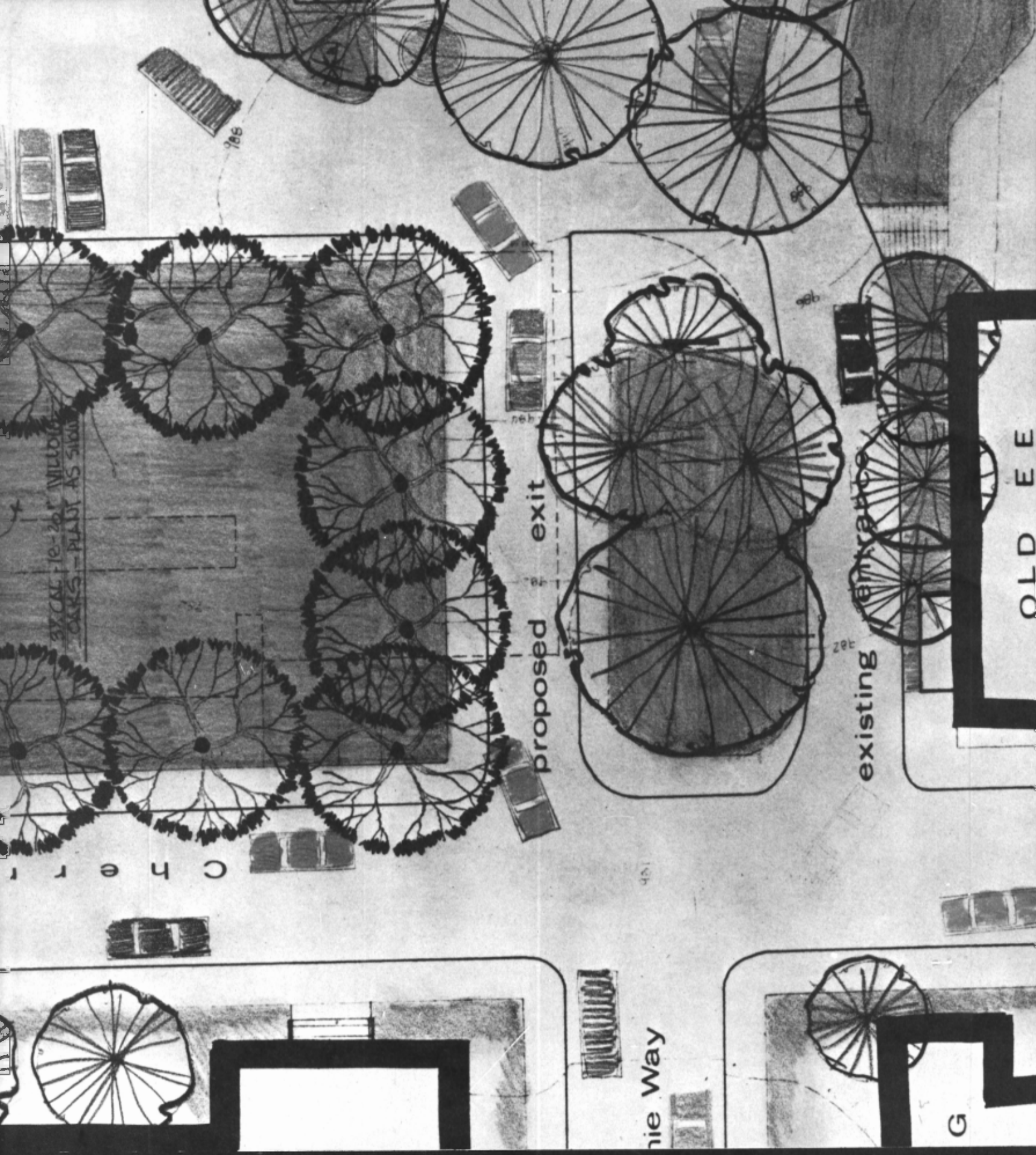




INSTRATION FACULT

Y, ADMINISTRATION, F



The Board of Regents and Chancellor





Acting as coordinator of all of Georgia's institutes of higher learning, Chancellor Simpson truly has a mammoth job. However, the dynamism of our higher education system shows his skill and competence. The august group of men who guide the educational policy of the state of Georgia is known as the Board of Regents. Appointed by the Governor and approved by the State Senate, these gentlemen work to update and improve the educational level of the state colleges and universities. The excellence of our own school, Georgia Tech, is a monument to their industriousness and devotion.

BELOW: Chancellor George Simpson. LEFT: Members of the Board of Regents, SEATED (L to R), James V. Carmichael, James C. Owen, Jr., H. G. Pattillo, vice chairman, John W. Langdale. STANDING (L to R), Jack Adair, Carey Williams, G. L. Dickens, Jr., William S. Morris, III, Roy V. Harris, John A. Bell, Jr., James A. Dunlap, Anton E. Solms, Jr., T. Hiram Stanley, John I. Spooner, W. Lee Burge.





President Harrison: An Open Letter to the Class of 1969.

You, the Class of '69, have been the prime reason for Tech's existence during the past few years. The conferral of your degree carries with it the stamp of approval of the faculty and administration who have been a part of your academic program.

You, and they, can be proud of your achievement for you are the best prepared class Tech has yet generated. Your field of study has necessarily covered a dynamic and diverse area. The curriculum and courses of your major have similarly been dynamic, current and appropriate educational programs.

You came to Tech with an outstanding preparation for college. From a point in the future, you will be able to look back at your years at Tech, and, in retrospect, measure for yourself the relevancy of Tech's offerings to your life and your work. You will be pleased.

For more than eleven years, I have had the good fortune, the honor, the privilege, and the responsibilities of

the presidency of Georgia Tech. I feel, therefore, a real part of your educational experience and even a contributor to the metamorphosis you have undergone.

Tech, during my tenure, has moved forward in the quality of its programs and the quality of our students. Our undergraduate programs are the envy of other colleges and we must continue to hold this position of leadership. The growth of our graduate program is essential to our future — and to that of the state. Although limited resources have permitted relatively slow growth in this area, it has been growth of quality.

Certainly no man can accomplish all he hopes in an administrative position and much still remains to be done by my successor. He will have, however — among other assets — a fine student body made up of some of the finest young men and women on today's campuses. The overwhelming majority of these students, like you, have demonstrated a

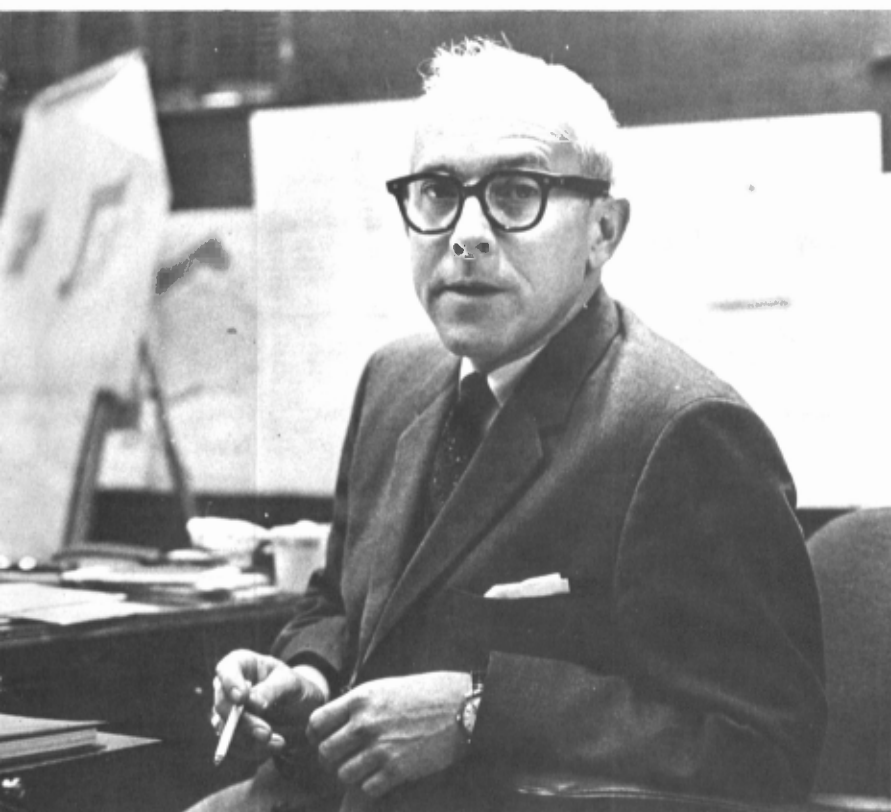
positive constructive approach to needed changes, a tolerance of necessary delays that have come about, a validity in establishing reasonable priorities and a helpfulness in the means of accomplishment. These characteristics of Tech students become those of our alumni. As you make this transition, I urge you to keep your interest and confidence in this institution alive.

Those who review the changes in Tech during my tenure will no doubt comment on the number of new buildings and the expanded area of the campus. But, essential as facilities are to an educational institution, they are still not the major ingredients of a college education. I am grateful that new facilities and added space were made available but I am much more pleased with the steady progress that has brought about a unification of direction and purpose, more interdisciplinary activities and a broader dialogue between you and us.

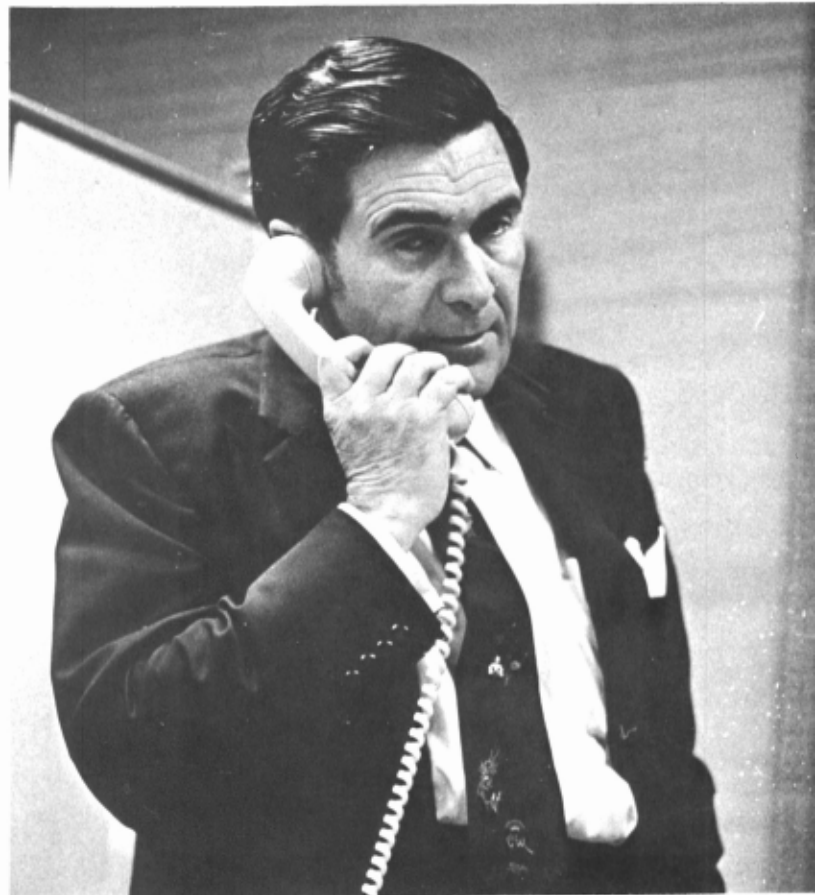


ADMINISTRATION

ABOVE RIGHT: Mr. Robert E. Stiemke, Vice President of Programs. ABOVE: Dr. Paul Weber, Vice President of Planning.



LEFT: Mr. Joseph W. Guthridge, Vice President of Planning. BELOW LEFT: Mr. Jamie R. Anthony, Vice President, Comptroller. BELOW: Dr. Walter L. Bloom, Vice President of Academic Affairs.



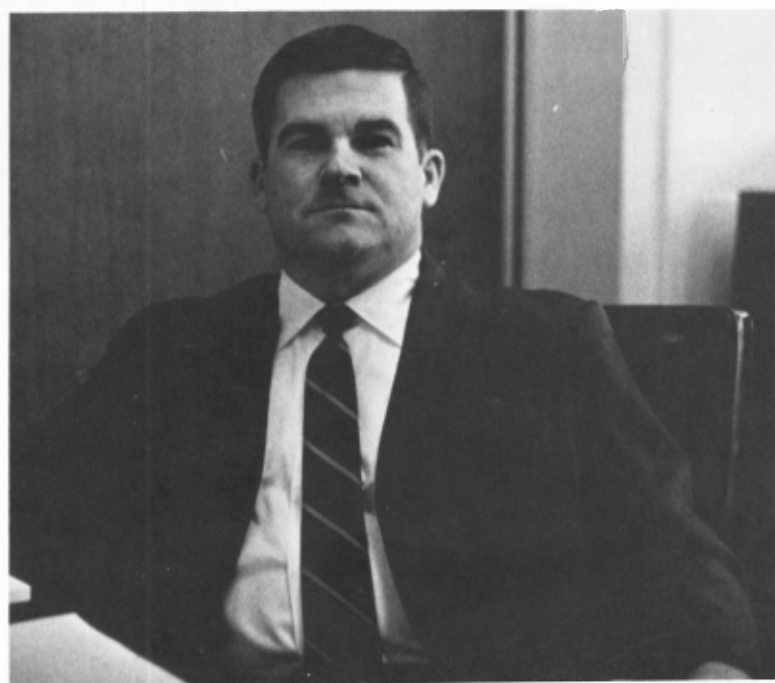


BELOW: Mr. Frank Roper, Registrar. BELOW
RIGHT: Mr. Miller Templeton, Dean of Foreign
Students. RIGHT: Mr. George Griffin, Dean of
Students, Emeritus.

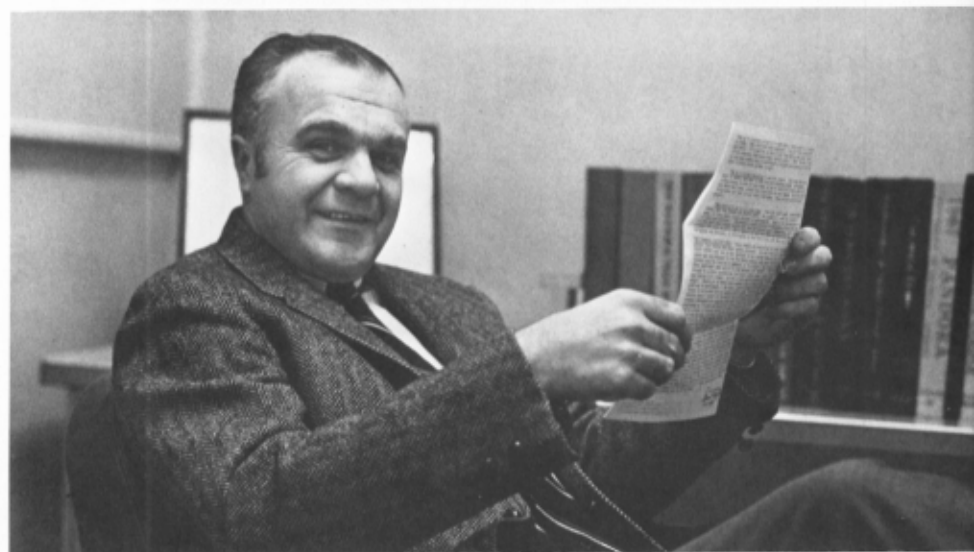




ADMINISTRATION

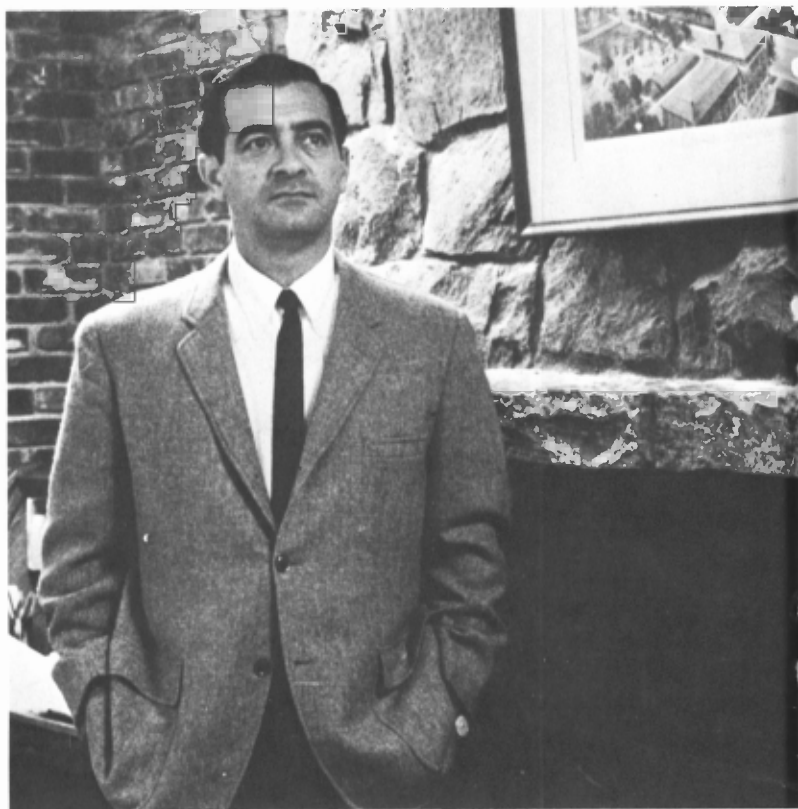


ABOVE: Mr. W. Eugene Nichols, Associate Dean of Students. ABOVE RIGHT: Mr. Edwin P. Kohler, Assistant Dean of Students. RIGHT: Mr. Jerry D. Purser, Assistant Dean of Students. BELOW RIGHT: Mr. James E. Dull, Dean of Students.





