In 1936, he became a member of the faculty of the Technical University of Berlin (Technische Hochschule Berlin) and in 1939 he became lecturer there.

After 1945, he was appointed provisional director of the Institute for Applied Photochemistry at the Technical University of Berlin. At the same time, in the capacity of chief engineer, he built, in Babelsberg, the Research Institute for Cinematography, Sound Film, Photo-Technology and Optics (Forschungsinstitut für Kinematographie, Tonfilmtechnik, Lichttechnik und Optik). In 1948, he was called as associate professor (extraordinarius) and acceded to the chair for Applied Photochemistry and Film Technology. After a full professorship was restored to the chair, the rank accorded it under Privy Councillor Miethe, Dr. Narath became, in 1957, professor and Director of the Institute.

Thereafter, he expanded his field of endeavor and turned also toward the preparation of photographic emulsions, especially those used for nuclear research. But he also carried out in his Institute a number of interesting investigations into plastic emulsions, gelatin, and related problems. Together with H. Lichte he wrote, in 1941, *Physics and Sound Film Technology* (*Physik und Technik des Tonfilms*). The fourth expanded edition of this standard text will appear shortly.

section reports

The Atlanta Section met October 3 at WSB-TV with an attendance of 23. Bill Craig, Southeastern District Manager, Ampex Data Products Co., addressed the group. His subject was: "The Magnetic Recorder as an Instrumentation Device."

During the evening basic magnetic recording theory was discussed and some of the elements of a recording system were illustrated. Differences in design between recording and playback heads were shown. The need for tape of higher quality than that necessary for audio and visual work was emphasized.

Different methods of encoding information and a discussion of the advantages of each were presented. Of particular interest was a description of the various methods used to record multiple signals simultaneously.

Several applications of magnetic tape-recording equipment were shown. The presentation was well illustrated with color slides. A question-and-answer session was held after the meeting.—W. R. Sandell, *Secretary-Treasurer*, c/o Kodak Processing Lab., 4729 Miller Dr., Chamblee, Ga.

The Canadian Section met at the Main Studio of Robert Lawrence Productions in Toronto for the September 15 meeting. Eighty-three members were present.

The leading topic of a two-part program for the evening was a description of the new Thermoplastic recording technique by Peter E. Pashler of the Electron Physics Research Dept., General Electric Co., Schenectady, N.Y. The fundamentals of the process and the equipment involved, were illustrated by the showing of slides, followed by projection of two samples of film which had been pre-recorded at the GE Laboratory in Schenectady. Interesting comparisons were made between photographic film, magnetic tape and thermoplastic film, as to their relative abilities for information, storage and playback.

During the coffee break (Courtesy of Braun of Canada Equipment, Ltd.) Dr. Pashler was kept busy re-running his demonstration films and answering questions.

Following the coffee break, A. Kufluk and Leslie Holmes, both of the Ryerson Institute of Technology in Toronto, collaborated in presenting a description of the facilities and curricula at Ryerson for those preparing to enter the broadcasting or motion-picture industries. Teaching facilities of broad scope have provided Canada with many valuable graduates to these industries since the courses were initiated in 1948.

A pleasant pre-meeting dinner with the speakers and several of the Toronto SMPTE executive group was enjoyed at the Town and Country restaurant.—R. B. MacKenzie, *Chairman*, Program Committee, Toronto Group, Canadian Section, MacKenzie Equipment Co., 433 Jarvis St., Toronto 5, Ont.

The Chicago Section met Tuesday evening, September 20 in the auditorium of the Portland Cement Assn. The meeting was opened by Philip E. Smith, Secretary-Treasurer of the Section, who requested Jack Behrend, Program Chairman, to give a brief indication of the year's programs. After Mr. Behrend's report, the meeting was turned over to the staff of the Portland Cement Assn.

G. T. Kennedy, President, gave a description of the Association and explained how the Educational Film Bureau fits in with the overall work of the organization.

