



Reporter

OFFICIAL PUBLICATION OF ROCHESTER INSTITUTE OF TECHNOLOGY

Volume 34

Rochester, N. Y., September 6, 1959

Exposition Extra



THE DEPARTMENT OF PRINTING, which is most completely equipped degree granting located in the George H. Clark Building, is school of printing to be found anywhere in generally recognized as the best housed and the world.

RIT's Programs Unique Educational Operation

Rochester Institute of Technology is currently engaged in a three-part program in the Graphic Arts—research, information, and technical education. Through development and growth in these areas, the Institute today enjoys a unique position among all institutions of higher education.

Although it can boast of a 130-year-old heritage in higher education, it has taken only a little over two decades for the Institute to gain the stature it now enjoys in the field of Graphic Arts education and research.

It has been only during the elapsed time since the last Educational Graphic Arts Exposition that RIT has established and developed its Graphic Arts Research Department which today employs one of the largest staffs in the United States, and is the only research department of its kind on any college or university campus.

The rapid growth of the department can be attributed, in no small measure, to the fine support and cooperation given to it by many firms interested in development and research within the graphic arts. Its highly-trained staff, headed by Warren L. Rhodes, is constantly endeavoring to improve procedures and processes which will, in the long run, benefit all of the graphic arts industry.

Information is not only disseminated by the Graphic Arts Research Department's Information Service, particularly through its bulletin "Graphic Arts Progress," but is also an integral

part of the educational aspects of the department through reports of its findings, papers by its scientists and technicians, and through its cooperation in RIT's annual summer seminar, "Quality Control for the Graphic Arts Industries."

During its 22-year history, RIT's Department of Printing has grown in size and reputation until today it attracts students from nearly all the states and many foreign countries. Under the leadership of Department Head Byron G. Culver, its faculty of skilled and respected teachers offers instruction to more than 300 students preparing for management roles in the ever expanding areas of the graphic arts. Through the department's instruction the Institute supplies a constant flow of trained man-power to the industry, graduates who in turn will make their offering to the graphic arts through research, information or education.

Additional detailed information regarding RIT's graphic arts programs will be found in other stories in this edition of the RIT Reporter. You are also encouraged to submit questions to members of the college staff at the RIT booth.

Institute Display Sent To Graphic Arts Show

Rochester Institute of Technology is actively participating in the seventh National Graphic Arts Educational Exposition. The affair is being held in the New York Coliseum during the week of September 6, 1959.

RIT's colorful booth is located on the first mezzanine floor of the Coliseum. It is number 229 on Exposition listings. The Institute was one of ten educational groups approved by the Exposition's Board of Directors to exhibit at the graphic arts show.

The booth is designed to present to Exposition visitors a graphic story of RIT's Educational Services to the Graphic Arts Industry.

This year's activities mark the second consecutive time that the Institute has participated in the Graphic Arts Exposition. RIT was represented at the last exposition which was held in Chicago in 1949.

Occupying an area of 12 feet by 17 feet, the booth is equipped to display color photographs of the Institute's facilities and examples of student typography.

During the course of the National Exposition, the booth will be manned by members of the faculty of the Department of Printing.

RIT's colorful booth, featuring a rotating disk bearing the symbols of the Institute and the Graphic Arts Research Department, was designed and constructed by WA Displays, Inc., of Rochester, New York. Serving as president of the display firm is Richard A. Williamson, a graduate of RIT's School of Art and Design.

The large central display unit, which has been used in the construction of the booth, was made possible through the generosity of the Advertising Council of Rochester, Inc.

Color photographs used as part of the Institute's booth are the work of two faculty members from the Department of Photography at RIT. Illustrating some of the aspects of the college's graphic arts programs, the photos were prepared by Mr. Robert Bagby and Mr. Donald L. Smith.

Several pieces of literature describing the graphic arts facilities at the Institute are being distributed at the booth. This printed informational material is made available for exposition visitors who are interested in RIT's graphic arts programs.

Planning of the Institute's participation in the exposition was a joint project of the Department of Printing and Graphic Arts Research. The preparations were co-ordinated by the Director of Public Relations, Mr. Alfred L. Davis. Several faculty and staff members contributed their time and talents to specific areas of the program.

If you have not already done so, the Rochester Institute of Technology cordially invites you to view the booth and take the opportunity to meet members of the Department of Printing faculty

Information Available

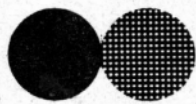
Booklets, folders, the official 1959-60 catalog, and other printed information concerning the educational and research programs at the Rochester Institute of Technology are available at the Institute's booth, No. 229, which is on the first mezzanine floor.

Faculty and staff members from the Department of Printing and the Graphic Arts Research Department are also on hand to answer any questions.



LABORATORY FACILITIES second to none. Students in the Department of Printing develop both operational skills and technical

knowledge in the 14 specially designed and splendidly equipped up-to-date instructional laboratories.



EDITORIAL

Through Achievement, A Contribution

"No other achievement has contributed more to the advancement of mankind than this art of printing and no other art more universally serves all phases of human endeavor—intellectually, and industrially, than does printing."

This paragraph was written in 1955 by a printing student for the undergraduate newspaper of Rochester Institute of Technology. As the members of the Graphic Arts industry gather for the 7th national exposition for their industry, we feel that this paragraph is expressive of the regard that the Rochester Institute of Technology holds for the graphic arts industry.

Maintaining this regard, we feel that we should pay due tribute to the International Association of Printing House Craftsmen, and to the Printing Industry of America who are sponsoring this Exposition which will prove a valuable milestone for the industry and in unprecedented experience for all who attend.

As an institution of higher learning, having two departments dedicated to a threefold program of education, research, and information on graphic arts, we feel a great deal of pride in having been invited to be a part of this 7th National Graphic Arts Exposition. We will look forward to having the opportunity of continuing to serve the graphic arts industries of the world in future years. We firmly believe that the knowledge that will preserve the rights and dignity of the individual, can best be conveyed through the intelligent use of the printed media. And upon this premise and the occasion of this industry-wide exposition, we take pleasure in paying tribute to an industry which we are privileged to serve through our educational, research, and information services.