ADMINISTRATION



TOP LEFT: Dr. Vernon D. Crawford, Dean of General College. TOP RIGHT: Mr. A. P. DeRosa, Director of Placement. ABOVE: Mr. Jerry L. Hitt, Director of Admissions. RIGHT: Mr. W. Roane Beard, Director of Alumni Affairs.

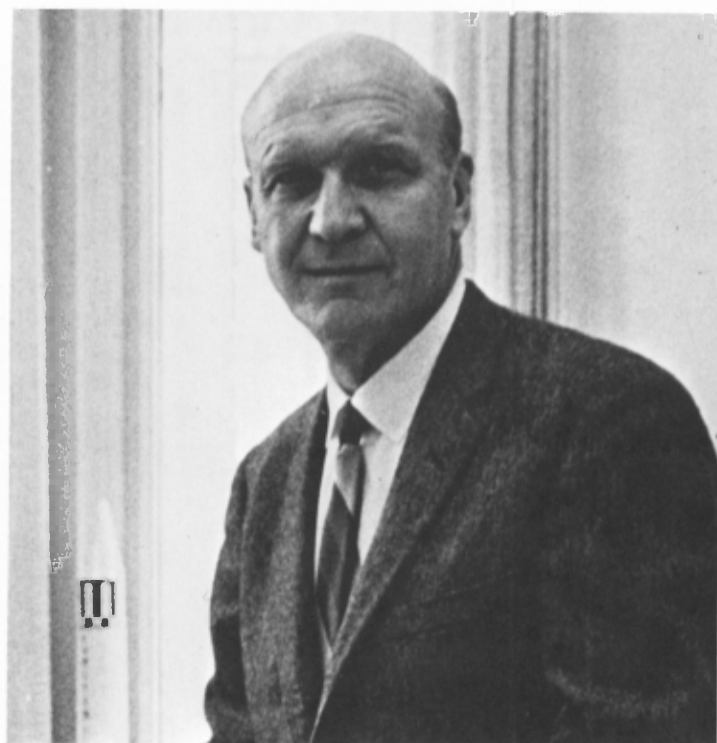
BELOW: Mr. R. T. Staton, Dean of Undergraduate College. BOTTOM RIGHT: Mr. Arthur G. Hansen, Dean of Engineering College. BOTTOM: Mr. Sam C. Webb, Dean of Graduate Division.



ADMINISTRATION

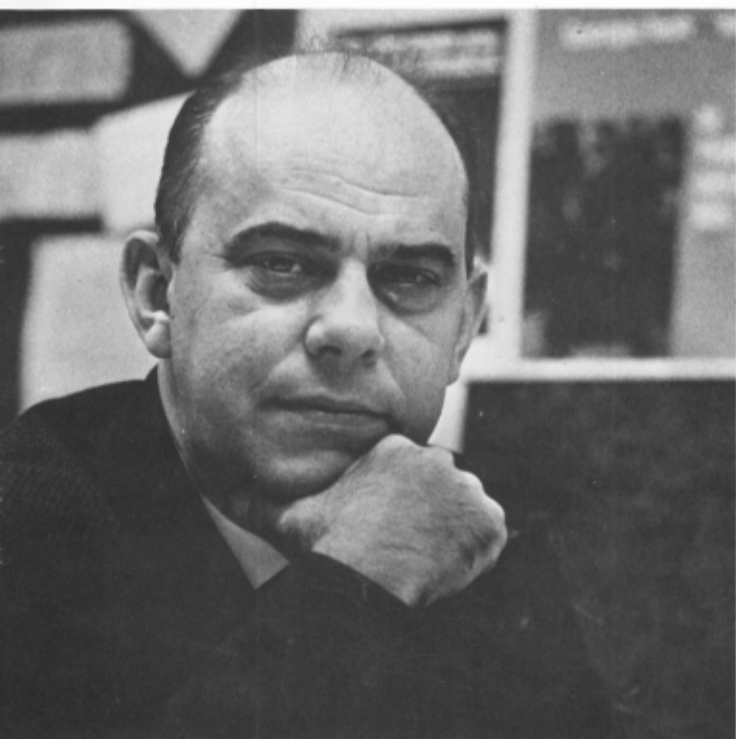


RIGHT: Dr. James Strickland, Director of Guidance and Testing. BELOW: Mr. James G. Wohlford, Director of Cooperative Division. BELOW RIGHT: Mr. Tim F. Mitchell, Director of the Student Center.





TOP LEFT: Dr. M. W. Long, Director of Engineering Experiment Station. LEFT: Mr. Lawrence V. Johnson, Director of Engineering Extension Division. BOTTOM LEFT: Mr. Robert B. Wallace, Director of Publications and Information Services. ABOVE: Mr. Harry L. Baker, Director of Research Administration.



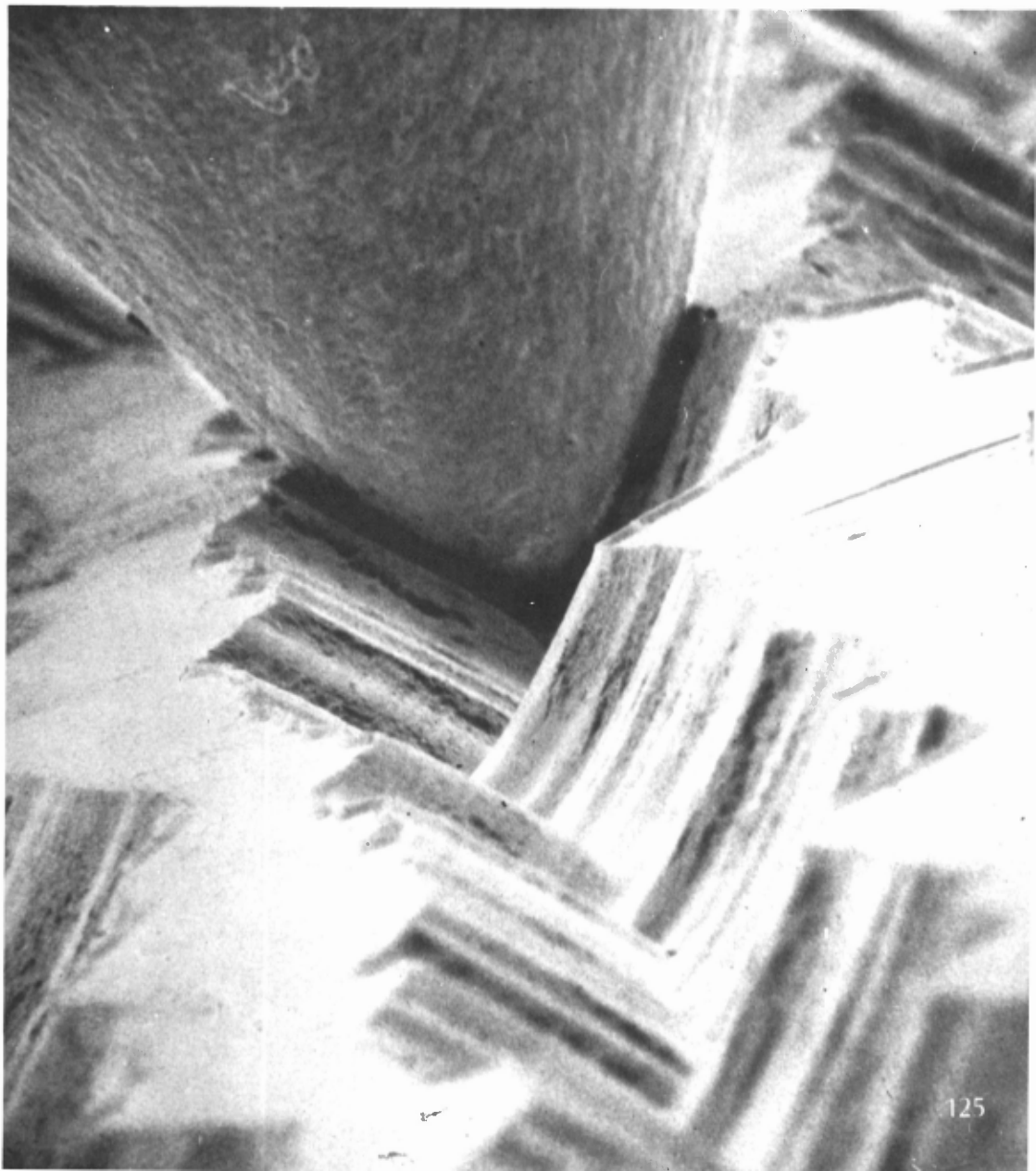
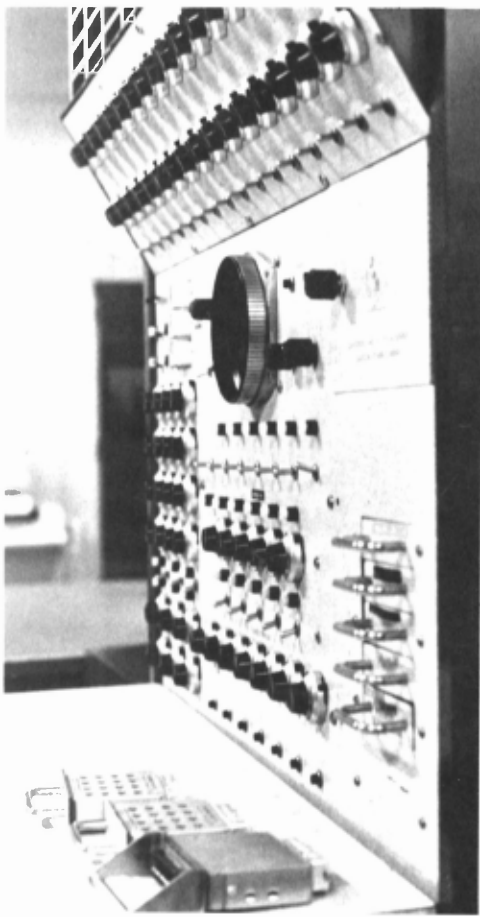
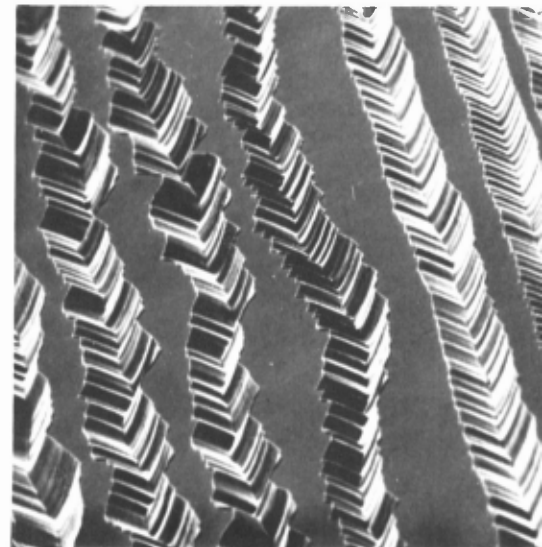


ABOVE: The newly acquired Scanning Electron Microscope is being put to use by the Engineering Experiment Station. FAR UPPER RIGHT: The Scanning Electron Microscope provides great depth of focus as one can see in these pictures of an ant and record grooves. RIGHT: Control panel of a color analyzer allows the matching of colors. FAR RIGHT: This picture represents the magnification of a diamond needle in a record groove.

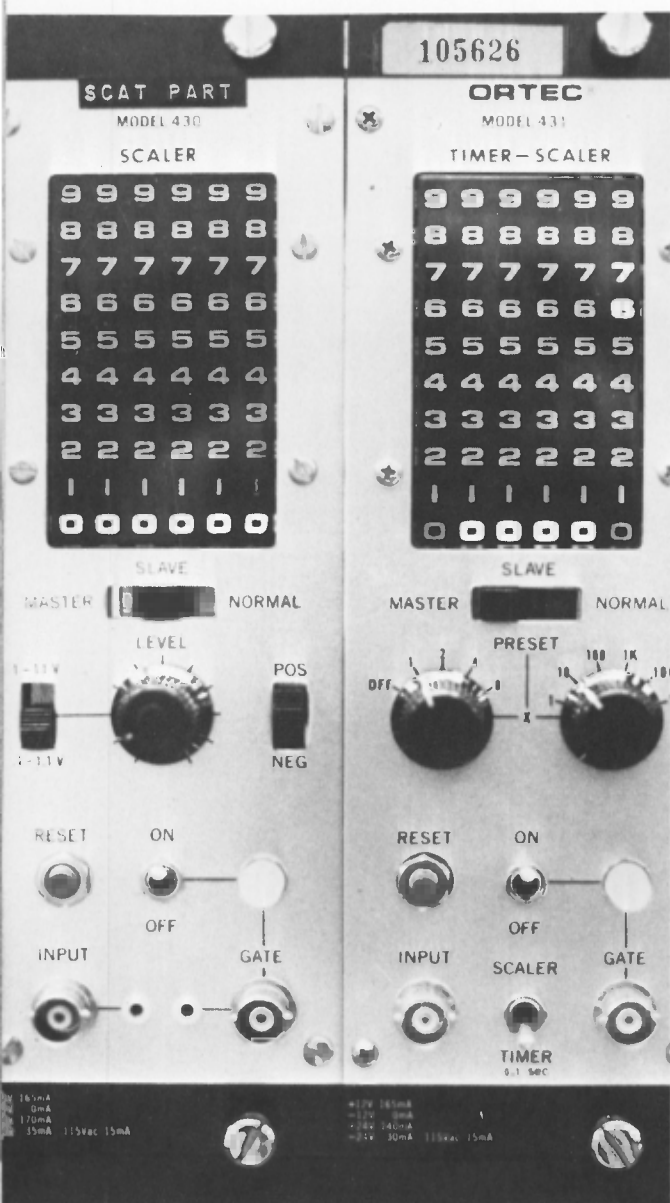
Research Expands With Completion of New Buildings

Research is found in almost every institution of learning. It not only accredits the school, and leads the way to new information, but also provides a means of the highest education available. Here at Georgia Tech, we are involved in numerous areas of research and are proud to be able to acknowledge all aspects of it. The Engineering Experiment Station, by far the authority for a great number of the institution's studies, is presently pursuing almost 500 research and service programs in seven operating divisions. Nearing completion is an addition to the Engineering Experiment Station which is expected to expand research areas even further when it is completed in August.

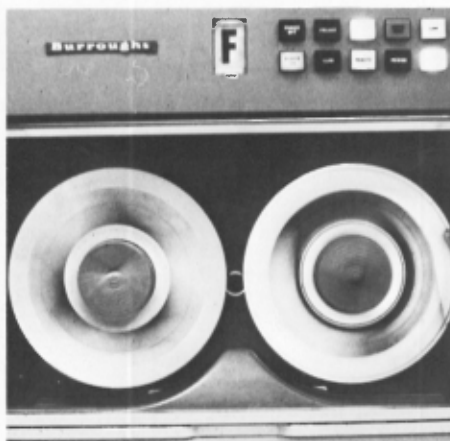
One of the station's latest additions is the scanning electron microscope, one of four in institutions across the United States. This remarkable instrument is unique in that it can view original specimens and furnishes great depth of focus below 40,000 times magnification. Also new, the division of Nuclear and Biological Sciences was created to reflect the biological research that is being conducted along with the nuclear research program.