Carl Ziegler, Director of the Educational Film Bureau, described the work and organization of the bureau and its general mode of operation.

Art Mandler of the Film Bureau discussed the details of the various productions made by the Bureau including such phases of work as scene writing, dialogue, settings, emotional audience reaction, etc. His talk was illustrated by some excellent excerpts from various productions made by the Bureau.

Phil Walusek, engineer for the Bureau, described various technical problems and methods relating to sound production, titling, special effects, etc.

The meeting was concluded with an orientation film, prepared by the Bureau, which contained many humorous overtones. All who attended the meeting agreed that it was highly informative and entertaining.—Philip E. Smith, *Secretary-Treasurer*, c/o Eastman Kodak Co., 1712 S. Prairie Ave., Chicago 16, Ill.

The Hollywood Section met on September 20 at ABC Studio A with an attendance of 150. Guest speakers were Neal Keehn, Regional Vice-president, General Film Laboratories, who discussed "The Production of Nontheatrical Films"; and Charles "Cap" Palmer, Head of Parthenon Pictures, whose subject was "Some Specifics on the Production of Business Films."

Mr. Keehn gave an entertaining and informative presentation regarding the production and distribution of nontheatrical films. Excerpts from several film productions were shown to illustrate the broad range of subject matter and production techniques employed in the nontheatrical film field.

As a producer of business films, Mr. Palmer outlined the differences in purpose, production techniques, and distribution of business films as compared to theatrical entertainment films. An excellent demonstration reel, consisting of excerpts from several business films produced by Parthenon Pictures, was shown.—Ralph E. Lovell, *Secretary-Treasurer*, 2554 Prosser Ave., Los Angeles 64.

The Nashville Section met in Memphis on July 16 and toured three new Kodacolor studios there. Twenty-five members were present. Charles Caldwell of WMCT, Memphis; and Frank M. McGeary of Motion Picture Laboratories, served as guides.

The group gathered first on the sound stage of Fotovox, Inc., for chicken dinners supplied by Motion Picture Laboratories, Inc. The sound stage was lighted for shooting and all members present were given Kodacolor negatives for their still cameras so that they could photograph a model. She appeared in various costumes, one a swimming suit. The Chairman asked her to drape herself with the section banner. The result: an interesting advertisement for SMPTE.

The exposed film was rushed to MPL for processing and printing while the group toured the new television studios of WMCT. Charles Caldwell, film director, guided the tour and members reported that his comments added spark to the undertaking.

The next stop was MPL for an inspection tour of the laboratory facilities and a short talk on "Kodacolor" by Frank McGeary. The film shot at Fotovox was ready and the members saw the results of their own photography on the medium that they had been discussing.

This was our fun meeting of the year, but still there were opportunities for learning something new. It seemed to bring the group closer together and everyone is still talking about it.—Frank M. McGeary, *Secretary-Treasurer*, c/o Motion-Picture Laboratories, Inc., 781 S. Main St., Memphis 6, Tenn.

The Nashville Section met on September 17 at the Southern Bell Conference Room with an attendance of 20. Guest speaker George Gill of Century Lighting Company discussed "Lighting for Television."

The meeting began with a showing of Academy Award nominee, *City of Gold*, produced by the Canadian Film Board. The film was a fine example of the use of still photographs in a motion picture.

Mr. Gill's paper on television lighting included problems of the past, situations encountered today, the predictions for the future. He gave an illustrated (slides) talk on a television studio in Miami in which his company had installed a rail lighting system. The slides included diagrams, blue prints, and shots of the studio in use which illustrated well the rail system.

A question period followed Mr. Gill's formal presentation. During this time he gave his reasons for the use of particular details in his setup (e.g. a 14-ft grid) and compared notes with the television people present at the meeting as to the use of dimmers, etc., in their setups. Although his work at the studio was intended as a demonstration for television, it has application to and interest for motion-picture people as well.