Best wishes for an enjoyable and educational exposition!

The Invitation Was Appreciated!

Rochester Institute of Technology is proud to be a participant at this the 7th Educational Graphic Arts Exposition. We doff our mortar boards to all who have made this such an important occasion within the graphic arts industries and educational fields. We are happy for the opportunity to be a part of "the best show in town."

Our congratulations to Gus Giegengack and his Board of Directors who have made this exposition the finest ever, and, in particular, our best wishes to all the fine folks who have stopped by Booth 229 to visit and get acquainted. Now that we know you, may we extend to all of you a most sincere invitation to stop in and visit with us when you are in the vicinity of Rochester.

The latch key is always out!

Our thanks to the Advertising Council of Rochester and W. A. Displays, Inc., for their help in making the Institute's exhibit possible.

Speaking of Facts and Figures ...

This paper was printed on newsprint by the ATF Webendorfer 4-unit perfecting offset press in the Graphic Arts Research Department at the Rochester Institute of Technology.

Newsprint Stock: For research, contributed by the following companies: Bowater, Consolidated, Ltd., Great Northern, International, Spruce Falls, and Wright Co.

Inks: Pope and Gray, Inc., 3-color web offset for newsprint.

Plates: 3M Presensitized Aluminum.

Blankets: Rapid Roller and Vulcan Duroflex.

Printing Speed: This issue, 12,500 impressions per hour.

Photography: Robert Bagby and Donald L. Smith.

Typographical Data: Headlines for this edition were set on the Ludlow Typograph utilizing the Tempo series of types. The body type was set on a Teletypesetter equipped Linotype Blue Streak Comet. The body type is 8 point Corona with Boldface No. 2 on a 9 point body. After page make-up in the Hand Composition Laboratory, reproduction proofs were pulled on a Vandercook Precision Proof Press.

Culver, Rhodes Direct Three-Phase Printing Program at Institute

Byron G. Culver, head of the Department of Printing at RIT, has long been a resident of Rochester. After graduating from the Institute's Department of Art and Design he served for almost twenty years as a member of the department's faculty as an instructor in design, lettering, drawing, history of art and other related subjects.

When the Department of Printing was established in 1937, Mr. Culver was named department head and given the responsibility of organizing the program, ordering equipment and developing teaching facilities.

An active interest in the many phases of printing and of graphic arts education has carried him into a number of professional and service organizations.

In addition to supervising the Institute's printing program, Mr. Culver is also an active member of his department's teaching staff and instructs classes on a regular schedule.

In 1955 Mr. Culver was the recipient of the Harry J. Friedman award in recognition of his outstanding contributions to the development and growth of graphic arts education.

Warren L. Rhodes, head of the Graphic Arts Research Department at RIT is a native of Colorado. He attended the University of Colorado at Boulder both before and after military service.

After graduating from the Department of Photography of the Rochester Institute of Technology he became affiliated with the Institute's Graphic Arts Research Department. In 1955, Mr. Rhodes was appointed head of the department.

In addition to active participation in local printing club affairs, he is a member of the Technical Association of the Graphic Arts, the Technical Association of Pulp and Paper Industry, the Research and Engineering Council of the Graphic Arts Industry. He also serves as editor of the Inter-Society Color Council "Newsletter."

His research activities have been in such fields as statistical quality control, sharpness, tone reproduction, color control and color reproduction.

Reunion Scheduled For RIT Printing Alumni

Graduates of Rochester Institute of Technology's Department of Printing have scheduled a reunion in conjunction with the 7th National Graphic Arts Exposition. The affair will be held on Sept. 11, 1959.

The reunion will be held in the form of a dinner meeting at the Hilton Statler Hotel. The event is scheduled for 7 p.m. at the Hotel which is located at 33rd Street and 8th Avenue.

Following an informal plan, the affair has been planned to include wives of alumni attending the affair. Approximately two hundred alumni and guests are expected to attend.

Open to all graduates of the Department of Printing, the original suggestion for the reunion stemmed from the class of 1954. Two members of this class, David Essrow and Donald Goldman had suggested that a reunion for their class be held. However, after a discussion with a staff member of the Alumni



"You can spot a printing student every time!"

Honor Fraternity To Hold Convention At Exposition

Gamma Epsilon Tau, the National Collegiate Graphic Arts Honor Society, will be holding its annual convention on September 8, 1959, at Columbia University in New York City.

The national meeting of the group is being held in conjunction with the Seventh National Graphic Arts Exposition at the New York Coliseum.

In making the announcement of the national GET meeting, Exposition President Giegengack made the following statement, "Welcome to the gathering of the printing clans. This brings to thirteen the number of national organizations of the graphic arts industry which will meet in New York during Exposition Week."

Gamma Epsilon Tau, the International Collegiate Honor Society, was founded in 1954 to encourage and recognize scholastic achievement among college students in graphic arts programs.

GET is also active in promoting the importance of professional education as preparation for a career in the Graphic Arts Industry.

The fraternity is affiliated with

the Education Council of the Graphic Arts Industry and is currently sponsored by the International Graphic Arts Education Association. There are over 300 student and alumni members in the organization.

Rochester Institute of Technology's Chapter of Gamma Epsilon Tau will be represented at the Columbia meeting. Known as Zeta Chapter, the organization was formed on the Rochester Campus in 1955 and is the third oldest chapter of the organization.

Approximately twenty-five members of the Department of Printing student body are members of Gamma Epsilon Tau. In addition to the active group, the RIT contingent of GET Alumni, number approximately seventy-five. A 3.000 cumulative grade point average for all courses in the college curriculum must be maintained by the student to remain a member of the organization.