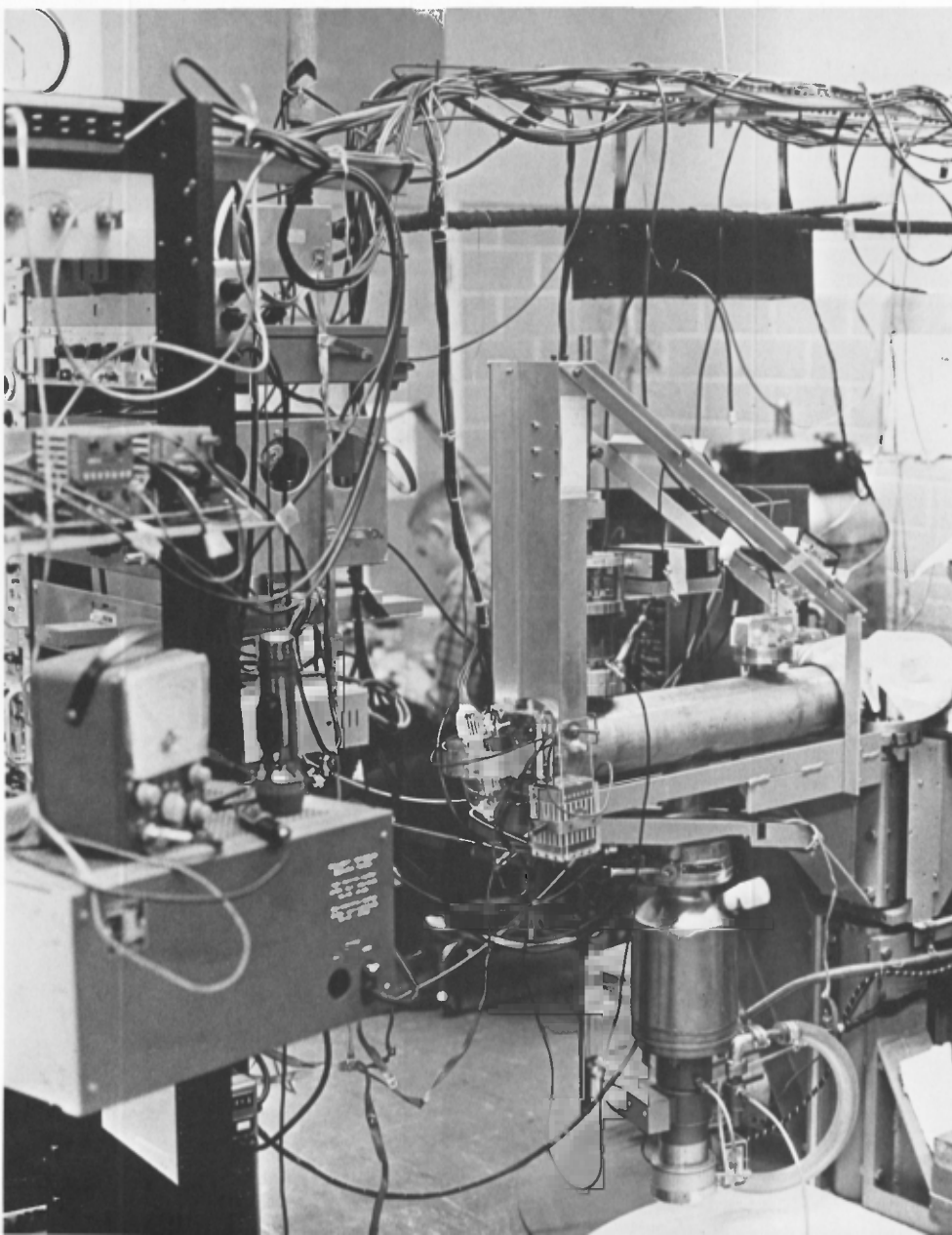
Research (cont'd)

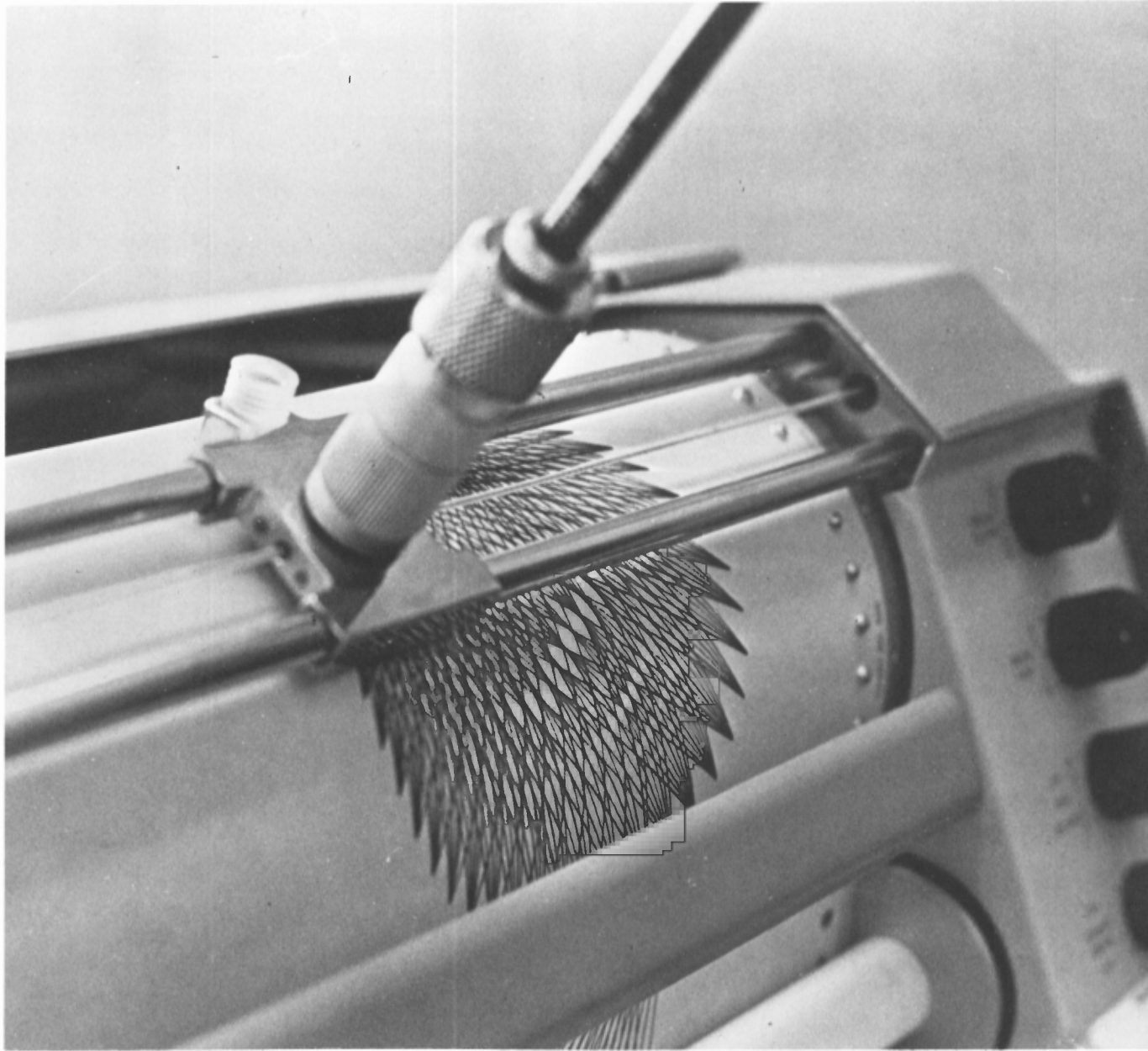


ABOVE: The timer pictured here is used to count fast neutrons in a research project at the Nuclear Reactor center. TOP RIGHT: The Burroughs 5500 is available to student and faculty use as well as industrial services. RIGHT: Wiring dominates the scene of a project on diffusion carried on by the Physics department.

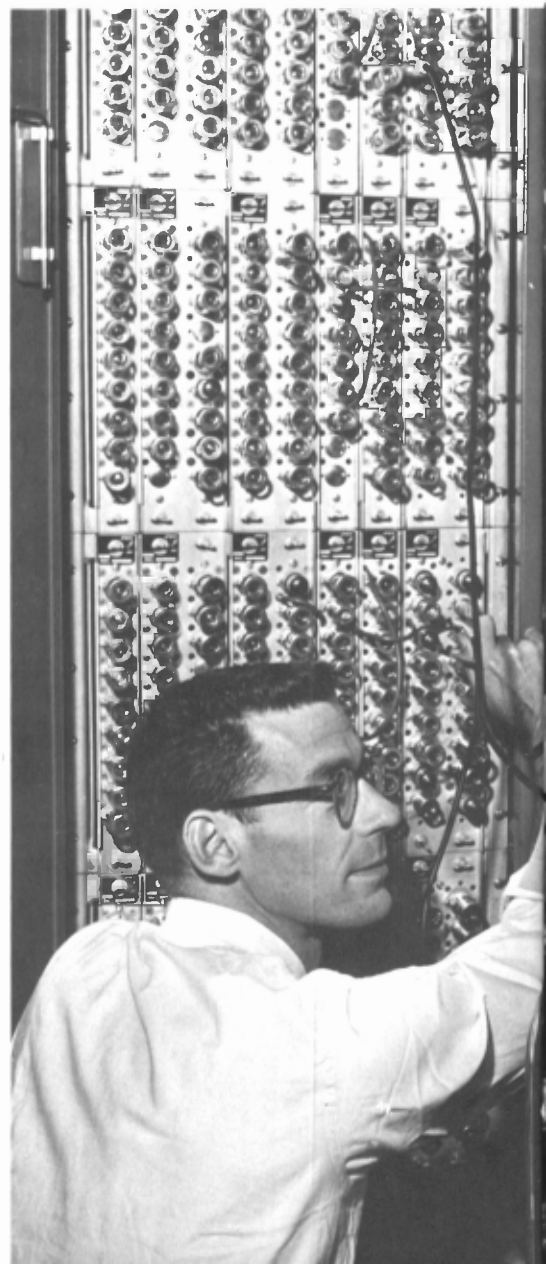


An active division of the Experiment Station, the Rich Electronic Computer Center is now processing more than 60,000 programs each month. Computer time is spent between student use, faculty research use, and industrial service projects. Two new tools have been added to the facilities: a CAL-COMP digital plotter and an analog to digital converter. The plotter is used to produce graphic or pictorial presentations of computer data. The converter is employed in jobs such as the analysis of electrocardiograms for the variation of heartbeats and also for pre-dominant frequencies.





ABOVE: The CALCOMP digital plotter, recently obtained by the computer center is used to plot three dimensional data on paper when a program is run through an adjoining unit.



ABOVE: Studies in microwave theory are carried out by the electronics division of the Engineering Experiment Station. ABOVE RIGHT: These reagent bottles contain liquids that enable students in the Chemistry Department to do post-doctorial work in areas of synthesis, and protein analysis to mention only a few. RIGHT: The maintenance of computers requires much time as well as working knowledge.



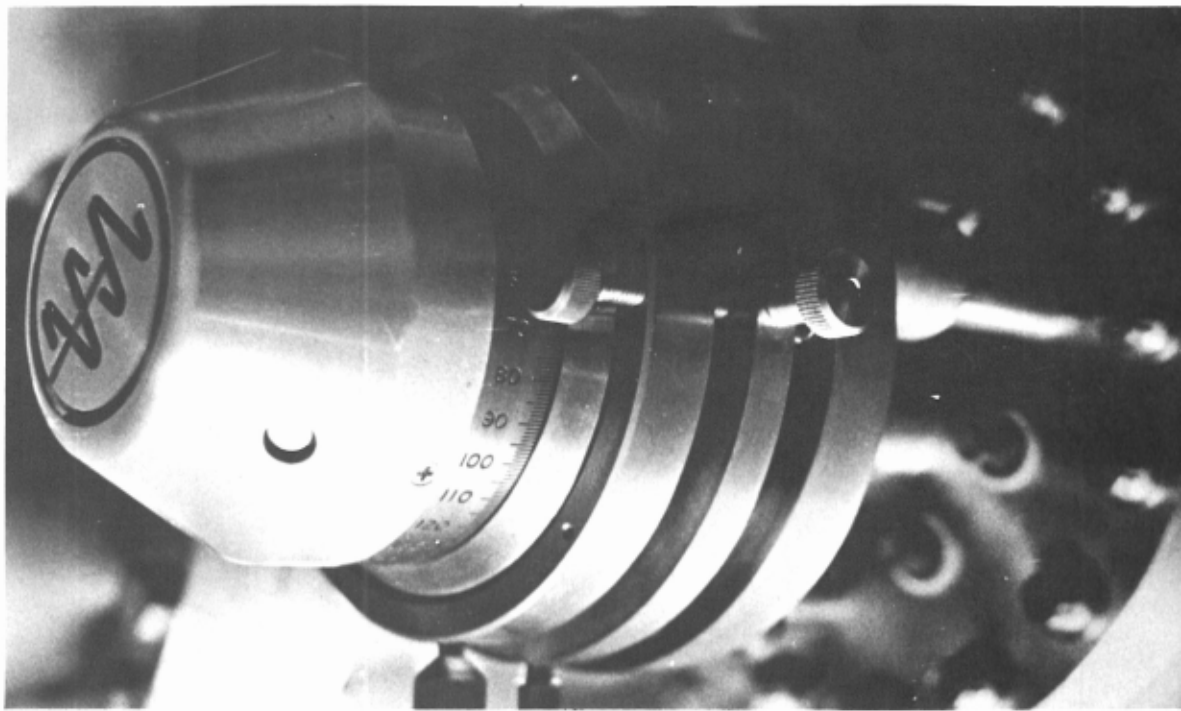
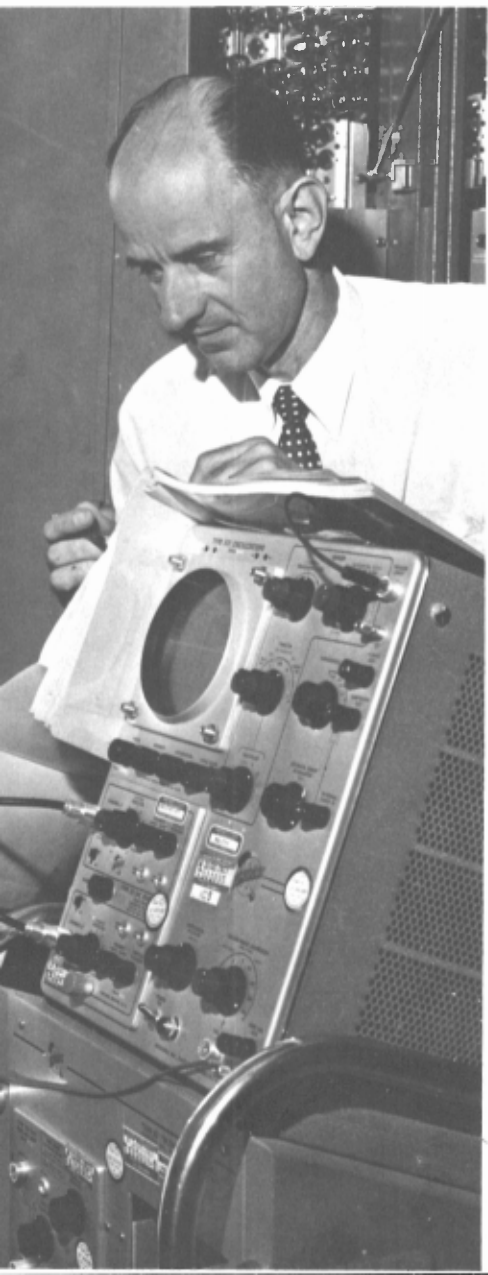
Research (cont'd)

A great amount of campus research is done by the electronics division of the Engineering Experiment Station. The activities of this division are closely associated with national defense, space exploration, communications, and radar experimentation. The largest amount of work is concentrated in the field of radar systems consisting of submillimeter microwave testing, compact range techniques, radar detection in the presence of noise, the infrared spectrum and ultrasonics.

February saw the advent of a series of one week courses which were offered by the Electronics Division and were designed for the engineer as well as the scientist. These courses will again be offered in June and August and will

include topics such as "Microwave Theory and Measurements" and "Electromagnetic Compatibility".

The department of Civil Engineering at Georgia Tech has instituted a research program which consists of a team of seven different specialists gathering information and conducting research in vehicular collisions. Supported by the U.S. Department of Transportation, the program, to the present date, has reported in detail on thirty different accidents. Concerned with identifying and evaluating the causes of specific accidents and injuries, research in this area will help make advancements in the reduction of automobile accidents as well as the improvement of safety.



ABOVE: The apparatus pictured here is used in X-Ray diffraction studies.