Coffee and doughnuts were served before and after the meeting. Some of the members stayed for further discussions with Mr. Gill.—Frank M. McGeary, *Secretary-Treasurer*, c/o Motion-Picture Laboratories, Inc., 781 S. Main St., Memphis 6, Tenn.

The New York Section met September 14 at the World Affairs Center Auditorium with an attendance of 65. Don Malkames, a director of photography, addressed the group. His subject was "Antique Motion Picture Equipment."

Mr. Malkames, although prominent as a director of photography, is also well known for his collection of antique motion-picture equipment. He opened this meeting with a 3-reel motion picture illustrating many of the unique items in the collection maintained in his home. After the film presentation he displayed and demonstrated several of the older and rarer cameras from his collection. He discussed some of the earliest beginnings of the motion-picture art and described some of the old techniques and equipment used.

After the coffee break and social period, an interesting question-and-answer session, in which many members of the audience participated, was enjoyed.—James W. Kaylor, *Secretary-Treasurer*, c/o Movielab Film Labs, Inc., 619 W 54 St., New York 19.

The San Francisco Section met September 13 at the Studios of KGO-TV with an attendance of 20. Robert J. Nissen, chief engineer, KQED (San Francisco's noncommercial television station) was the guest speaker. His subject was, "D-C Restorers in Television Receivers."

Mr. Nissen for some years has been carrying the fight to various manufacturers in an attempt to have d-c restorers included in modern receivers. With a series of slides the basic problems of the two types of popular restorers were explained and the reasons for their need shown. (For a complete technical explanation of their operation see the August 1960 *Journal*, pp. 521–527.)

In addition to the slide lecture a live studio camera chain was fed into a Conrac monitor, which can have its restorer switched on or off. The change in

the picture quality was very pronounced in the off position. A series of cards going from white to black was shown under both restorer conditions. The lack of black under restored conditions became very apparent. A question-and-answer period followed the lecture-demonstration.—Frank Mansfield, *Secretary-Treasurer*, 57 Stoneyford Ave., San Francisco 24.

The San Francisco Section meeting of October 11 took the form of a tour through the Radio and TV Broadcast Departments of the John O'Connell Vocational School. About 20 members attended.

Ken Nielsen and Ken Dragoo, instructors in charge of the Radio and TV Broadcast Departments, were the speakers of the evening. Mr. Dragoo described how the department was first set up and the equipment that was used. Mr. Nielson conducted the members on a tour of the studios where image-orthicon studio cameras and complete film pick-up equipment were in operation. In addition to the television equipment the students also operate an FM station (KALW) on a regular schedule. —Frank Mansfield, *Secretary-Treasurer*, 57 Stoneyford Ave., San Francisco 24.

The Rochester Section met jointly with the Society of Photographic Scientists and Engineers on September 30 to hear guest speaker I. C. Abrahams of General Electric discuss a new and interesting system of "thermoplastic recording." The attendance by a record crowd of 288 was an indication of the interest in this subject.

Thermoplastic recording can be briefly described as a system which combines the processing speed and versatility of magnetic recording and the storage capacity of photography. Information is written at extremely high density by means of an electron beam on a film consisting of a low melting thermoplastic material. The information can be projected as a black-and-white or full color image, or can be converted to an electrical signal. The tape, which is processed by quick heating and cooling, can be readily erased and reused.

Mr. Abrahams presented a very good off-the-cuff account of the system and demonstrated one means of read-out of the recorded image by using a 16mm projector with a schlieren optical system.

To start the meeting, a very delightful 16mm color film produced by British Transport Films entitled *Journey Into Spring* was shown. Prior to the meeting, Chairman Connor held a meeting of the Section officers to discuss plans and programs for the balance of the year. Several officers and guests adjourned to have a social hour and dinner with the speaker of the evening.—W. G. Hill, *Secretary-Treasurer*, 10 Hillcrest Ave., Binghamton, N.Y.