RIT's Zeta Chapter is responsible for the publication of The Typographer, the Department of Printing's Graphic Arts publication.

Relations Office, the event was expanded to include all alumni of the printing program at RIT.

Planning for the event has been handled by Mr. Essrow, Mr. Goldman and the Institute's Alumni Relations Office. The arrangements for the location of the dinner meeting were handled by Mr. Arthur Borock '56, of the Letter Guild, New York.

Contact with the members of the department's alumni was handled by a series of direct mail letters. The original mailing was made only to the class of '54. It consisted of a questionnaire regarding the feasibility of a reunion at the Exposition. Due to the fine response to this mailing, the affair was expanded and a questionnaire mailed to all graduates of the department.

Commenting on the plans for the reunion, Mr. Eugene T. Natale (Chem. '42), president of the RIT Alumni Association, stated: "Terrific! I feel very strongly that our Alumni Asso-

ciation needs such activities whether they be departmental or general in nature. Such gatherings can do a great deal for our alumni program. I sincerely wish that my schedule would permit me to attend this affair. I am sure that it will be a successful reunion."

Program for the evening will be informal in nature providing the alumni with ample opportunity to exchange greetings and renew acquaintanceships.

Mr. Byron G. Culver, Head of the Department of Printing, will address the gathering. Subject of his short talk will be a report to the alumni of the present and future course of the Institute's Graphic Arts Programs.

Reservations for the affair will be accepted by Mr. Borock until 12:00 noon, Wednesday, Sept. 9, 1959. He may be contacted at the Letter Guild, 136 West 42nd Street, New York 36; telephone, OXford 5-3590.

ROCHESTER INSTITUTE OF TECHNOLOGY
Rochester 8, N. Y.

Please send me information on the following printing programs:

Check

_____ Degree programs

_____ Summer special programs

Name _____

Street _____

City _____ Zone _____ State _____

Steady Growth Develops Institute As Leader in Technical Education

The Rochester Institute of Technology is a privately endowed, non-profit, gift-supported institution chartered in 1830 by the legislature of New York State.

The Institute had its origin in the founding of the Rochester Athenaeum 130 years ago by a group of civic leaders who saw a need for an educational and cultural institution in the frontier village which later became the city of Rochester.

With the rapid growth of Rochester's industries came the need for capable technicians and supervisors. This growth led to the founding of Mechanics Institute in 1885.

The merger of the Rochester Athenaeum and Mechanics Institute came only six years later. This proved to be a pioneer educational effort to prepare each student for competence in both his occupation and his civic life.

Renamed the Rochester Institute of Technology in 1944, the Institute has pioneered in many fields of education, including mechanical drawing, home economics, photography, printing, and crafts. Its cooperative education program was one of the first in the country.

RIT began its second century with the founding of the Department of Photography in 1930. It has since added the Department of Printing, the Counseling Center, The School for American Craftsmen, the Graphic Arts Research Department, and the Business Administration Department.

The Institute now includes ten departments of specialized instruction, with an annual enrollment of more than 2,000 students. These students come from nearly every state and many foreign countries.

Evening Division classes at the Institute serve over 5,000 additional students each year.

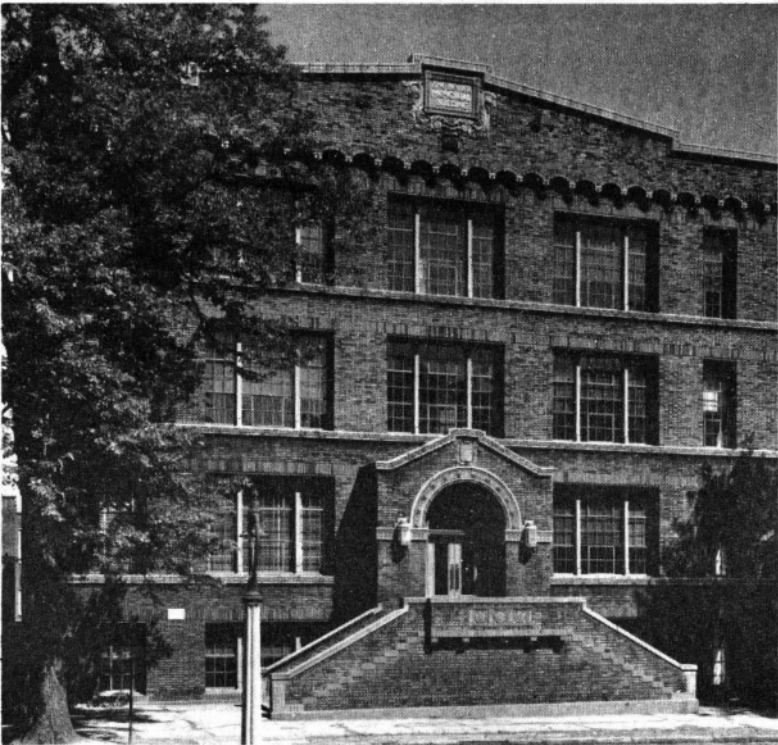
Institute facilities and eight major buildings are valued at over eight million dollars. Its endowment fund is in excess of ten million.

RIT has a continuing building and endowment program to include new buildings for a Graphic Arts center, the School for American Craftsmen, student union, classrooms, etc. Estimated costs for this development program is nearly \$30 million, of which over nine million has been raised to date.

The new Ritter-Clark Memorial Building, which houses the gymnasium and indoor ice rink, and Nathaniel Rochester Hall (the men's residence hall) have been made possible through the development program.

During the past summer the Institute library was moved to a new location. It is now housed in its own completely remodeled building which provides increased space for stacks and study areas.

RIT is a degree-conferring institution chartered by the Regents of the University of the State of New York. It is accredited by the Middle States Association of Colleges and Secondary schools. It is also a member of the American Council on Education, and the Association of Colleges and Universities of the State of New York.