AE Moves Into New Facilities



S. C. Bailey

P. Blumensadt

R. A. Cassanova

J. I. Craig

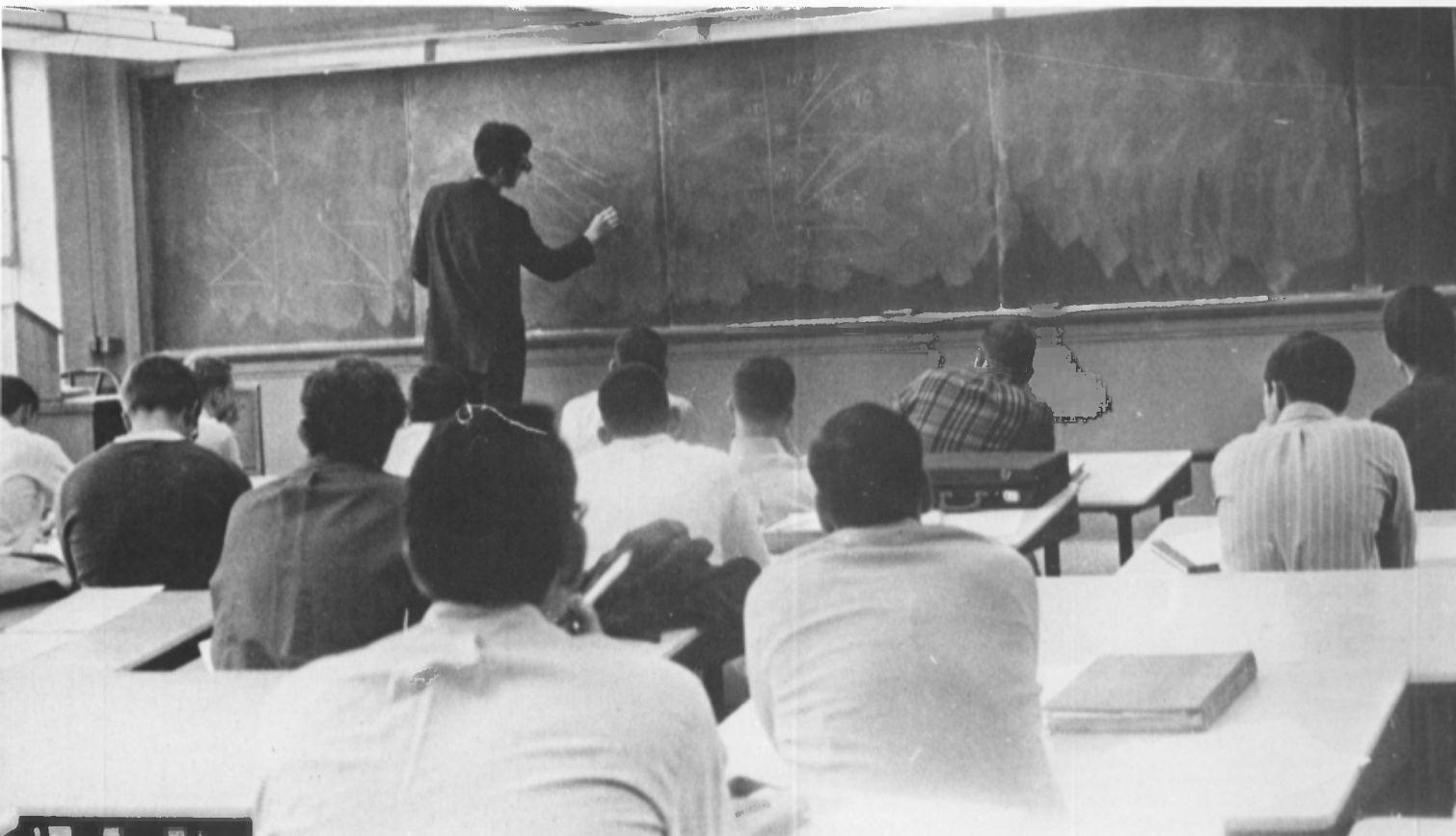
D. W. Dutton

R. B. Gary

J. J. Harper

H. R. Hudson

C. G. Justus



ABOVE: Students discuss the analysis of the effect of wind velocity on airplane wings aligned at different angles. RIGHT: Lab studies involve the stress analysis of various metals. ABOVE RIGHT: Dr. Arnold Ducoffe, director of the Department of Aerospace Engineering. FAR RIGHT: Wind tunnel studies show the air patterns that flow over an airplane wing simulated in flight.





C. C. Rogers



S. Q. Slaughter



E. R. Wood

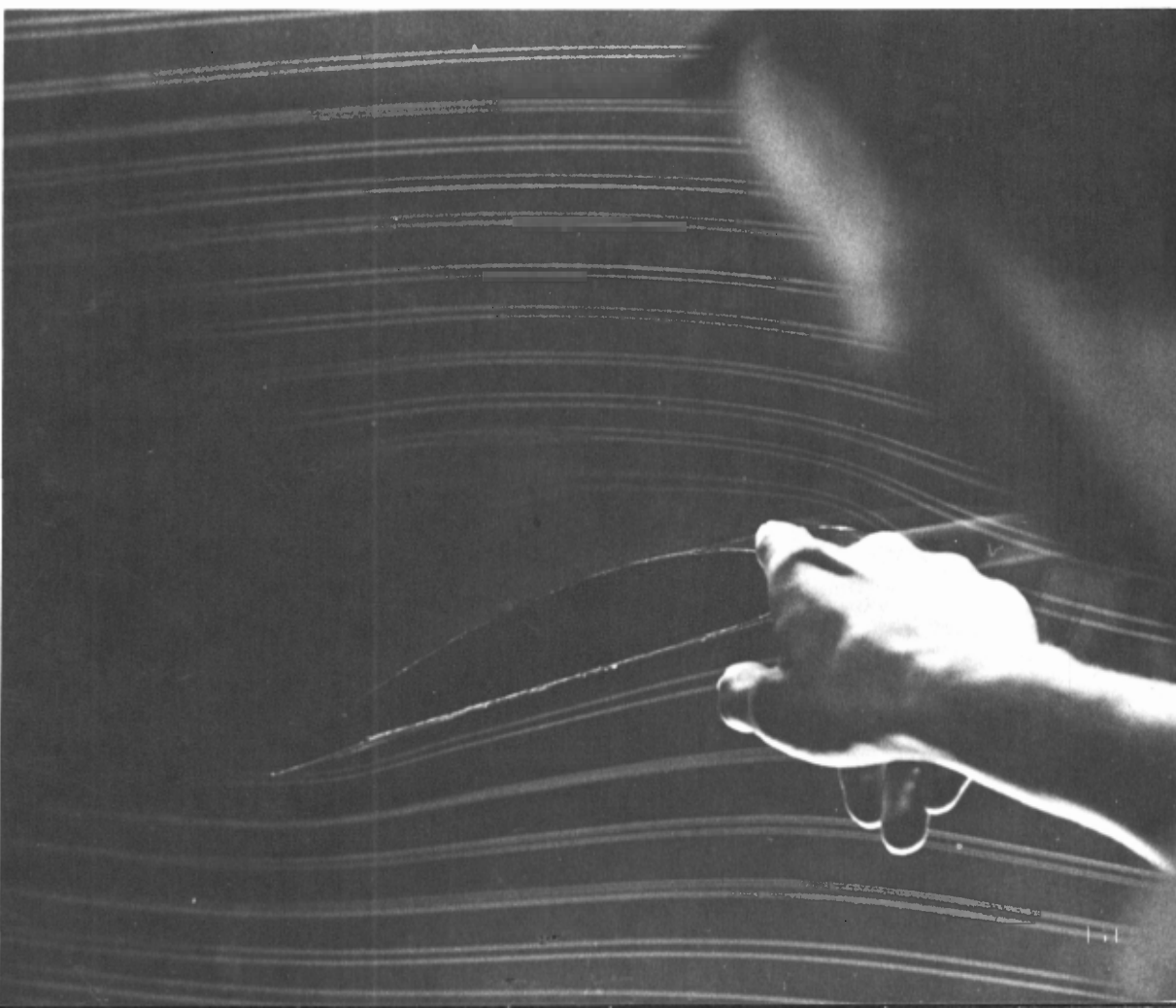


B. T. Zinn

Considerable emphasis will be placed on the completion of the Aerospace Laboratories in the new Aerospace Buildings. The labs are to be an integral part of the undergraduate program and will also provide facilities for the conduct of research for the faculty and graduate students. The facilities to be completed include: low turbulence wind tunnel, plasma tunnel, automated structural static testlab, photoelastic lab, dynamic structural test lab, rarefied gasdynamics lab, flow lab for simulating flows for VTOL aircraft, composite materials test lab, propulsion lab to study combustion instability, hypersonic wind tunnel, combustion lab, and environmental sciences labs. The laboratories will be equipped with the latest designs in instrumentation.

The laboratories will be used to investigate the experimental aspects of current aerospace problems and are also designed to provide the tools for investigation of problems of the future.

These facilities along with the formal course offerings will give aerospace students the opportunity to receive an outstanding education in the technology of flight vehicles.



Architecture Produces an Artist, Engineer and Humanist



A. F. Beckum Jr.

A. Catanese



H. G. Edwards

G. J. Kelnhefer



M. G. Little

R. F. Rupnew



I. E. Saperta

W. W. Shipley



R. Wilson

R. J. Young

The architect at Georgia Tech not only must be an artist, and an engineer, but a humanist as well. The hours he spends in lab as well as the time he spends starting over after mistakes are reasons enough to cause those without devotion to drop from the ranks. One can be sure that those who survive will be outstanding in their field at graduation and in work afterwards.

Each quarter the Architecture Department makes it a point of having displays of students' work as well as outstanding artists' work. This year saw the advent of several unusual displays: rugs, woven in the design of insects. Works by John Portman, designer of the Peachtree Center. A display of unusual musical instruments proved to be a unique approach to bringing music to the Tech campus. Paintings as well as sketches by Black Artists of America were sponsored by the AIA.

TOP: Design projects usually require three dimensional working models as well as drawings. RIGHT: Dr. Paul Heffernan, Director of the School of Architecture. FAR RIGHT: Consultation with other students as well as professors is not an uncommon scene when projects are due.





Biology Moves Into New Building



Biology, in its attempt to understand the processes and organisms concerned with life, is a science of observation and deduction. The Biology Department at Georgia Tech in an effort to carry out this purpose distinguishes itself as one of the upcoming departments on the Tech campus.

After moving into their new building, the Biology Department is presently thinking of expanding into related fields. Already doing research in coordination with the department of Nuclear Engineering, the department is thinking about combining efforts with the Chemistry Department to create a School of Biochemistry: a big step toward the advent of medical sciences as well as liberal arts.

ABOVE: Student prepares to photograph slide of malignant cancer tissue in a study conducted by the department. ABOVE LEFT: Dr. Robert Fetner, director of the School of Biology.



K. Bachman



A. M. Colley



B. Eschenbrenner



R. H. Fetner



E. L. Fincher



J. B. Hamilton



J. J. Heise



S. M. Hong

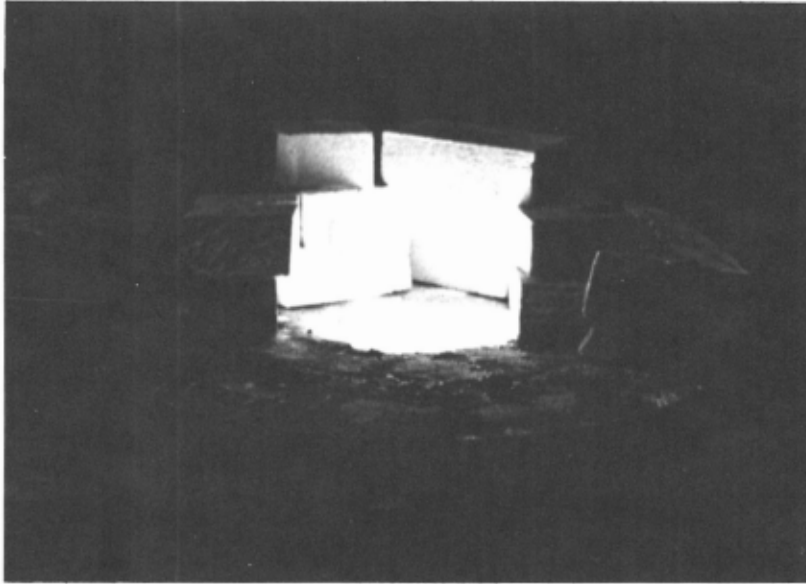


T. W. Kethley



N. W. Walls

Ceramics Dept. Does Tooth Enamel Research



Ceramic Engineers are busy today playing a vital role in all of the exciting developments of our times: space, electronics, computers, nuclear science, and the more traditional fields of structural products, consumer items, and manufacturing components and tools. Everything modified by high temperatures involves ceramics. With the great interest on materials for a multitude of exotic uses, it is the ceramic engineer who is called upon to supply the specific material. Thus ceramic engineers, already in short supply, are in very great demand.

Georgia Tech's School of Ceramic Engineering enjoys a world wide reputation. Its graduates are holding important positions all over the world. The research and study facilities are excellent and the staff consists of well-qualified personnel. Graduate degrees in Ceramic Engineering and Geophysical Sciences are offered as well as the Bachelor of Ceramic Engineering degree. Research projects cover a wide variety such as work with clay, special minerals, ferrites, and tooth enamel. Research and study go hand in hand and the graduate of this school finds ready market for services affirmed by his degree and experience.



Willis E. Moody



Cary W. Bannard



TOP LEFT: The spreading glow from the ceramic kiln offers a somewhat effective scene. LEFT: A ceramic engineer's work can very often become exciting as one instructor demonstrates. ABOVE: Director of the School of Ceramic Eng., Dr. Lane Mitchell.

Ch.E. Dept. Gets Field Ion Microscope

Last year's acquisition of a twenty-five thousand dollar Field Ion microscope has given the School of Chemical Engineering the opportunity to conduct extensive research in the fields of transport phenomenon and field ion studies.

Over the years the Chemical Engineering Department has proved to be one of the toughest in campus. Before the CHE major can advance into his Junior and Senior years, he must have a point average well above that needed to stay in good standing with the Institute. Not everyone makes it, but those who do will be tops in their field.



