Assn., is *Arrangements Chairman.* D. L. Clayton, President of Photographic Analysis Ltd., is Chairman of the *Exhibits Commitee.* The *Papers Committe* is headed by Martin Richardson, of the National Research Council of Canada. Stephen Rothwell, Director of the Canadian Film Institute, is Chairman of the *Publicity Committee.* The Congress *Secretary* is Jo Ann Vano.

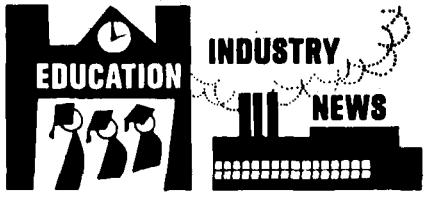
Persons other than authors planning to attend the 12th Congress (including those desiring exhibit information) should write to the Congress at the address given above for detailed program information and registration forms. The telephone number of the Congress Secretariat at the Ontario Science Centre is (416) 429-4100.

The commercial exhibit is limited to 56 booths of which about half had been reserved by October. The Congress is scheduled immediately following the summer Olympic Games in Montreal and, quite likely, many delegates will plan to attend both events. National Delegates to the International Committee on High-Speed Photographic Congress include Donal L. Clayton, Photographic Analysis Ltd., 8 Brian Cliffs Dr., Don Mills, Ont. Canada, and Carlos H. Elmer, L-W Photo, Inc., Box 875, Scottsdale, AZ 85252.

US Mailing Address for 12th Congress

Because of the recurrent mail strikes in Canada, a US mailing address has been established for prospective authors and for Conference attendees. The address is:

12th International Congress
on High-Speed Photography
c/o Mrs. Claire Louden
Eastman Kodak Co.
343 State Street
Rochester, NY 14650



The International Engineering Conference will be held 12-14 July 1976 at Iowa State University's Scheman Continuing Education Center at Ames, Iowa. Theme of the conference will be The Role of Engineering in Technology Transfer. Plans for the conference originated with the Engineering Committee for the American Bicentennial established by the Engineers Joint Council. The primary concern of the conference participants will be to show what the engineering profession can do for the development of all nations. Relating the theme of the conference to the American Bicentennial, the various ways in which existing technologies can be applied to meet specific needs will be explored. Discussions will be on such matters as where certain technologies are needed and how to apply them at the right time and at the optimum level.

The conference will be organized around five two-part sessions. Each session will have three speakers to provide overviews on the particular topic followed by a workshop session. The workshop sessions will include panels, short papers and open discussions on such topics as Energy, Transportation, Communications, Resources, Agriculture, Urbanization, and Environment with relevance to the session topic.

Contacts are being established with engineering organizations throughout the world to assist in the detailed planning and to participate in the conference. The delegate from SMPTE will be O. S. Knudsen, SMPTE Vice-President for Educational Affairs, 1976-77. The conference is under the general direction of Glenn Murphy of Iowa State University.

The American Film Institute's Center for Advanced Film Studies began the 1975-76 academic year on 26 September with an enrollment of 90 fellows. The first year class includes 62 new fellows — 32 more than were enrolled last year. The curriculum will include directing, producing, cinematography and screenwriting. Film director Jan Kadar will be Filmmaker-in-Residence. The senior faculty includes Antonio Vellani and Nina Foch. Noted visual film specialist Slavco Vorkapich will deliver a series of ten lectures during the fall. Other activities will include more than 30 weekly seminars and eight special cinematography seminars. In addition to his activities as Filmmaker-in-Residence, Jan Kadar will conduct a full-day course in Film Analysis.