BEVIER BUILDING—The entire four floors are occupied by the Department of Art and Design. The equipment and studios are considered superior in every respect for both teaching and learning.

RIT Offers Ten Programs

The instructional programs at the Rochester Institute of Technology are centered in five divisions. These divisions are made up of ten specialized departments.

The Division of the Arts includes the Dept. of Art and Design, and the School for American Craftsmen. Students in these two departments are trained for a variety of positions in arts and crafts as relate to commerce, industry, design, advertising, and merchandising.

The Dept. of Business Administration, the Food Administration Dept., and the Retailing Dept. make up the Division of Business. Programs in these three departments prepare students for careers in commerce and business administration; food management and dietetics; and all phases of retail management.

Three departments compose the Division of Applied Science: Chemistry, Electrical, and Mechanical. Programs are geared

to prepare students to enter fields of industrial chemistry; power and machine design, tool engineering, and screw machine technology.

The fourth division contains the Photography Dept. and the Dept. of Printing. Major objectives are to train qualified young men and women for careers in the many aspects of photo technology, printing, and the graphic arts.

General Education comprises the fifth of RIT's teaching divisions. The principal objective of this division is to provide courses of general nature in four major areas: Communications, Humanities, Social Sciences, and Natural Sciences. Courses are available only to students enrolled in any one of the ten technical departments.

All ten departments have programs leading to A.A.S., B.S., and B.F.A. degrees. The Dept. of Art and Design offers a M.F.A. degree program.



LIBRARY—The Institute library moved into this completely remodeled building during the past summer. Increased stack, reference, and study areas help to meet needs of growing student enrollment.

Many Activities Available

A broad variety of extra-curricular activities are available to students at the Rochester Institute of Technology.

In the field of intercollegiate sports there are teams for both men and women. Basketball, wrestling, fencing, soccer, baseball, and tennis are open for men. The women's fencing team competes in meets with other colleges.

Along the social lines there are fraternities and sororities on the RIT campus.

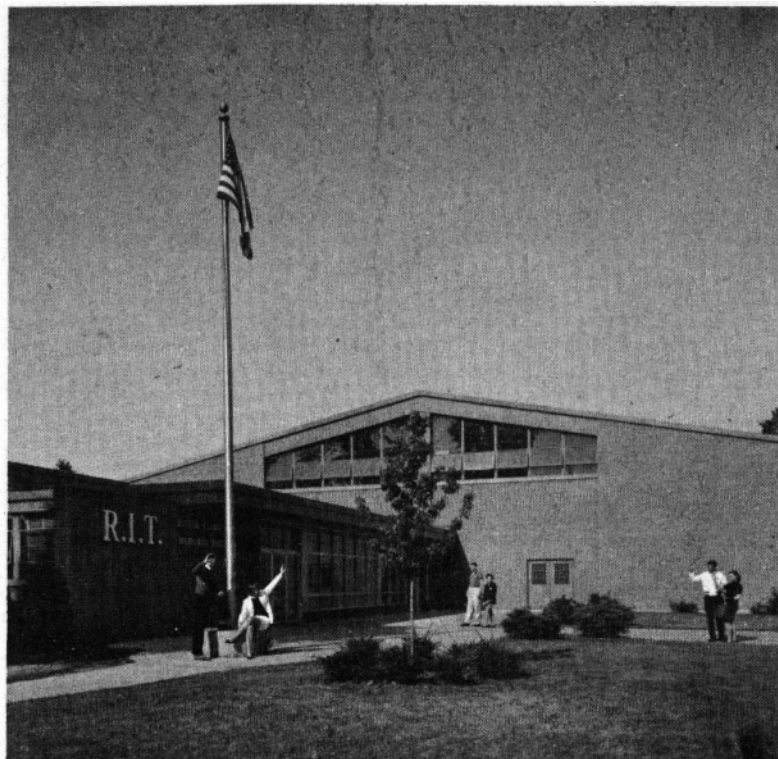
In the publications area, the RIT year book "Techmila" and the Institute newspaper, the "RIT Reporter" provide attrac-

tive activities for those interested in journalism, photography, art, and the technical aspects of publishing.

Clubs and professional organizations are open to interested and qualified students in all departments.

Religious activities on campus are centered in Newman Club, Hillel, and Student Christian Fellowship organizations.

Other groups open to interested students are the Modern Jazz Society, the Masquers (dramatics), Radio RIT, Ski Club, and the International Students Club.



RITTER-CLARK MEMORIAL BUILDING—Houses fine skating rink and large gymnasium, and offers unusual facilities for students to participate in various forms of sports and recreational activities.



NATHANIEL ROCHESTER HALL—Spacious eleven-story men's residence hall, equipped with automatic elevators, provides living, study, and recreational facilities in the immediate campus area.



OFFSET PLATEMAKING
 Students learn methods and practice techniques of making various types of plates. Modern laboratory equipment and control devices give students the opportunity to develop basic understanding and skills in this area.



COLOR SEPARATION DARKROOM
 Separations are made directly from transparent originals to be used in conjunction with web offset newspaper production project. Temperature control is utilized and techniques are standardized to insure uniform color balance.