R. F. Hochman

H. C. Lewis

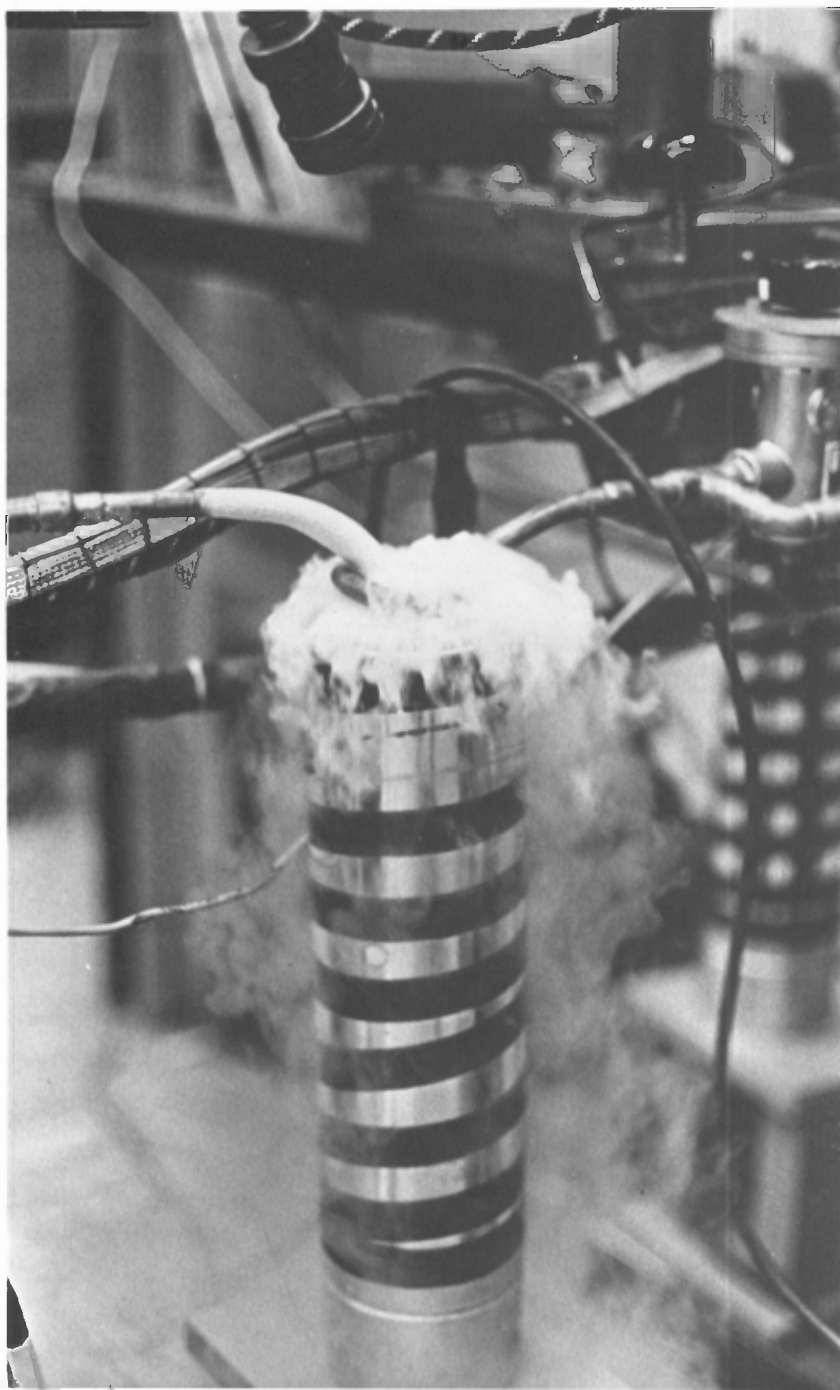


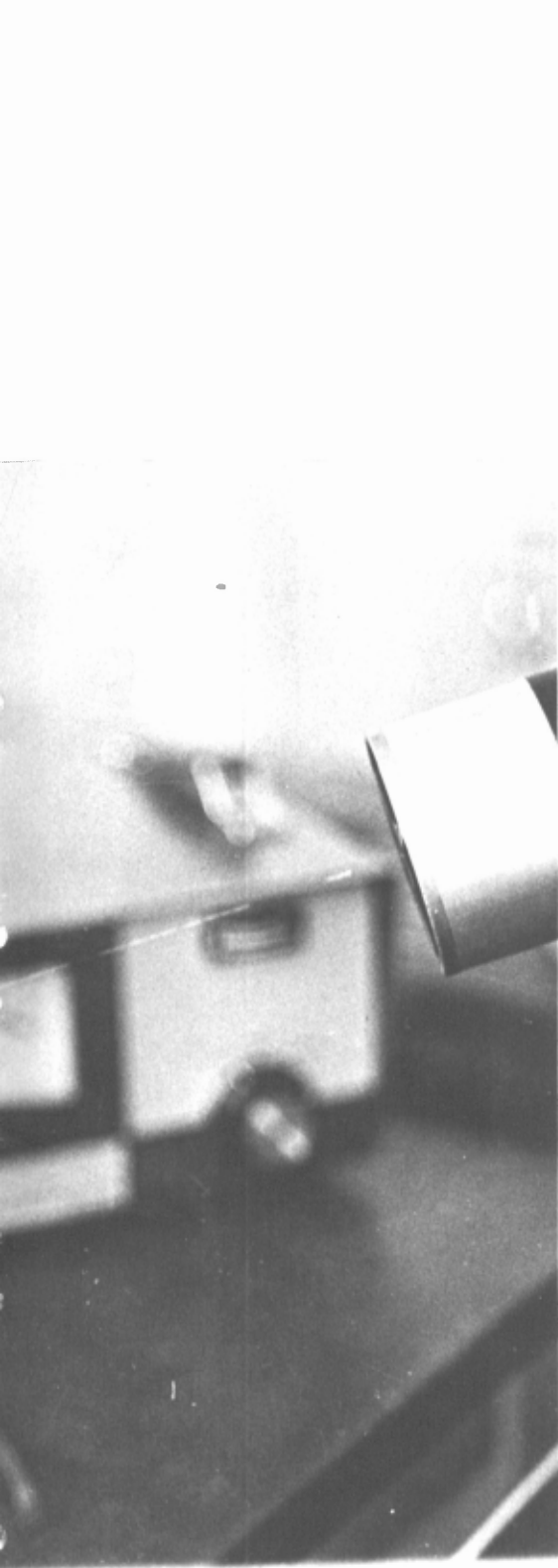
H. A. McGee

C. Orr



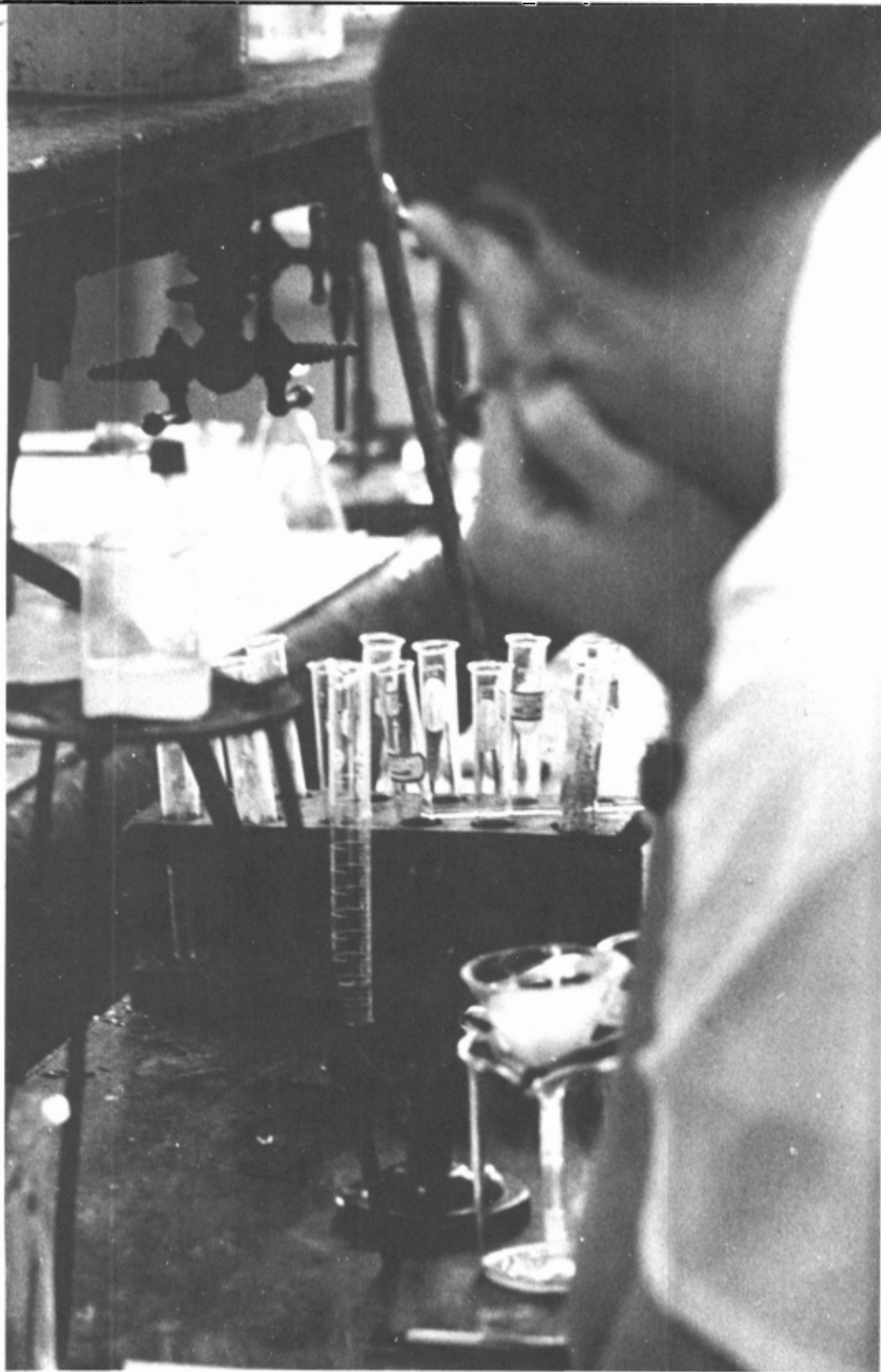
LEFT: Reactions at low temperatures is a study being carried out by the Ch. E. department. ABOVE: Laser research is a common sight in most departments on the Tech campus.





LEFT: Students set up framework for apparatus to study transport phenomena. BELOW: Dr. G. Bridger, director of the School of Chemical Engineering. BOTTOM: Graduate student repairs metering device used to detect imperfections in instruments.





E. C. Ashby

E. M. Burgess



B. W. Davis

W. H. Eberhardt



R. W. Fink

H. A. Flaschka



E. Grovenstein

R. Kimbrough

C. L. Liotta

T. F. Moran



H. M. Neumann

J. A. Stanfield

A. C. Topp

L. H. Zalkow

ABOVE: Freshman chemistry involves both quantitative and qualitative analysis. RIGHT: Complex apparatus enters into the studies done by Tech professors and graduate students.



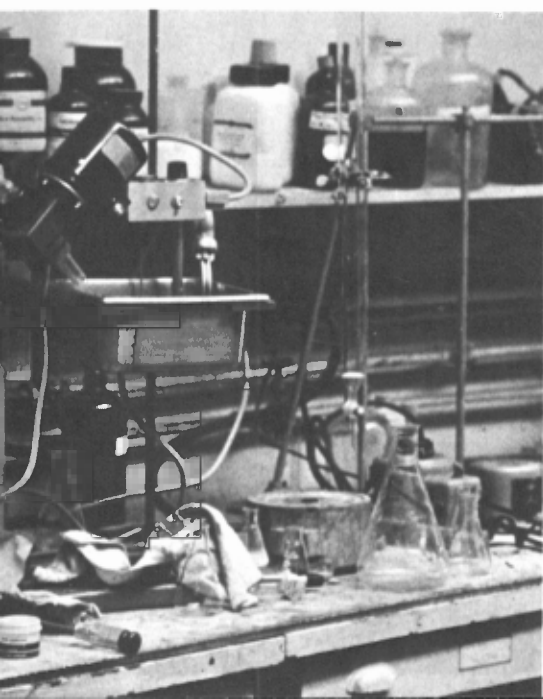
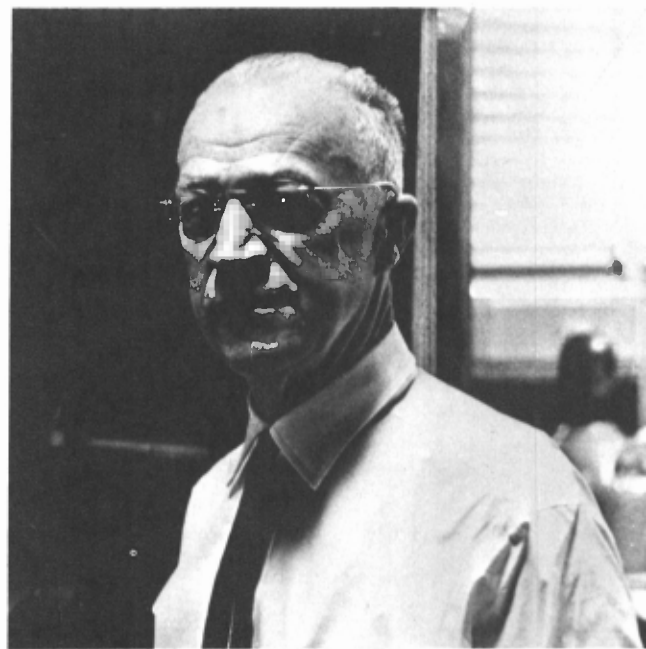
Chemistry Revises Curricula

Although hampered by a lack of space until it can move into its new building next year, the School of Chemistry is still making exciting progress in many ways.

A revised curriculum will appear in next year's catalogue. This curriculum will involve a slight reduction in the total hours required but its more important feature is a greater number of elective courses at the senior level. In general, the Chemistry B.S. graduates divide into three groups in terms of plans for the future: many plan to attend graduate school, others wish to pursue a course in medicine, and still others go directly into industrial positions. With this new curriculum, each group will be able to select courses to satisfy its particular needs.

Grants from the National Foundation have made possible much new equipment in the undergraduate laboratories, particularly in the honors freshman laboratory. Also some half a million dollars worth of research instruments have been added in the last few years. Among these are those with such exotic sounding names as a laser Raman spectrometer, an optical rotary dispersion spectrometer with a circular dichroism attachment, and a hundred megacycle nuclear magnetic resonance spectrometer.

Along with the increase in instrumentation, there has been an increase in graduate enrollment. The department reached a milestone this year—the hundredth student completed his Ph.D. requirements.



ABOVE LEFT: The contents of these bottles constitute the main tools of the beginning chemist. ABOVE RIGHT: The director of the chemistry department, Dr. William Spicer.

Civil Engineering Looks Toward Completion of New Facilities



LEFT: Students test soil sample. ABOVE: Dr. W. M. Sangster, Director of the School of Civil Engineering. FAR RIGHT: The new CE building nears completion. UPPER FAR RIGHT: Surveying is one of the basic courses in the CE's curricula.



With the approach of the completion of the new Civil Engineering building, the Department is looking forward to the long awaited moving day. The new building will house forty faculty offices, thirteen classrooms, a large assembly hall and laboratories for computer work, fluid mechanics, hydraulics, hydrology, astronomy, and structural models.

Another program which has received considerable notice and is connected with one of the Civil Engineering professors, Dr. F. W. Schutz, is the JEPHS program or the "mice" program as it is more commonly known. This program initiated for high school seniors is presently thirty-three strong. These students receive credit for their work here as well as the experience of college life before they are thrust into it as many of us are.