The Audio Engineering Society held its 52nd Convention 31 Oct.-3 Nov. in New York. Thirteen technical sessions and four seminars covered many advances in sound recording, reproduction and acoustics. Two of the most interesting were a panel discussion on Videodisc Systems and Their Impact on Audio and a session on Architectural Acoustics. Other sessions included: Audio In Medicine; Disc Recording; Signal Processing; Magnetic Recording; Psychoacoustics; Audio In Broadcasting; Instrumentation; Electronic Music; Sound Reinforcement; and Transducers (I and II). Topics of the four seminars were: Compressors and Expanders; Echo and Reverberation; The New Tapes and Noise Reduction; and Programming the Electronic Music Synthesizer. An equipment exhibit was held as part of the convention. Audio Engineering Society's headquarters are at 60 E. 42 St., New York, NY 10017.

The International Electrical, Electronics Conference and Exposition sponsored by the Canadian Region of the Institute of Electrical and Electronics Engineers was held 29 Sept.-1 Oct. in Toronto. There were 34 technical sessions covering technological advances in industry, commerce, medicine and defense. Papers were presented by more than 200 internationally recognized authors. There were two sessions (eight papers) on the CN Tower, the highest freestanding structure in the world (see p. 385, *Journal,* May 1975). There were four sessions on Measurements and Instrumentation, a session on Satellite Communications and a session on Telecommunications Systems.

The Information Film Producers of America held their national conference 23-25 October in San Diego. Theme of the conference was Know Your Options. The technical program dealt with the production and utilization of motion pictures, videotape and slide programs. Emphasis was on multi-media, holographic (3-D) and videotape presentations. Highlight of the annual event was the CINDY Award ceremonies when gold, silver and bronze awards were presented to producers of films in some 17 categories. The IFPA

WHEN YOU RENT FROM US YOU RENT US.

There's a lot more to renting from Camera Mart than renting equipment. Sure, we offer the greatest range of cameras, lenses, accessories, lighting and grip equipment in the east. Plus sound stages, mobile location vehicles and virtually any production or post-production facilities.

For any format—film or video.

But the real difference in renting from Camera Mart is our people. Professionals with the experience, for instance, to recommend another camera better suited to your particular job or style of shooting. People who've made real contributions to the successful completion of literally hundreds of features and documentaries, thousands of commercials.

Finicky folk who are absolutely maniacal about maintaining anything that leaves our shop in first-class condition. Who look after our gear like a kid brother.

And when you walk out of Camera Mart with a piece of equipment, we don't walk out on you. If by some remote chance something were to go wrong, we wouldn't hesitate to slosh out to wherever you happen to be shooting in the middle of a downpour with a replacement. Our maintenance staff is one of the best in the business. Bona fide factory-trained technicians armed with the latest testing and repairing equipment.

So when you rent from Camera Mart, you rent a lot more than just equipment. You rent a company. The best rental company, we like to think, in the business.

CAMERA MART

THE CAMERA MART, INC.
New York, 10019 (212) 757-6977
SALES • RENTALS • LEASES

Electronics in Hollywood, Fla. Photomart is southeastern representative for such lines as National Cine Equipment, Canon Scoopic, Rosco Lighting Control Equipment, and the firm has exclusive 18-state representation for Frezzolini products. Photomart is also developing its own news photography product lines under the Phomar label.

Victor Duncan, Inc., 11043 Gratiot, Detroit, MI 48213, has been appointed exclusive distributor in the mid-west for Matthews Studio Equipment, Inc., 2405 Empire Ave., Burbank, CA 91504, it was announced by Roy Isaia, President of Matthews. The firm manufactures portable studio and motion-picture equipment including reflectors, dollys, track, scrims and light stands.

Deane R. White has been elected to Honorary Membership in the Society of Photographic Scientists and Engineers (SPSE) in recognition of his outstanding contributions over many years to the advancement of photographic science and technology. He became Editor of the SPSE journal, *Photographic Science and Engineering* in 1968. Before his retirement in 1967 he was Associate Director of Research in the Parlin Research Laboratory of the E. I. DuPont de Nemours Photo Products Dept.

Dr. White served as President of the SMPTE for the 1969–70 term of office. A detailed Biographical Note about his life and career in the photographic industry appears on page 776 of the September 1974 issue of the *Journal*.