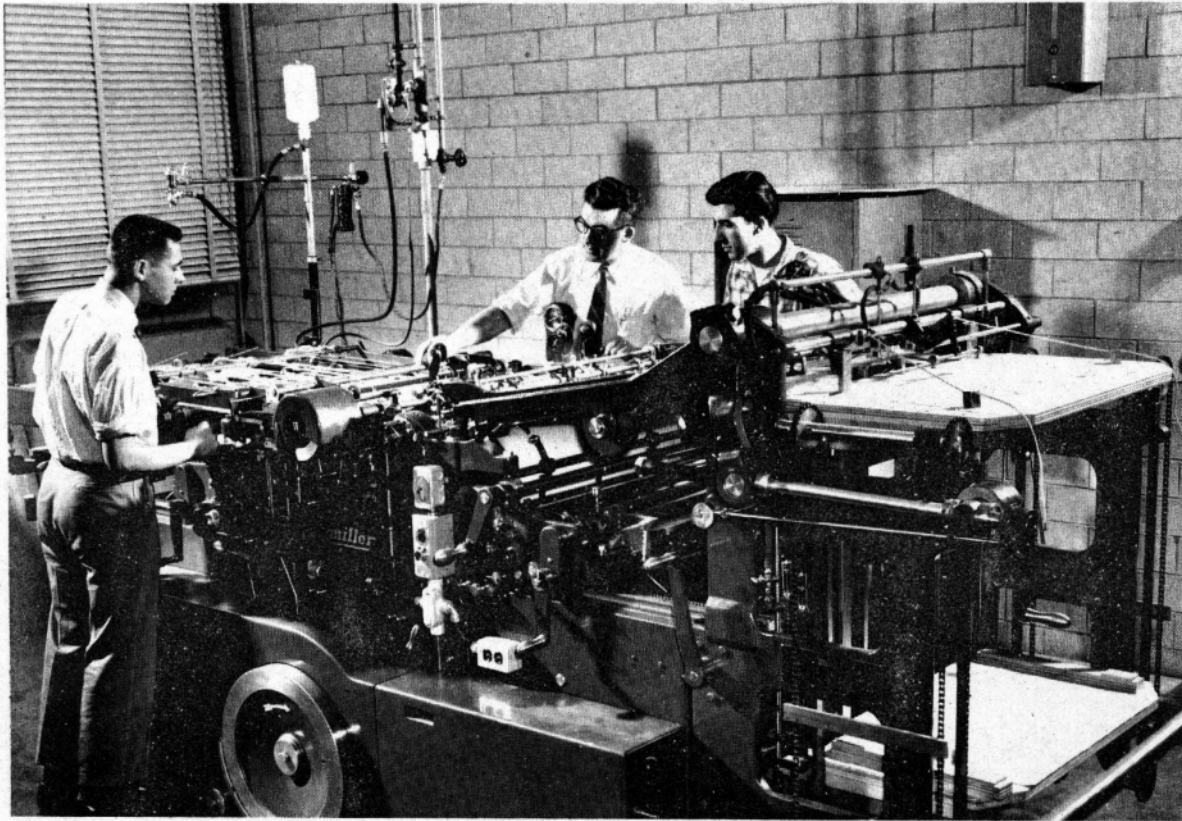
RESEARCH • INFORMATION • TECHNICAL EDUCATION



4-COLOR WEB-FED OFFSET PRESS
 This perfecting press is utilized as research equipment for testing paper, inks, blankets and plates. It is used to solve problems and develop new production techniques in the area of offset press operation.



PRINTING DESIGN
 Discrimination in the areas of art, design, technical applications is developed through classroom and laboratory experiences. Students receive theoretical background and functional knowledge of modern techniques and methods.



STUDENTS IN THE Department of Printing learn both theory and the practical aspects of machine operation. Lectures in the class room plus experience in the laboratory give the individual student a depth of knowledge

and a sound appreciation of modern printing methods and procedures. Size of class sections is kept small, and student-faculty ratio provides for close supervision and guidance in the laboratories.

Two Degree Programs Stress Technology, Administration

High school graduates who are interested in college-level training in printing technology and printing management are offered two types of programs by the Department of Printing of the Rochester Institute of Technology.

Upon completion of appropriate program requirements students are awarded either the Associate in Applied Science degree or the Bachelor of Science degree.

The basic program offered by the department normally requires three years and leads to the Associate in Applied Science degree. This program is designed to provide a broad technical background in graphic arts, to promote personal development, and to prepare the individual to meet requirements for initial employment and for eventual promotion to positions of importance.

Foreign Students Attend Institute

Many foreign countries are represented each year in the Department of Printing.

Since the founding of the department in 1937, students from some 20 countries have come to the Rochester Institute of Technology for the purpose of receiving college-level training in the areas of printing technology and printing management.

Students from the following countries have recently been enrolled in the various RIT printing programs: Canada, Mexico, Nicaragua, Colombia, Argentina, Turkey, Israel, Iceland, Philippines, Viet-Nam, Indonesia, Iraq, India, Korea, Japan, England, Nationalist China, West Indies, Sweden, and Switzerland.

Upon completion of their training in printing these students return to their countries to take active part in promoting various phases of the graphic arts from production techniques to the complex problems of research and development.

The A.A.S. program includes courses in a wide variety of technical and related subjects. Considerable emphasis is placed on the letterpress and lithographic processes, and upon such areas as production planning, estimating, layout, design, copy preparation, etc.

Technical courses are arranged in three levels. Introductory courses in both letterpress and lithography are required in the early phases of the program. These are followed by selections of intermediate and advanced technical courses. These electives provide the opportunity for some choice of emphasis within the various technical areas. Requirements are such, however, as to assure proper breadth of training.

Required courses in general education subjects help to add balance to the total program.

Students successfully completing the basic three year course may terminate their training at this point. If additional training is desired, they may elect to continue for an additional year in a more advanced program and become candidates for the Bachelor of Science degree.

This program has been designed to intergrade printing technology, up-to-date management techniques and methods, science, and a functional background in liberal arts.

Ultimate goals of graduates of the B.S. program include employment in technical positions involving adaptations and improvements of production processes and procedures; sales and sales management positions requiring the ability to give professional-level advisory service to clients; administrative and supervisory positions requiring sound technical knowledge, good judgment, and a high degree of individual responsibility.

Graduates of RIT's printing programs are employed by a wide range of representative companies in the graphic arts field.

'Reporter' Given First Place Award In Recent Rating

The RIT Reporter is the weekly undergraduate student newspaper of the Rochester Institute of Technology. In addition it is circulated to some 12,000 members of the RIT Alumni Association on a bi-weekly mailing schedule.