D. O. Cavault

C. S. Martin

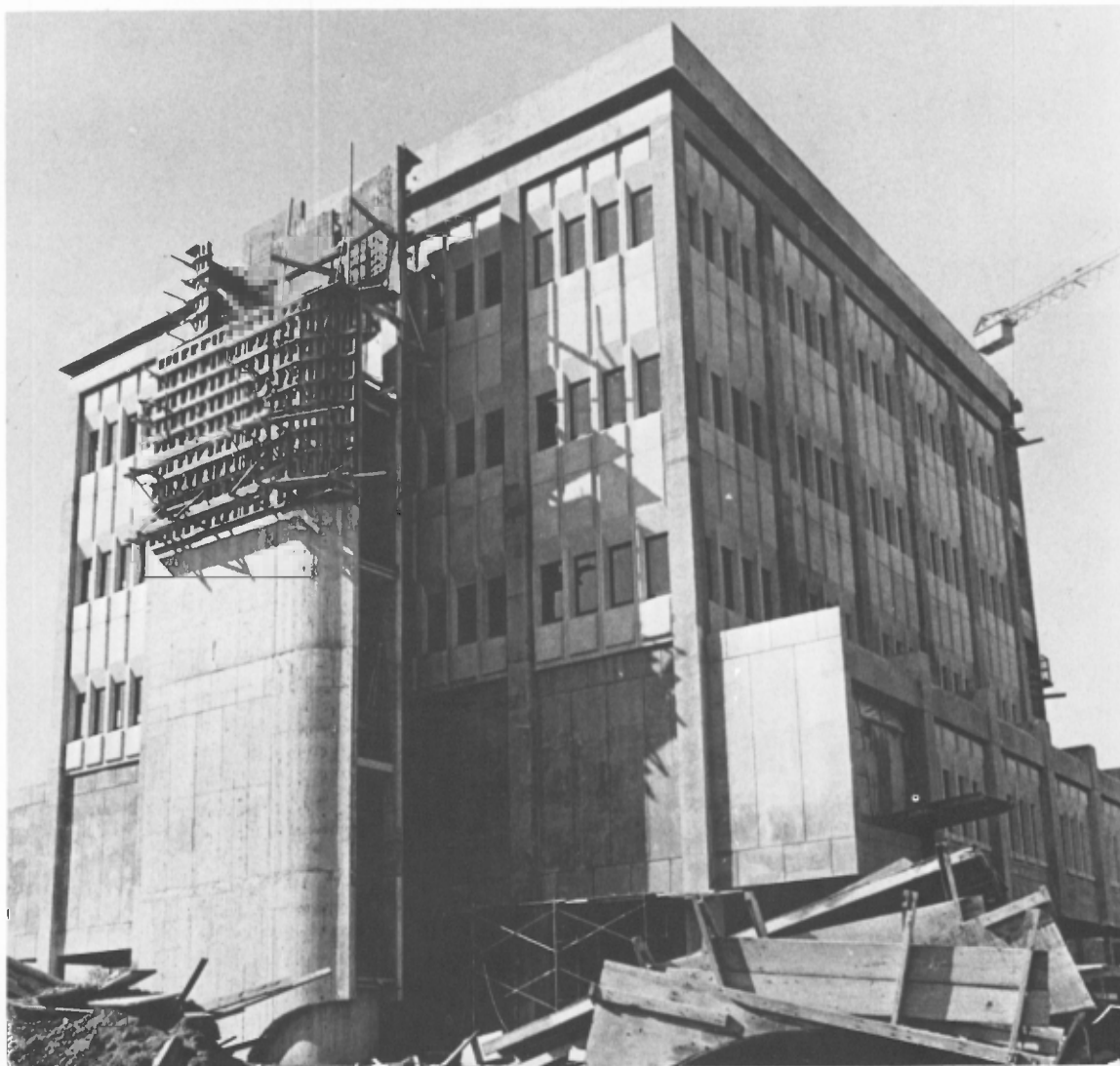
P. G. Mayer



R. J. Pâquette

P. H. Sanders

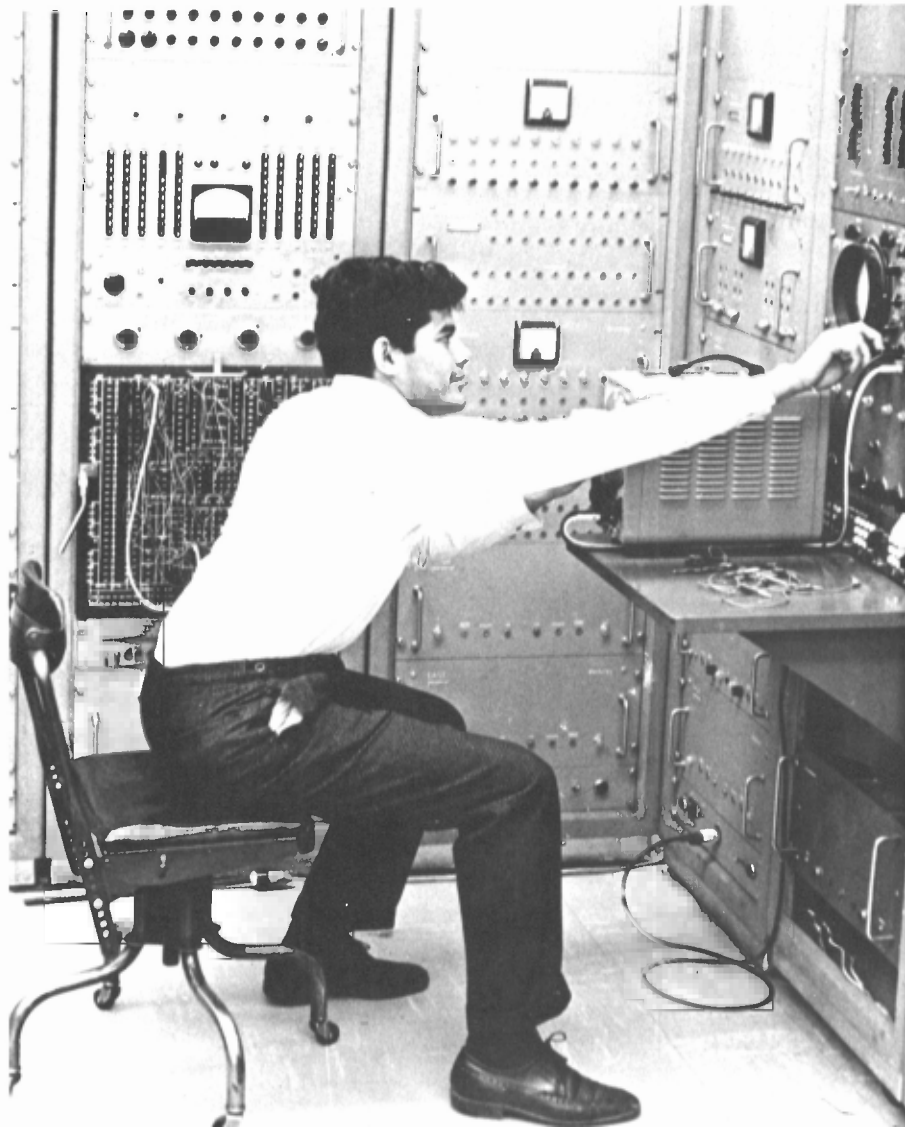
P. H. Wright



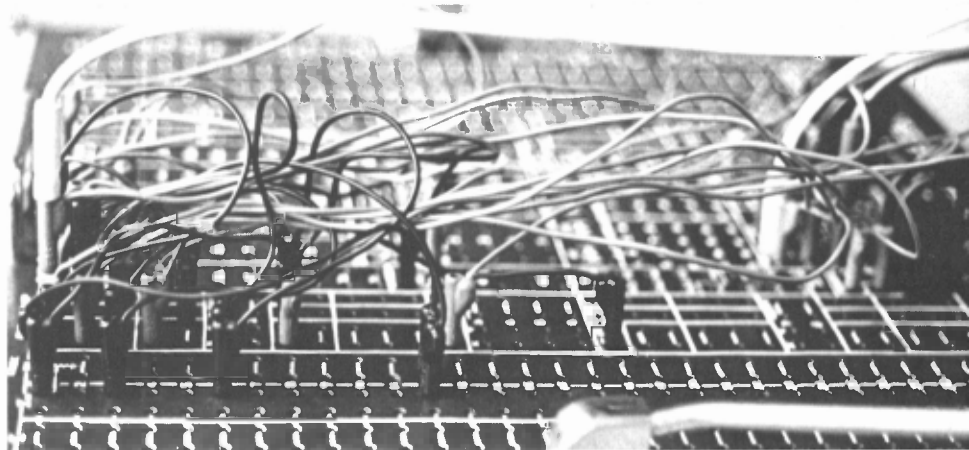


Almost every part of society is influenced by the electrical engineer. As electronics is expanding rapidly into the fields of industry and commerce, the need for the electrical engineer is increasing. As a result the school of Electrical Engineering offers a program that prepares its graduates to enter any phase of electrical engineering. This fundamental mastery of all concepts of this field puts the student in a position to help extend knowledge in his own field of specialization as well as originate new fields that are unknown at the present. Through research in areas like microwave theory, the department is taking a step in this direction.

ABOVE: The Blake Ragsdale Van Leer Electrical Engineering Building. RIGHT: Graduate student studies the effect of different output factors of transistors.



EE Promotes Microwave Research



TOP RIGHT: Circuit board represents link to computer in aid for analyzing transistor amplification. ABOVE: Dr. Benjamin Dasher, Director of the School of Electrical Engineering. RIGHT: The oscilloscope is a common measuring instrument used by Electrical Engineers.



Engineering Graphics Prepares for Degree



W. M. Baggs

J. C. Durden

I. L. Ellis



J. D. Hutcheson

R. K. Jacobs

A. J. Nechi



J. G. Nevitt

D. H. Smith

H. J. Smith



H. W. Streitman

E. M. Wheby

I. E. Wilks

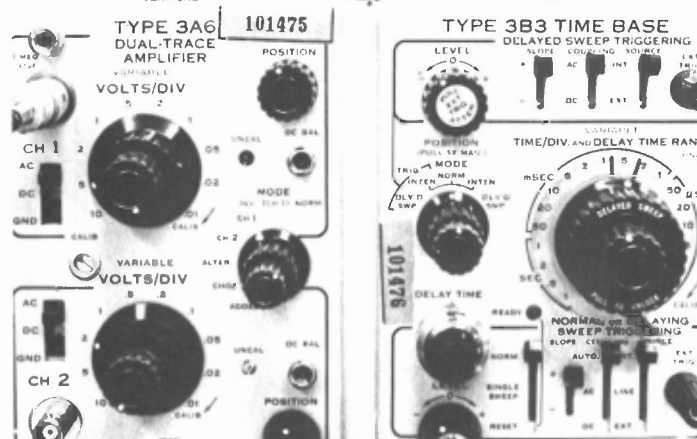
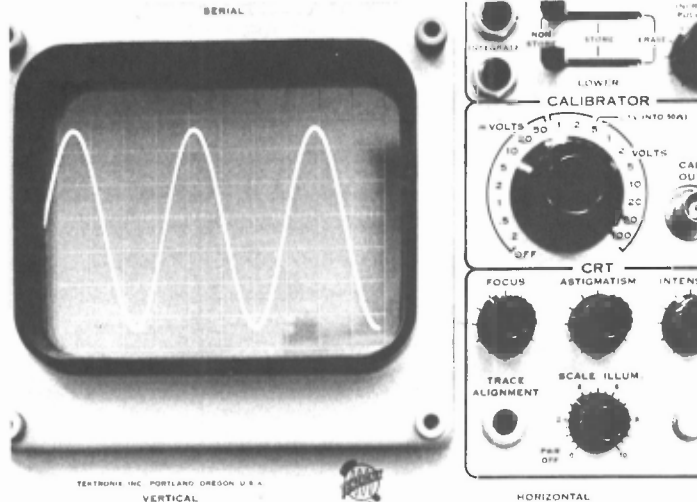
The Department of Engineering Graphics continues to provide professional training in those areas of communications and creativity that are vital to the engineer, the scientist, and the manager in industry.

The department is nearing completion of a proposal for a four-year program leading to a degree in engineering and aesthetics, catalytically sharpened by applied psychology and engineering-oriented liberal subjects.

As to Engineering Graphics in general, the following quote from Mark Van Doren might well have been written with this subject in mind: "Any piece of knowledge I acquire today has a value at this moment exactly proportioned to my skill to deal with it. Tomorrow, when I know more, I recall that piece of knowledge and use it better."



ABOVE: Drawing courses require accuracy as well as long hours in the drawing lab. LEFT: Dr. Kenneth Jacobs, director of the School of Engineering Graphics.



J. H. Armstrong



H. F. Bauer



M. C. Bernard



F. C. Bragg



D. J. McGill



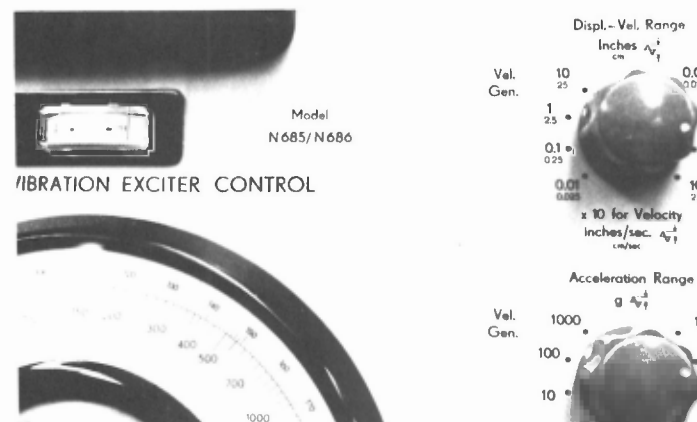
G. M. Rentzepis



G. I. Simitses



C. E. S. Ueng



TOP RIGHT: Oscilloscope is employed here to measure induced vibrations in various kinds of metals. CENTER RIGHT: Research in vibration control is aided with the use of a Vibrational Exciter Control. RIGHT: Dr. Milton Raville, Director of the School of Engineering Mechanics. FAR RIGHT: Timer is also employed in vibration studies.



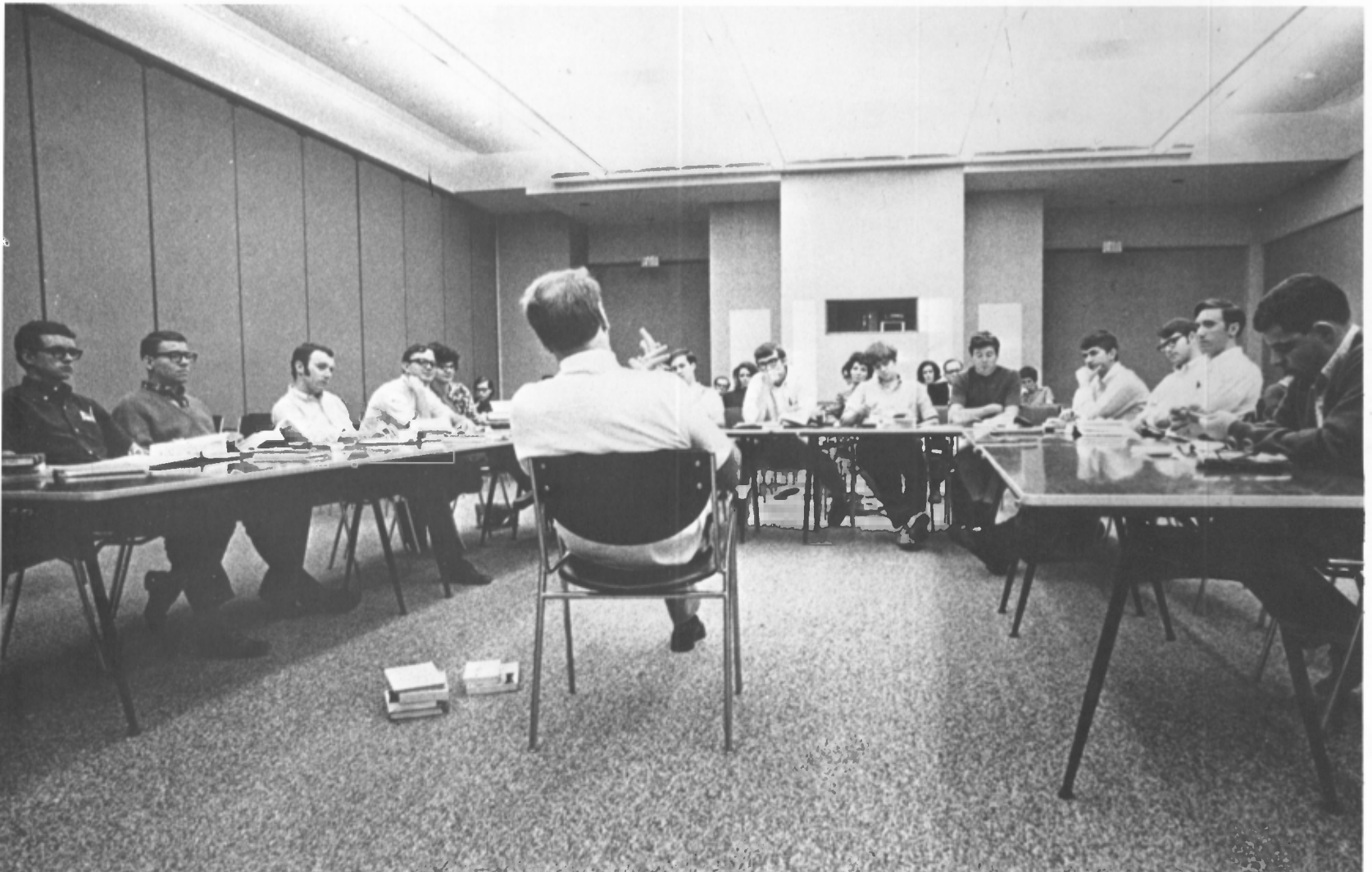
Engineering Mechanics Does Vibration Studies

Engineering Mechanics combines the theories of mathematics and physics for engineering applications. The studies offered in this department are therefore considered a well-rounded, as well as fundamental, approach to a degree.

With an emphasis on mechanics, the Department involves most of its time devoted to research in studying areas of stress analysis, vibration and material analysis in order to meet the need of a rapidly expanding technology in the Department of Engineering Mechanics and other related fields.



BELOW: James Dickey conducts a seminar course on his poetry. BELOW RIGHT: Professor Chaikin instructs students on drama. BOTTOM RIGHT: Professor Moore discusses the procedure and theory that goes into the production of a short story.



James Dickey Hosts Seminar as Poet-in- residence



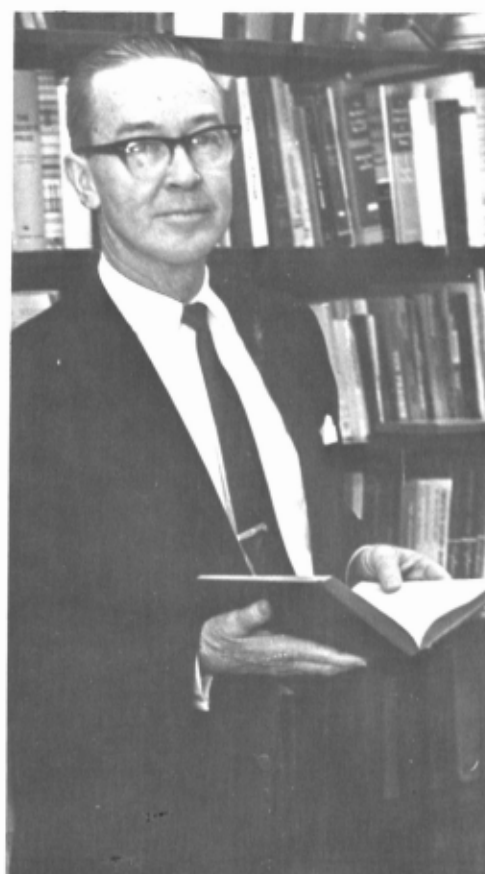
The English Department is as old as Georgia Tech, and throughout its existence it has aimed at giving the student skill in writing and growth in sympathy, understanding and perception through the required study of literature in each quarter of the first two years. It is also one of the largest departments with 38 fulltime faculty teaching an average of 3,400 students or more each quarter.

The English Department courses, required in the first two years, resemble those in better colleges throughout the nation. The first year aims at perceptive and sympathetic understanding of men and women as revealed in the short story, drama and poetry. Tech students respond especially well to poetry, perhaps because it is closest to mathematics. Last year, on three occasions they crowded into the auditorium to hear Mr. Dickey, the poet in residence, read his poetry—and asked for more.

The sophomore years bring the student in contact with the great literature and ideas of the western world, beginning with the Greeks, continuing through Dante and the Renaissance, and ending with literature since Shakespeare. The scope is broad, but the outline is there and any student can fill in the gaps for himself if and when he wishes. And increasingly he shows that he wishes to take his place alongside those who desire to understand the society they live in.



RIGHT: Dr. Andrew J. Walker, director of English department.