David L. MacAdam, Editor of the *Journal of the Optical Society of America*, has been made an Honorary Member of the Inter-Society Color Council. The citation noted that Dr. MacAdam "has devoted his life to the advancement of color science. After his graduation from MIT, he joined the Research Laboratories of the Eastman Kodak Co. where he made contributions in depth to the fields of colorimetry, color photography, color television, camouflage detection and color standardization. He obtained basic data on visual sensitivities to color differences in use by most color industries and laboratories throughout the world." Among other honors he was the recipient in 1963 of the ISCC Godlove Award for outstanding contributions to the knowledge of color. In 1974 he was awarded the Optical Society of America's Frederick Ives Medal for distinguished work in the field of optics.

Thomas M. Lemons, President of TLA-Lighting Consultants, 72 Loring Ave., Salem, MA 01970, is one of the six new Fellows of the Illuminating Engineering Soc. announced at the IES annual technical conference held in July in San Francisco. The grade of Fellow is bestowed for valuable contributions to IES technical activities, to the art or science of illumination, or to directly related scientific fields. Mr. Lemons was cited for pioneering efforts in developing tungsten halogen lamps for studio, theater, television and film lighting. His activities were major contributing factors to the advance of the lighting techniques in lamp and luminaire design in these fields of application, the citation noted. He was also cited for his work in sports lighting and the use of models in lighting design. A member of the SMPTE, Mr. Lemons is the author (with Werner Block and Michael J. McGovern) of "A New Daylight Source" in the September 1974 issue of the *Journal*.

Robert T. Filep, a professor in the University of Southern California's Annenberg School of Communications and Director of USC's Learning Systems Center, has been awarded a Fulbright lectureship for India in recognition of his studies of world communication satellite systems. In India he will speak with satellite planners and will be present at the start of a major experiment in which many Indian families will be watching television for the first time. The India Satellite Instructional Technology Experiment (SITE) is presently disseminating health, family planning and agricultural information as well as entertainment to millions of Indians many of whom had never seen a television set before. From India Dr. Filep will go to Iran at the invitation of the Iranian Government to participate in a working meeting on the use of mass communications in a rapidly growing society.

Robert Kreiman, President of DeLuxe General, Hollywood, Calif., predicted that videodisc systems will not arrive at the marketplace as soon as generally expected and that they will cost more than projected figures have indicated. This prediction was made during a 22 July speech on "The Market Potential for Videodisc Systems" before the Institute for Graphic Communication. He emphasized that the videodisc is a significant technical achievement and an engineering success but he warned against overoptimism in respect to early availability and low prices. He noted that: "Just as motion pictures became more than filmed stage plays, just as television programs became something different than motion pictures, the videodisc is a new medium and it demands new media to take full advantage of its capabilities . . ." He urged that plans be made for "a realistic yet effective program for the marketing of the most exciting product of our decade."

Walter Clark has been selected as the 1975–76 SPSE visiting lecturer and he will be speaking at several SPSE Chapter meetings during the fall and winter, it was announced by the Society of Photographic Scientists and Engineers, 1330 Massachusetts Ave., N.W., Washington, DC 20005. The subject of his talks will be "Conservation of the Photographic Heritage." Dr. Clark is a widely known authority in the world of science and photography. A native of England, he founded and directed the Kodak Research Laboratories at Harrow, England, and shortly thereafter transferred to the Research Laboratories in Rochester, N.Y. He is presently Vice President of the Institute for Graphic Communications, Inc., in Rochester.

Dr. Clark is a Fellow of the SMPTE and has been a member of the Society since 1928.

Peter C. Goldmark, President of Goldmark Communications Corp., One Communications Plaza, Stamford, CT 06904, has been appointed to the National Research Council, a specially appointed scientific advisory group to assess science and technology programs in the national interest. The Council, headquartered in Washington, D.C., is made up of scientists and engineers selected with the guidance of the National Academy of Science, National Academy of Engineering and the Institute of Medicine. Announcement of Dr. Goldmark's appointment was made by Philip Handler, National Research Council Chairman. Dr. Handler noted that Dr. Goldmark will serve on the Executive Committee of the Council's Assembly of Engineering.