This colorful paper was recently rated by the Associated Collegiate Press as a first class college newspaper. The only other rating more coveted is the "All-American" classification which the "RIT Reporter" has held several times during the past five years.

Each year, college newspapers which are members of the ACP Association, may have their publications evaluated by professional journalists who judge each issue.

Mr. Richard Kobak, assistant to the editor, "Minneapolis Sunday Tribune," judged the RIT Reporter in its latest evaluation. Mr. Kobak commented: "This (the RIT Reporter) is an outstanding newspaper in the fields of typography, printing, and photography. The work is highly competent throughout."

All photographic work is done entirely by undergraduate students of the Institute. Camera-work, platemaking and presswork are done by staff members of the Graphic Arts Research Division as part of a continuing program in color reproduction on newsprint.

Being the only college newspaper in the country to use color reproductions on a regular basis the RIT Reporter has been cited several times for its contribution to the advancement of web offset color reproduction on newsprint. Among these citations was a special award to the paper by the Rochester Times-Union and the Rochester Democrat and Chronicle in 1957.

The award was presented at the annual regional student press conference sponsored by the Rochester newspapers, members of the Gannett Group.

RIT Printing Program One of World's Finest

A strong four-part curriculum composed of printing technology, management and related subjects, science, and general education makes Rochester Institute of Technology one of the world's centers for printing education.

At RIT the curriculum as offered by the Department of Printing is aimed at broadening the student in all of these phases. Through the great variety of courses offered—ranging from technical printing subjects to administrative and general educational subjects—the individual student is advanced intellectually. Through the various clubs and organizations—both on a departmental and on a school-wide basis—the social aspect of the student's life is enhanced. And most important, the final end result of the development of the intellectual and social phases of the student's life is to enable him to take his place in industry and society, and to serve and contribute to these to the fullest extent.

Through the generosity and foresight of today's leaders in the printing industry, the Department of Printing is able to offer the type of instruction that will produce the industrial personnel of tomorrow.

The Institute is generally recognized as having, in the Department of Printing, one of the best housed and most completely equipped degree granting schools of printing in the world. A great deal of equipment found in the 14 specially designed and elaborately equipped instructional laboratories in the department is there because of various leading industrial printing concerns.

These instructional laboratories include: Linotype and Intertype laboratory with special section for Fotosetter and Justewriter composition, hand composition laboratory which includes Ludlow and Elrod equipment; a production shop with a planning and control office; a Monotype keyboard and casting laboratory; two letterpress pressrooms; Vandercook pre-press lab; and a complete line of laboratories devoted to the lithographic process—layout and stripping laboratory, offset plate-making lab, and offset pressroom.

The department's full-time faculty numbers 22 and includes specialists in the various areas of letterpress printing, offset lithography, photo - engraving, production control, design, estimating, plant management, and education.

Facilities in other departments of the Institute are utilized for courses in art, chemistry, business, and photography as they are needed to round out the printing student's program.

Historically, the Empire State School of Printing was absorbed by RIT in 1937 and became the Department of Printing. Since that time and under the supervision of the department head, Mr. Byron G. Culver, the department has made rapid strides in progress.

As a result of this progress and as a result of the assistance and interest shown by the graphic arts industry the department has been able to supply technically trained and experienced individuals for industry.

Each year the department graduates from 60 to 80 students who find employment opportunities in all sections of the U. S. and in many foreign countries.

Special Summer Courses Offered

During the summer months the Department of Printing offers three special programs. These programs have been set up to meet the specialized needs of industry, for graphic arts teachers, and for individuals.

In the industry sponsored programs all facilities and regular faculty members are made available to groups from industry desiring courses of short duration in specific areas. These courses are arranged and carefully tailored to meet aims and objectives within established time limitations.

A six-week summer program is also available to graphic arts teachers. Courses are approved by the New York State Education Department for in-service training and credit in the areas of professional improvement and of related activities.

The range of subjects is planned to make it possible for teachers to select courses that will be most beneficial in their own situations. Courses are planned to enable teachers to extend their technical knowledge and broaden skills in selected areas of the graphic arts.

The Department of Printing also offers a variety of technical courses in letterpress printing and offset lithography, plus classes in management and related subjects. These courses are made available to individuals desiring specialized training in any of these areas. Students may arrange for courses to meet specific objectives depending upon how much time they have available and their depth of interest.

During the past three summers students from Canada, Mexico, Puerto Rico, England, Philippines, Sweden and many of the states in the U. S., have come to Rochester to further their technical or professional training in the Department of Printing.

College Grad Plan Set

Beginning this September the Department of Printing of the Rochester Institute of Technology will offer a new two-year course for college graduates.

This specially designed course has been developed to meet the needs of individuals already holding academic degrees in liberal arts or non-printing subjects.

The highly-concentrated type of program will place major emphasis on both printing technology and printing management. All regular faculty members and department facilities will be utilized, and the individual courses will be the same as those offered in the department's normal four-year program.

Upon completion of the program candidates will receive the Bachelor of Science degree.

Specific details concerning this special course may be obtained by contacting the Director of Admissions, or the Department of Printing, Rochester Institute of Technology, Rochester 8, N.Y.

RIT Promotes Graphic Arts Research Program

One of the most important functions of Rochester Institute of Technology is in the field of graphic arts research. When the Graphic Arts Research Department was established in 1951, the major purpose of the program was to apply science and engineering principles to problems of the publishing and printing industry.

Problems for the research division have been chosen on the basis of close liaison with newspapers and magazines, commercial printing firms, equipment manufacturers, suppliers of materials, research laboratories, technical conferences and also through exhaustive surveys of literature in the field.

One of the first decisions made when the department was established was that the results of testing, development and re-

search programs would be made available without restriction to the entire industry.

In the event that a new process, machine or material is developed and patented by the Institute, suitable arrangements will be made with an appropriate manufacturer to produce it: subsidized or sponsored projects are undertaken with the understanding that the results are to be published.