A. J. Walker



P. D. Zivkovic

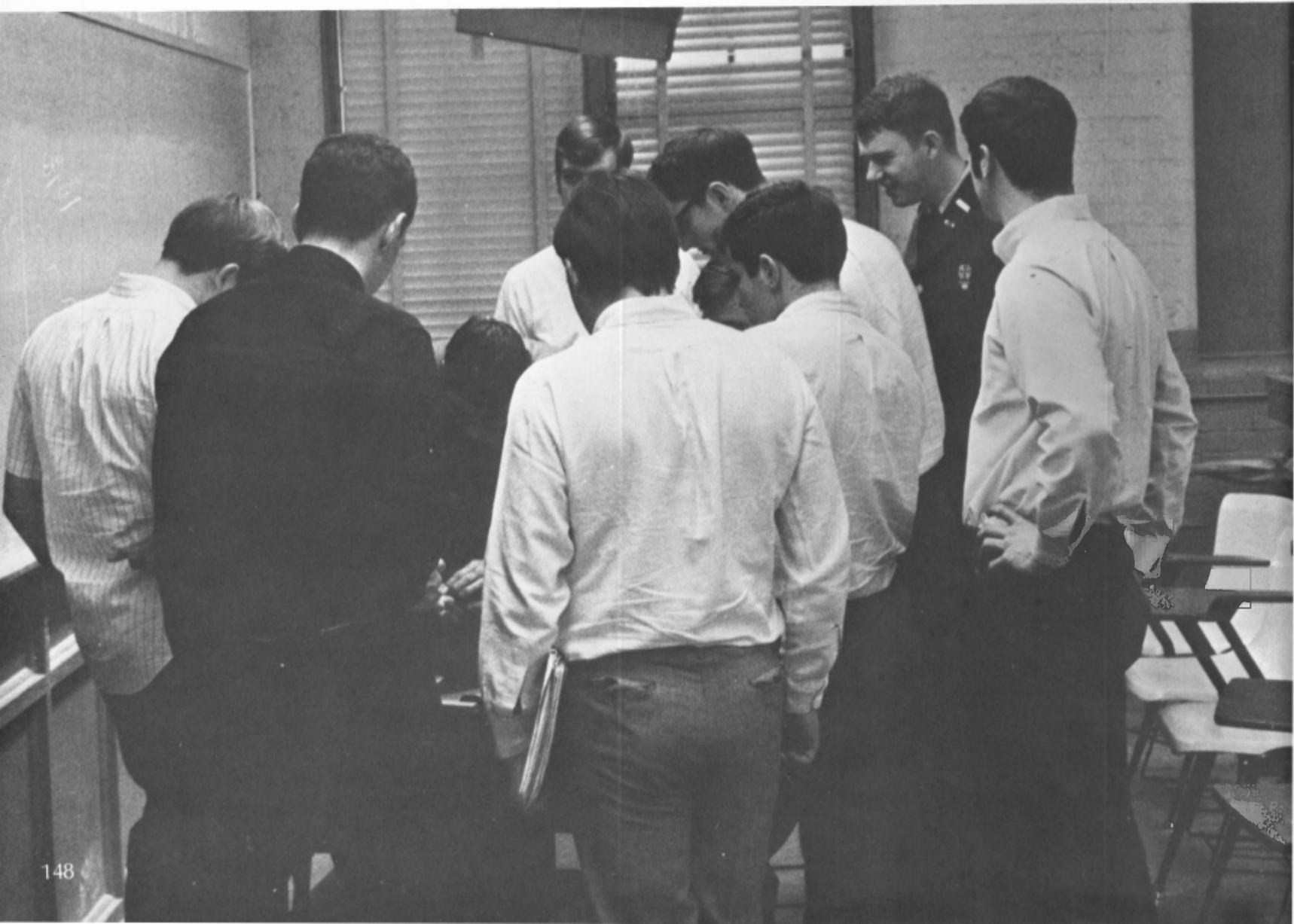
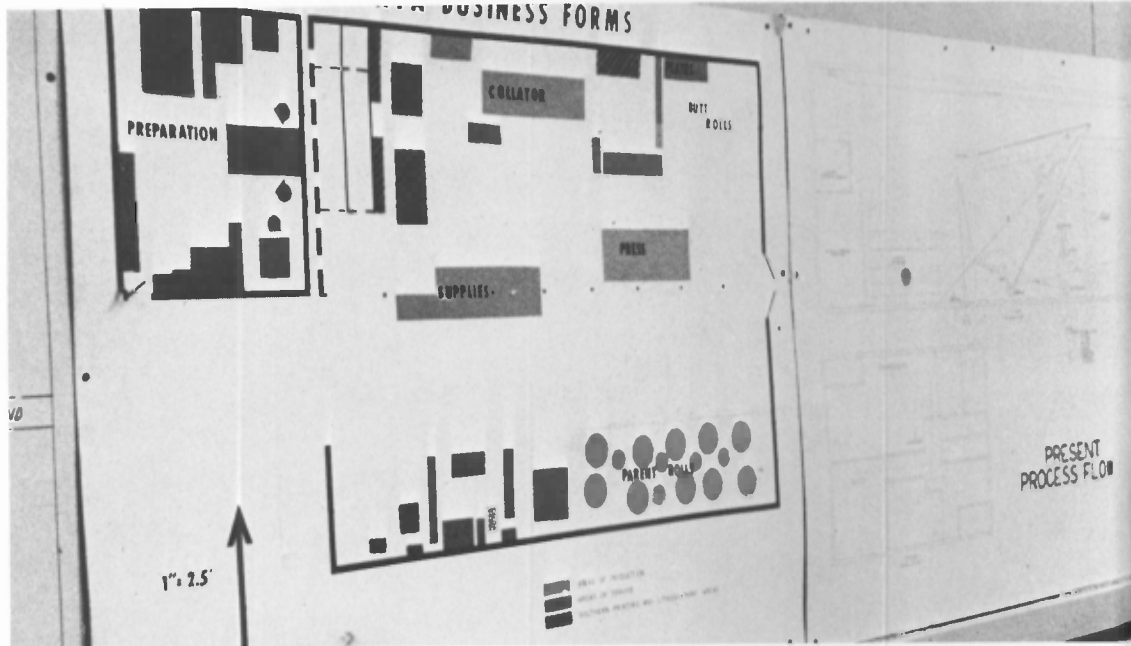


J. D. Young

IE Changes Name to Industrial and Systems Engineering

Industrial Engineering is a versatile major which is continuously changing its structure to equip the IE major with the most effective tool for achieving his goals after graduation: A change in the curricula of the department as well as a change in the name of the department. Formally known as the School of Industrial Engineering, the department has now changed its name to the School of Industrial and Systems Engineering after rearranging their Senior curricula to include a division of systems engineering.

Fighting crowded conditions in its present facilities, the IE Department created more space by subdividing some of its present rooms, hoping that its new facilities would be completed within a year. A new facility is badly needed to house Tech's noted Department of Industrial Engineering.





J. Banks



W. W. Hines



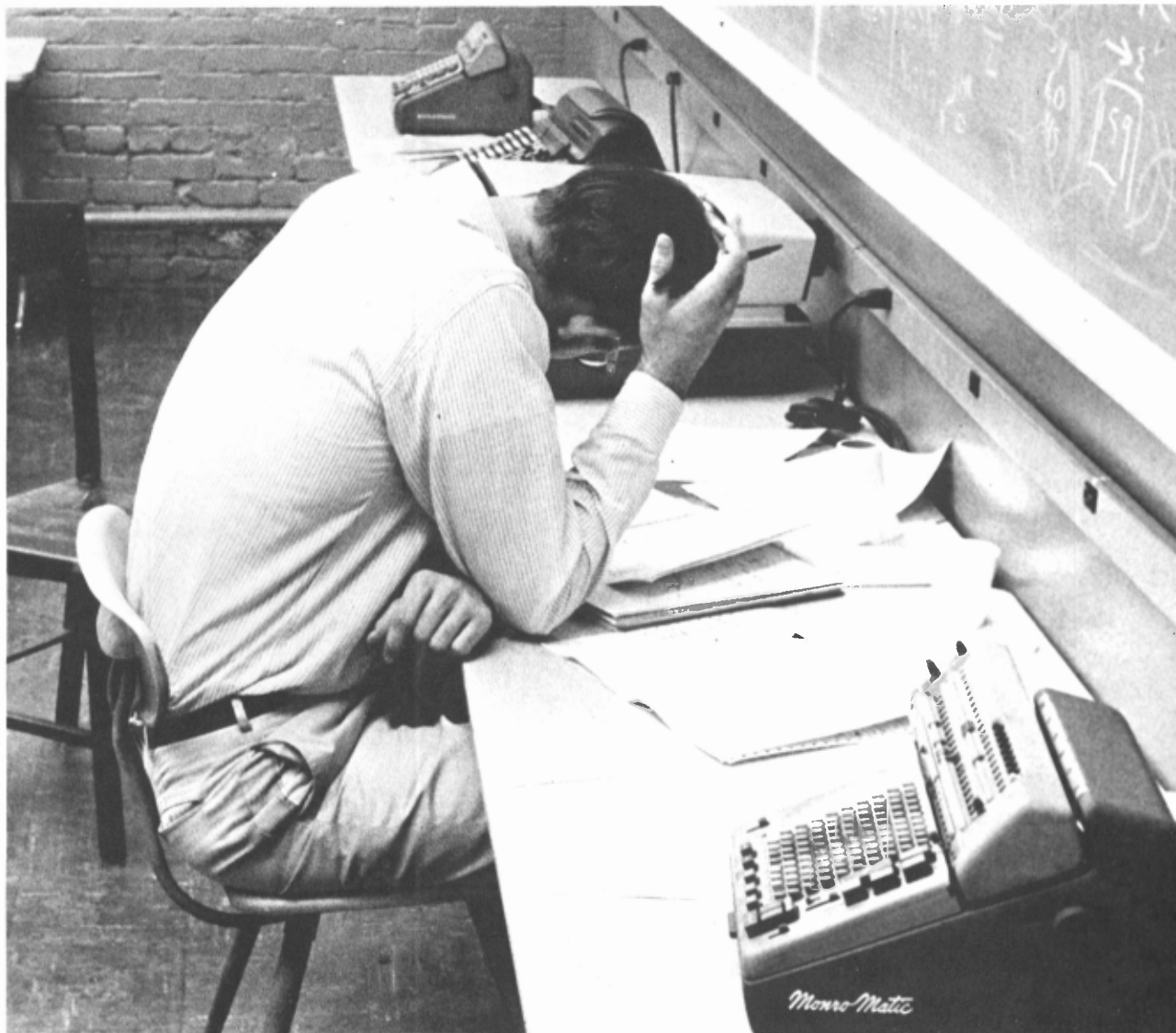
T. H. Huitt



N. K. Rogers

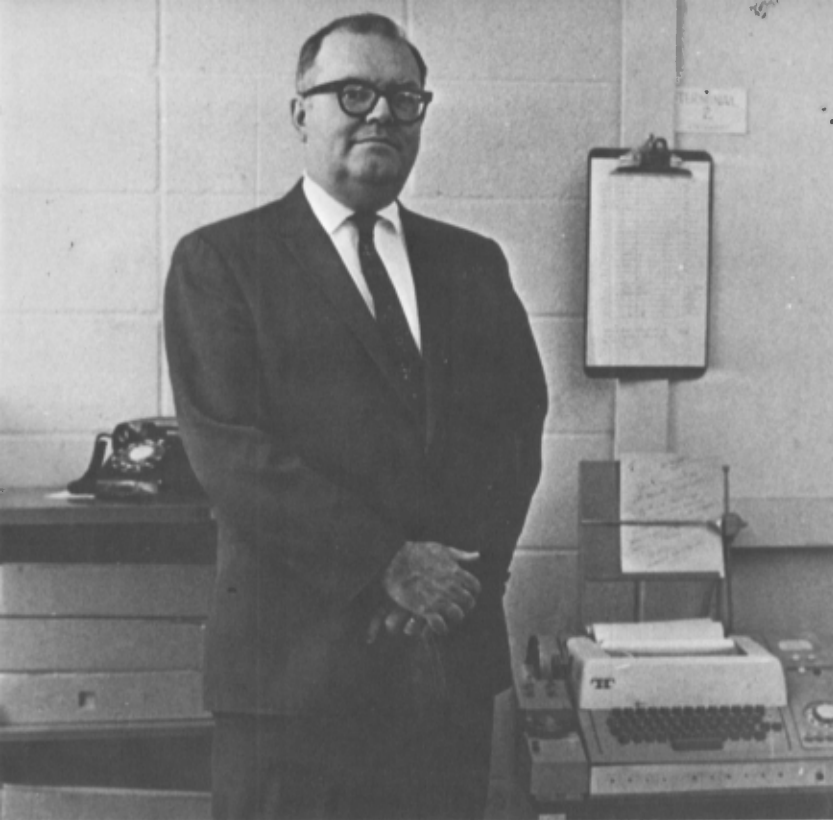


T. L. Sadosky



ABOVE: Students spend many hours in the IE calculating room. LEFT: Dr. Robert Lehrer, Director of the School of Industrial and Systems Engineering. FAR LEFT: A course was taught by television as an experiment conducted by the department. TOP FAR LEFT: A project conducted by one of the students to find faults in Atlanta area labs is an assignment of one of the labs.



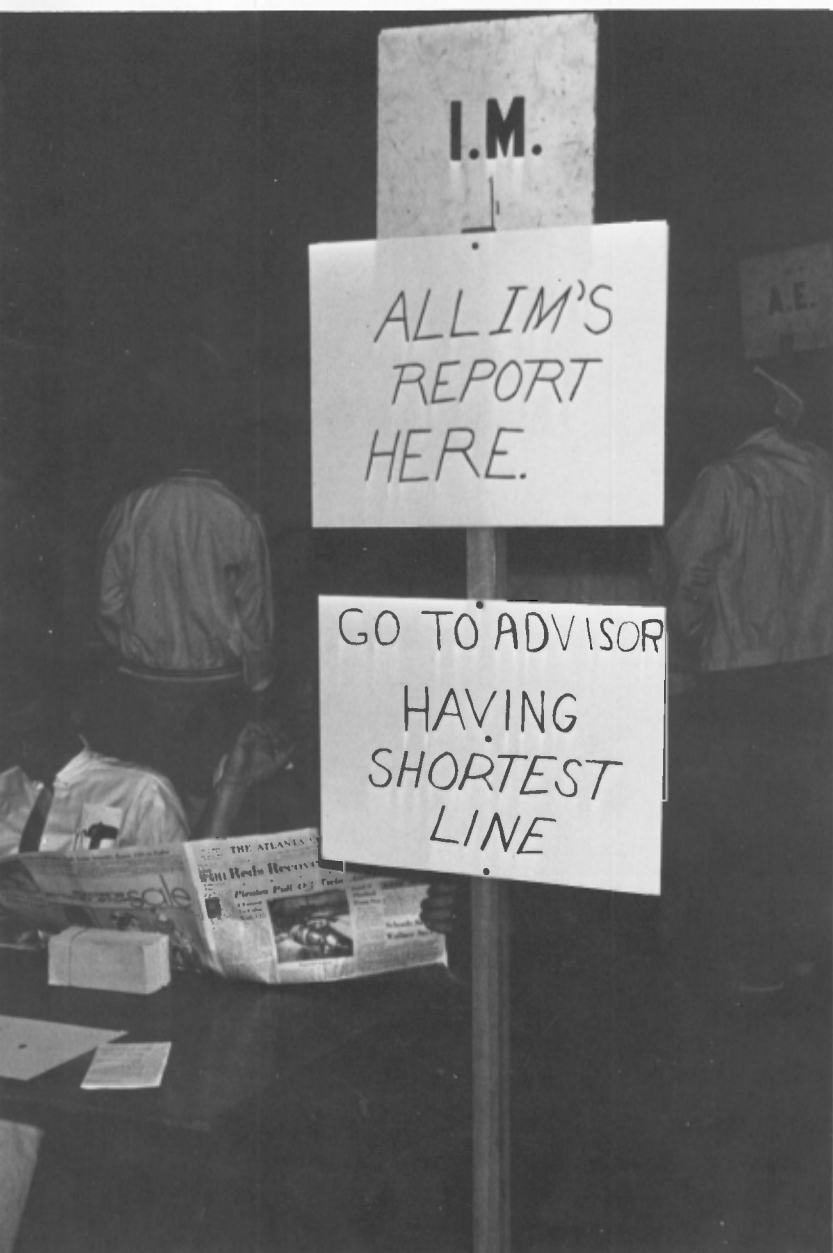


Industrial Management Initiates Field Work Program

A unique program is underway for a group of IM's this year. It consists of "field work" for six seniors who are individually paired with six Negro students from the Atlanta University system. Each pair of students, one white and one black, will be assigned to a small business in the Atlanta area. As the IM's work, they will be gaining valuable insights into the effects of a marketing program while obtaining beneficial experience working with people. The teams report to an assigned professor during the quarter. Thus, they can learn on the job and discuss back at school what they have seen at work. A by product is the benefits received by the businessmen in the program.