Robert van der Leeden has been appointed Manager of Video and Audio Systems for Europe, Africa and the Middle East, it was announced by Ampex International, 72 Berkeley Ave., Reading, Berkshire, England. The EAMA Systems Department is a group that supplies the needs of the broadcasting and recording industries for such complete video and/or audio systems as purpose-built vehicles or studio complexes. Mr. van der Leeden has been with N.O.S., the Dutch broadcasting service, since 1963. He was chairman of the EBU ad hoc group on cue-track time codes during 1972–73. In 1973 he became a member of the SMPTE group working on the Quad 2 standard.

Arch C. Luther, Chief Engineer of RCA Broadcast Systems, Camden, N.J., is the recipient of the 1975 David Sarnoff Award for Outstanding Technical Achievement, the company's top technical honor. The award, presented by RCA Chairman Robert W. Sarnoff, was in recognition of Mr. Luther's "many contributions enhancing RCA's reputation as a leading supplier of television systems." Mr. Luther has been involved in the design and development of RCA broadcast equipment since 1950 when he joined the company in Camden. He has been Chief Engineer since 1971. One of Mr. Luther's most recent accomplishments was in conceptualizing the design of the TCR-100 videotape cartridge recorder (*Journal*, p. 336 Apr. 1974) for automatic hands-off programming of the commercial station break. In the late 1950s, Mr. Luther led the first efforts in RCA Broadcast Systems to apply the new and developing solid-state technology to the design of new products. By 1961, largely as the result of Mr. Luther's activity, RCA introduced the TR-22 videotape recorder (*Journal*, p. 62, Jan. 1963), the first such machine to employ an all-solid-state design. During his career with RCA Corp., Mr. Luther has been granted 29 patents relating to broadcast systems and subsystems.

Other recipients of the David Sarnoff 1975 Awards were Steven A. Lipp, Theodore A. Saulnier, Jr., and Stephen S. Trond honored as a team for "outstanding achievement in the development and practical implementation of a high-contrast phosphor television screen." Other team awards were presented to Richard A. Baugh, Thomas H. Mehling, Willard T. Patton and George H. Stevens (of RCA Missile and Surface Radar Div.) "for outstanding contributions in the development of a multifunctional tactical phased-array radar system," and Bill Autry, Lee F. Crowley, Heshmat Khajezadeh and Andrew M. Missenda "for excellence in the design and development of a handheld, two-way portable radio."

Stephen K. Hoffman has been appointed Director of Markets for Charles Beseler Co., 8 Fernwood Rd., Florham Park, NJ 07932. He was formerly Director of Marketing for Target Systems Corp. and National Media Specialist for North American Philips Corp.

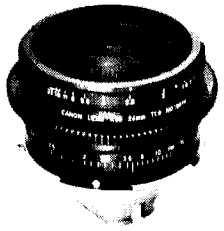
INTRODUCING THE CANON ULTRA-FAST ASPHERIC PRIME LENSES FOR 35MM CINEMATOGRAPHY

Specifically designed for professional cinematography, these exciting new lenses are the result of an extensive and painstaking research program jointly undertaken by Canon Inc. and Cinema Products Corporation, in cooperation with the Research Center of the Association of Motion Picture and Television Producers.

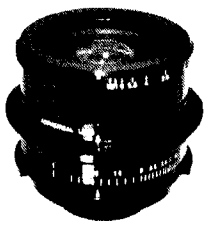
Naturally, these lenses incorporate all the latest advances in modern lens technology, including multiple anti-reflective coatings on all elements, floating elements wherever required, etc.