Significant progress has been made in the time that the research program has been in operation. Laboratory space has been increased to more than 15,000 square feet. Better than a half million dollars worth of laboratory equipment has been obtained. A highly competent staff, of both scientific and technical personnel, has been brought together.

New Uses For Color Tested; 'Reporter' Aids In Project

The Web-offset Laboratory, an important part of Graphic Arts Research at RIT, was established for research to provide training in web-offset press operation, and to investigate among other things, the advantages and disadvantages of this type of equipment in the newspaper field.

The development of a system of color reproduction on newsprint stocks and promotion of the use of the system for newspaper inserts and supplements are also purposes of this section of GARD.

Reproductions are being made from artist's renderings, photographic transparencies, and color prints. The stocks are standard grade newsprints. The inks are specially compounded inks similar to those developed by the Eastman Kodak Company for three-color offset. The direct-screen-separation method, with a single mask, is used for both transparencies and opaque originals. Presensitized plates are used throughout on a four-unit ATF perfecting web offset press. Special low-tack inks are used to help reduce picking and piling which result from the use of newsprint stocks. Experiments are being conducted with a sheet cleaner to reduce linting.

In addition to these experiments, a weekly experimental newspaper, the RIT Reporter,

similar to this publication, is printed. Cooperative efforts between the Rochester Institute of Technology, American Type Founders Co., advertisers, and newspapers has resulted in inserts for the St. Petersburg Times and the 1958 and 1959 issues of the Penrose Annual.

Other articles and examples of Web offset newspaper color work printed by RIT have appeared in the Dallas Times Herald (as a fashion supplement for Neiman-Marcus), Western Printer and Lithographers, Advertising Requirements, and the Printing Magazine.

Special blankets have been developed, in cooperation with manufacturers, to help reduce linting and 'piling. These and other techniques are being tried to help solve the problem. New techniques of color separation are being tried. Cooperation with newspapers and advertisers will be continued, and experimental advertising and editorial supplements will be produced. The cheaper, faster reproduction of color on low-grade stock will be of particular interest to publishers of newspaper supplements and inserts, and to advertisers issuing catalogs, throw-aways, and direct-mail material.

Continuing projects in tone reproduction, platemaking and process-color work are also under way.

Color Reproduction Methods Being Studied

The expanding interest in color reproduction has emphasized some of the limitations of present processes. In the Science and Technology Section, as much as possible is being done to learn what happens when color is printed—both physically, in the application of ink to paper, and optically, in the examination of the print.

Work centers in the printing of "reproducible" originals and study of the factors working against accurate reproduction of such originals. "Reproducible" is emphasized because much color copy is not reproducible by present printing inks; by working with copy which can be matched in the printing process, some factors with which GARD is not now concerned are eliminated.

Activities of this section are directed by the department head,

Warren L. Rhodes. The section consists of three full-time research employees, in addition to the department head, plus three part-time employees.

There are three laboratories in the section, photography, color measurement and sheet-fed press.

The photo laboratory contains a specially made color separation camera with fixed magnification of 1 to 1, and provision for contact screen operation. All processing is by nitrogen burst agitation.

The color measurement laboratory contains a Color Master colorimeter and a Macbeth Ansco color densitometer. In addition there are some small electronic facilities which are used for servicing and maintenance.

The sheet-fed press laboratory contains a 17x22 sheet-fed press and a densitometer for ink film

Letterpress Conversion To Offset Developed By Relief Plate Lab

Among the purposes of the Relief Plate Laboratory at Rochester Institute of Technology is the surveillance and evaluation of various methods of converting letterpress forms to offset plate. The section has conceived and developed a new method called double-offset transfer.

Eldon L. Thompson, head of the Relief Plate Laboratory at the research department, who has been largely responsible for this new process, believes that many publishers are becoming interested in web-offset printing.

He explained, "The majority of composition is done in metal type as for letterpress printing. Publication printers must in many cases work from electron, line engravings or other relief plates for illustrations.

"Accordingly, the conversion methods have taken on much importance because of the need to produce planographic plates from relief forms. One project of the Research Department has been the evaluation of promising methods of conversion from relief to offset.

"The methods that seem most practical are reproduction proofs (including transparent proofs, translucent proofs, Brightype, Direct-Image Offset and the double-offset transfer. The last is the new method that we have developed in the course of our work."

Also in this section of GARD, considerable progress in the development of a high-compression stereotype matrix that is substantially free from shrinkage and requires no hand packing in non-printing areas is being made.

Other projects of the Relief Plate Laboratory are development of a solder or technique for soldering magnesium, study of nitric acid etching of magnesium and zinc, and a general study of powderless etching.

TAGA Members Tour RIT

One of the features of the eleventh annual meeting of the Technical Association of the Graphic Arts, held in Rochester during the past summer, was a tour of RIT's printing laboratories and graphic arts research facilities.

thickness and sharpness control.

The project of the Science and Technology Section is concerned with the fundamentals of color reproduction. Work has been completed on reproduction of gray with three inks, saturation control by single masking and factors related to optimum ink film thickness. The current work is concerned with empirical determination of color error in duplication.

Duplication refers to the reproduction of originals which are composed of the same color as the reproduction process. Original art work is made from printing ink colorants and reproduced with these colors with a tone reproduction straight line 45 degree. A further requirement is that neutrals are reproduced approximately neutral in the final print.



INTERNATIONAL VISITORS—Guests from all over the world frequently visit the Graphic Arts Research Department at RIT. Here, a guest from Mexico, listens to Frank DeWitt of the GARD staff explain the research program.

Information Service Aids World's Printing Industry

Every printer who needs information about practical and technical aspects of his industry can get news and data from many varied sources. To help printers keep up to date and find their way among all these sources of information, RIT in 1952 set up the Graphic Arts Information Service.