But it is the *aspheric* property of these lenses that makes them so extraordinary — because aspheric lens design is inherently superior to conventional lens design since it permits the best possible use of all available light.

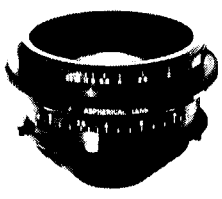
And, unlike any other series of high speed lenses currently available for motion picture use, *every lens in the Canon series is aspheric.*



24mm (T1.6)



35mm (T1.4)



55mm (T1.4)

85mm (T1.4)

The technological breakthrough

While the theory for the design of aspheric lenses has been known for quite some time†, it was not until the advent of modern computer technology and the development of computer-controlled automated machinery that it became possible to design and grind aspheric lenses in such a way as to permit *consistent high quality manufacture at a reasonable cost.*

Which is what prompted Canon and Cinema Products to launch a development program for a series of ultra-high-speed aspheric prime lenses, all supplied with BNCR-type mounts, and covering the range of focal lengths most used in professional cinematography: 24mm, 35mm, 55mm and 85mm.

A great deal of money, time and effort went into this program. The final results are more than well worth it.

Aspherics — ideal for filming at *all* light levels

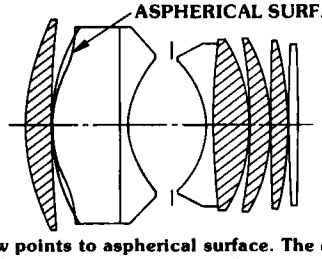
By causing the marginal rays to be in sharp focus, and, at the same time, rejecting random or spurious rays, the Canon aspheric lenses improve definition and sharpness at the edges and reduce flare when the lens is *wide open.*

Shooting night-for-night with available light — the aspheric lens wide open — at 25 footcandles and even lower, with nothing but neon signs and street lamps for illumination, there's virtually no halation. The Canon aspherics just take the light in: penetrating the scene, holding all the detail.

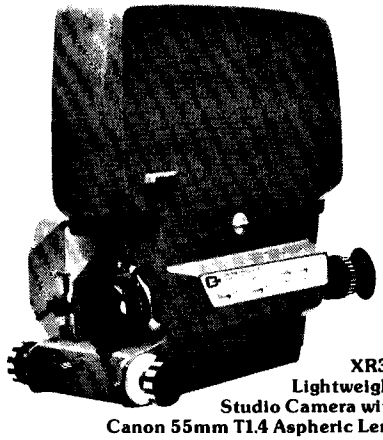
The Canon aspheric lenses minimize uncontrollable flare (with its concomitant loss in contrast and resolution) and improve the definition and contrast of the scene *regardless of variation of light levels within the scene.* Even at the highest levels of illumination.

The result on film is photography that is remarkably clear and sharp, well defined and well balanced, with good color rendition and saturation, especially with regard to flesh tones.

Which makes the Canon aspheric lenses ideal for filming under any and all light conditions. Night-for-night with available light, as well as in broad daylight, or on a well lit sound stage.



Arrow points to aspherical surface. The deviation from the normal spherical curve is exaggerated for illustrative purposes.



XR35 Lightweight Studio Camera with Canon 55mm T1.4 Aspheric Lens

Let your eyes convince you

Ask your dealer (or call Cinema Products) to arrange for a screening of our dramatic 35mm test reel comparing the Canon aspherics with other high speed lenses for motion picture use.

Before you start on your next film project, shoot some test film of your own.

Your eyes will convince you. The Canon aspheric prime lenses are superior to any other high speed lenses currently available for 35mm cinematography.

---

†*Descartes, the French philosopher and mathematician, had already suggested that the use of non-spherical surfaces might reduce optical abberation. That was way back in 1638.*

Exclusive world-wide distribution by:

cinema products CORPORATION

Technology In The Service Of Creativity

2037 Granville Avenue, Los Angeles, California 90025
Telephone: (213) 478-0711 ■ Telex: 69-1339 ■ Cable: Cinedevco