Prepared to handle questions on most phases of technology, the Information Service is now manned by a staff which are not experts, but who generally know where to find the experts. Its function is usually one of leading the printer with a problem to an expert who can help toward a solution.

In a majority of cases, such experts have discussed their findings in various publications, and for this reason, the Information Service relies heavily on its library.

This library is separate from the other RIT collections because of its specialized character and because it is intended mainly for Research Department and Information Service use. It has well over a hundred periodicals; most of them deal directly with printing, although some cover related matters such as chemistry, electronics, and photography. There are several hundred books and several files of pamphlets, most of them on the subjects shown in the Graphic Arts Index.

The Graphic Arts Index is published regularly as part of Graphic Arts "Progress," which covers news of the field. In compiling the Index, care is taken to cover printing technology as it is presented by the trade journals. There are a few foreign periodicals, but most of the concentration is on those in English.

Access to facsimile service of this printed information is avail-

able upon a signed request. The charge is twenty-five cents per page.

Questions asked of the Information Service cover a wide range. A problem may require simple data, such as can be found easily in directories, or it may require an extensive literature search.

Given an adequate picture of any situation, the staff can join the company in working on the problem, acting as remote members of the company's staff.

The Graphic Arts Index was started in June 1939 as the result of a talk by Mr. Elwood H. McClelland, Technological Librarian of the Carnegie Library in Pittsburgh.

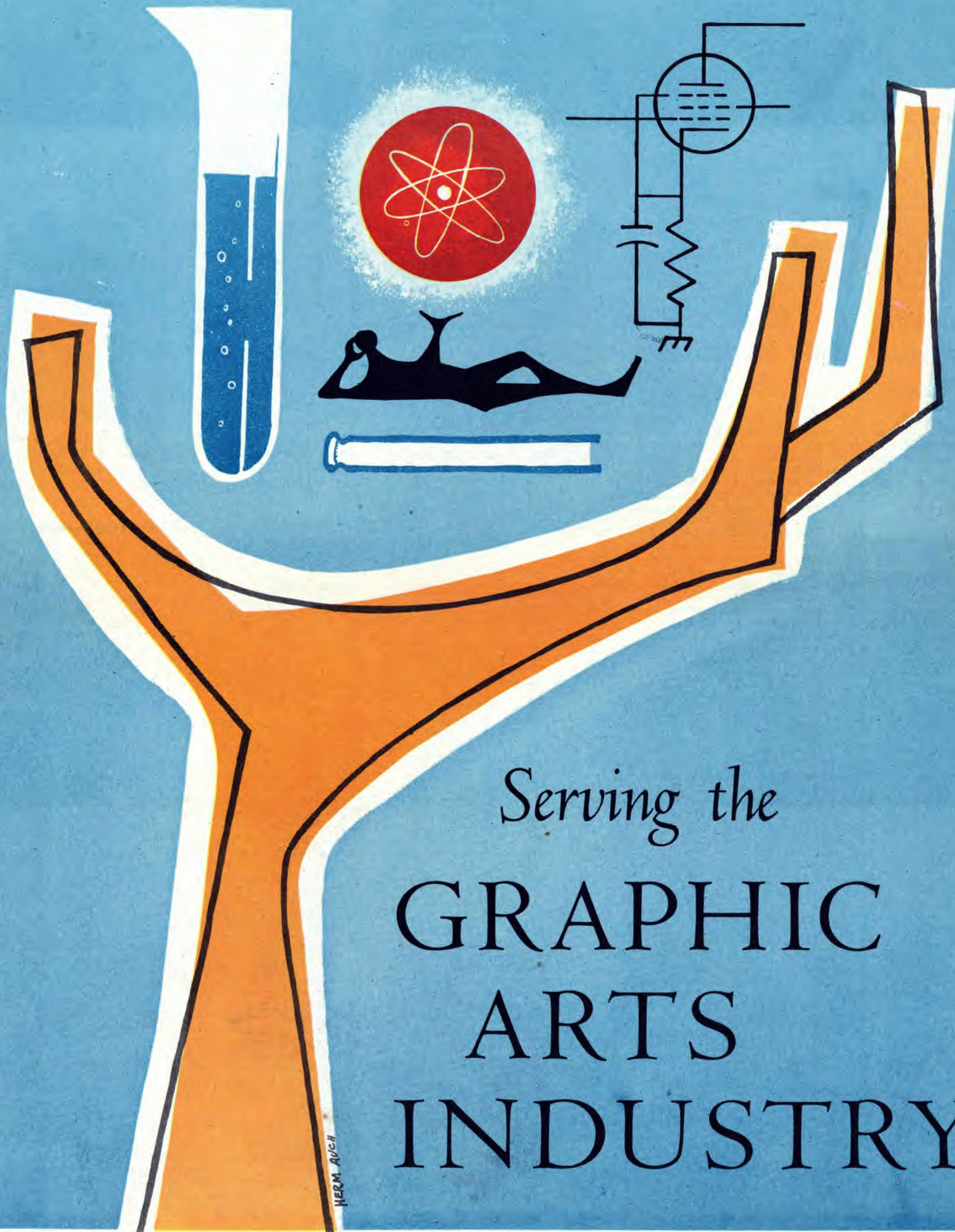
Speaking on "Technical Literature: Its Value to Research," Mr. McClelland pointed out that one of the first steps toward scientific research is to collect and organize pertinent literature. He commented that printing was one of the few major industries having done practically nothing in this direction, and pleaded for a guide to literature comparable with those of other important industries.

United Typothetae of America and the Printing Industry of America carried on the Index for many years. The PIA published the Index in its "Graphic Arts Summary" from January 1946 to January 1947, and in "Management Reports" from February 1947 to December 1950.

From 1951 to 1953 the International Graphic Arts Education continued to compile the Index and distribute it. At this time, it was printed by the students of RIT.

Since January 1954, Graphic Arts Information Service has published "Progress," including the Index.

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