An analogy can be drawn between this program and the co-op program in that the IM's receive work experience, yet the IM's are attached to, rather than separated from, the school. In addition, the IM's receive credit for their work.

FAR LEFT: Much of the IM student's requirements consist of mastering the operation of computers and data-processing machines. ABOVE: Dr. Sherman Dallas, Director. LEFT: Every year IM lines at registration grow longer.



IS Expands Facilities and Services ✓

Information Science courses are becoming more popular and more essential each year. The department is planning additional undergraduate courses with emphasis on computer technology. At the same time, the department is strengthening its graduate program and is encouraging Techmen to take numerous Information Science undergraduate courses in preparation for Information Science graduate study.

A revolutionary program based on remote control learning is being formulated. The program would allow a student to telephone a central lecture storage center and be taught a taped lecture through audio and visual means. This program would have many obvious advantages: conservation of classroom space, regulation of a student's learning pace, and diversity of subject matter to mention a few.



L. Chiaraviglio

J. J. Goda

J. Gough



I. H. Poore

E. F. Rumiano

R. M. Siegmann



ABOVE: The Computer Center has facilities available for both student and faculty use as well as industrial services. LEFT: Dr. Vladimir Slamecka, Director of the School of Information Sciences.

Modern Languages

Emphasizes Culture as Well as Languages



G. H. Driver



C. R. Fitzpatrick



C. I. Gale



C. B. Gauster



T. Gregory



C. D. Johnston



D. McCullough



M. S. Venable



G. F. Walker



J. D. Wright



R. O. Wyatt



L. J. Zahn

Traditionally, the principal interest of the Modern Language Department has been the maintenance of a program of instruction under which a student could acquire, for the use as a tool of research, the language(s) studied. In recent years, however, two departmental interests have received considerable emphasis: a specifically cultural interest—the development of a program of instruction in the belletristic literatures of the most common languages taught, and a scientific interest—the development of a program of instruction in the field of linguistics. The emphasis on these latter two interests is reflected in the official approval of a full complement of upper-divisional courses in each of the above mentioned disciplines. And with the support of institutional trends, the emphasis on these more recent interests is expected to continue.

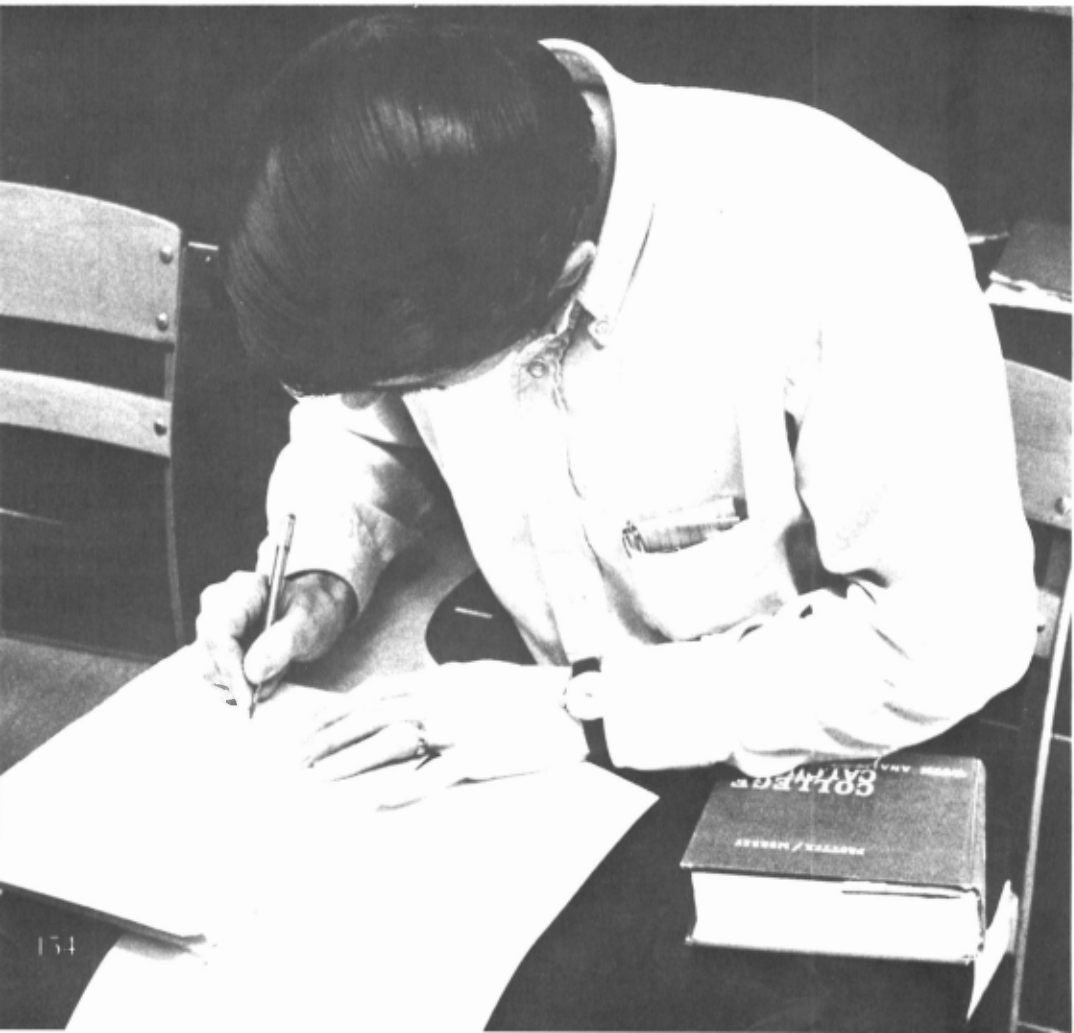


ABOVE: Dr. James Wright, director of the School of Modern Languages. TOP RIGHT: Mrs. Driver returns results of a recent exam. RIGHT: The language lab required by most of the language courses, provides modern equipment to facilitate the lab.





LEFT: Students discuss theory with professor after class. BELOW: Dr. Bertram Drucker, Director of the School of Mathematics. BELOW LEFT: The basic calculus courses are taken by almost all students.



Mathematics: Essential Basis for Engineering

The Math Department is re-evaluating its curriculum this year, both in the engineering and non-engineering fields. In an attempt to keep up with the ever-changing role of engineering mathematics, the department is revising the core curriculum so as to introduce the engineering student to certain concepts that are becoming more important. In particular, earlier involvement with Matrix Algebra and differential equations is being considered.

For the non-engineering students, a major change has been instituted. A special math sequence has been created which is oriented toward the needs of the social, managerial, and biochemical students. In essence, the Math Department is creating a flexible program that can be adjusted to fit the requirements of engineering and non-engineering Tech Students—something which has long been needed in Ga. Tech's rigorous Math Department.



ABOVE: Fundamentals of mathematical skill is a requirement for every walk of life.



A. E. Fulton

J. C. Brooks

D. L. Brown



J. P. Line

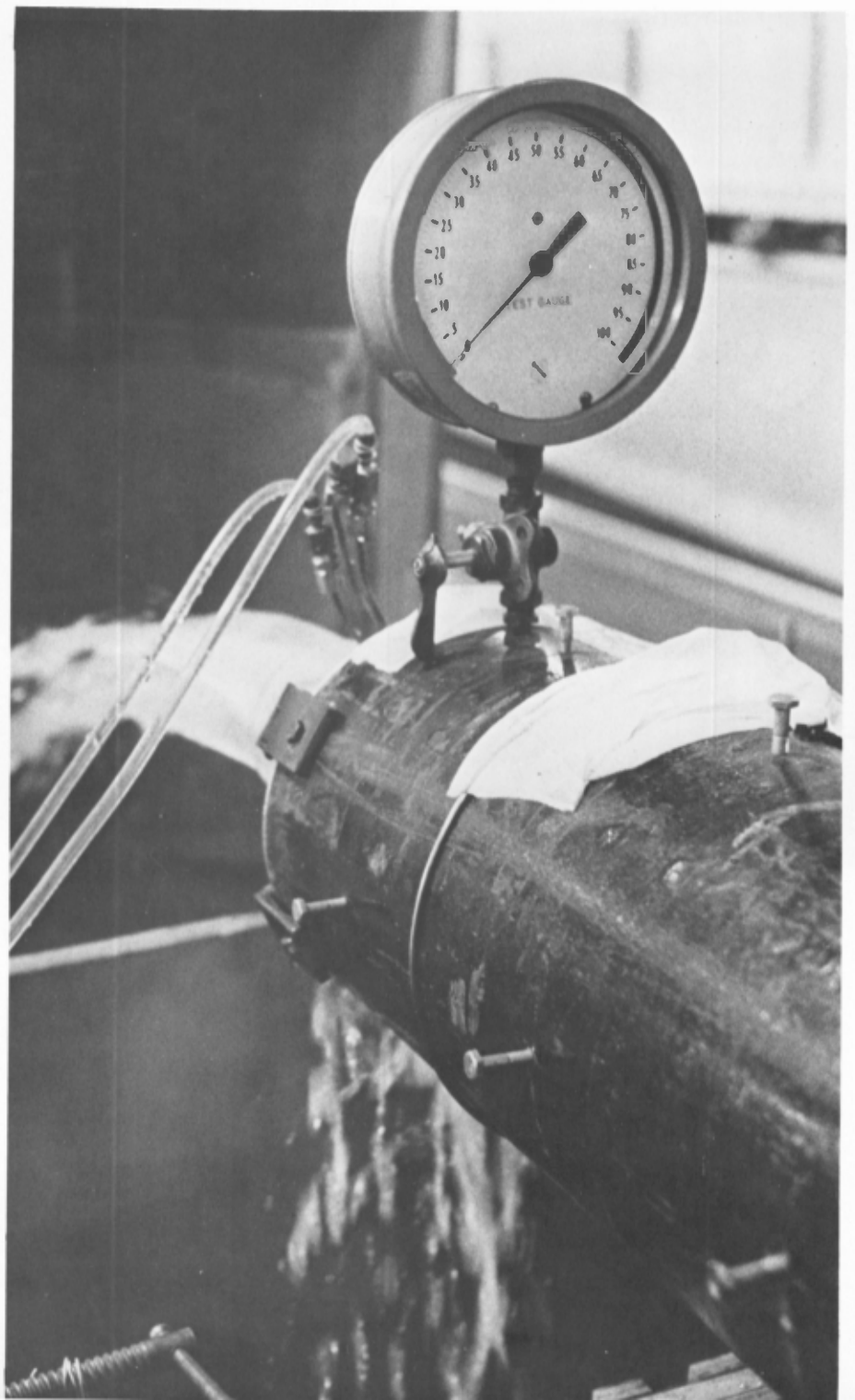
J. M. Osborn

G. A. York

Mechanical Engineering Institutes Five Year Program



ABOVE: One might expect to find scientific apparatus or chemicals in a stockroom, but in the ME department, the stockroom contains items like bolts, gears, pipes, and other metal objects.



The Mechanical Engineering Department is instituting a five-year plan to evaluate and perhaps eventually incorporate more diverse topics into its program. Examples of the sub-fields being considered are Energy Sources and Conversion, Flow Technology, Material Science, and Systems Design.

A summary of the proposed plan is part of a report recently drawn up: "Mechanical Engineering has dealt with perhaps the largest diversity of engineering problems and for this reason its horizons continually expand while spawning and spinning off sub-fields which go on to become full-fledged disciplines themselves."



J. M. Bradford

W. R. Clough



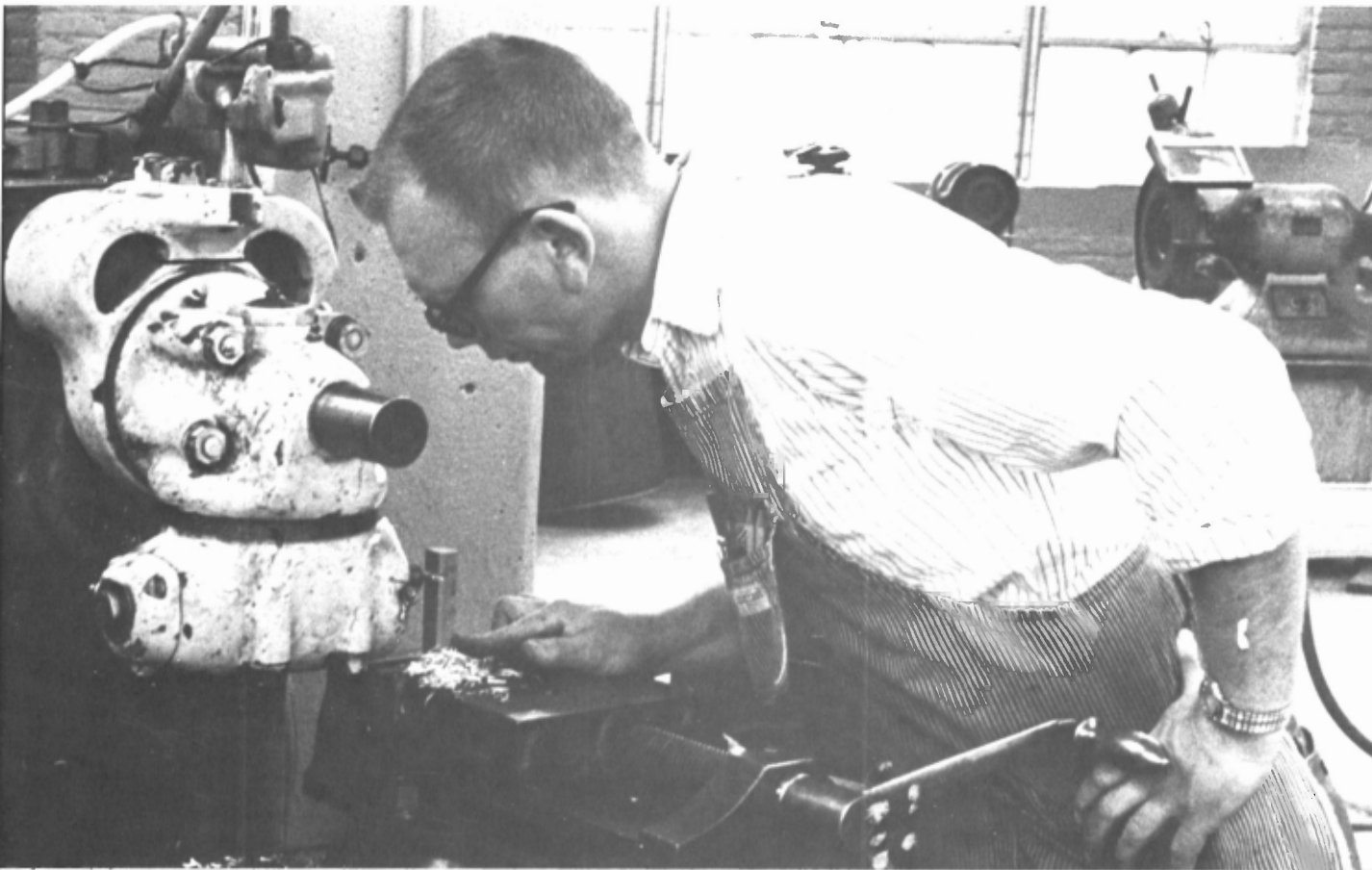
W. A. Hinton

W. L. Johnson



P. G. Sexton

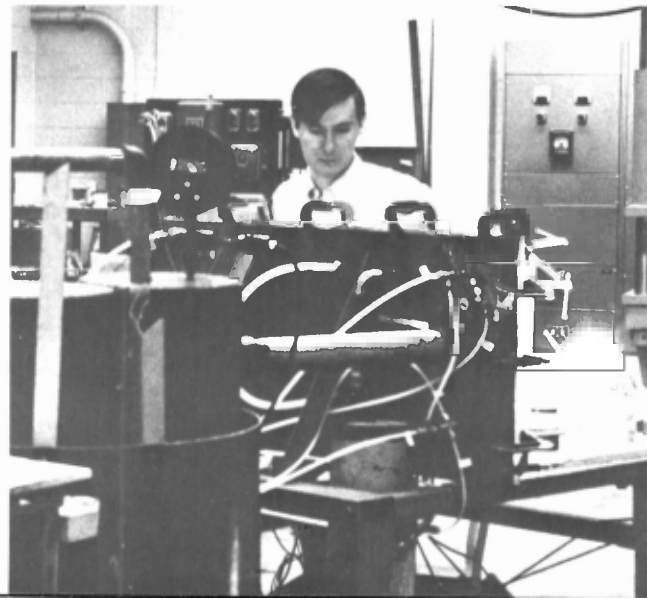
W. M. Williams



UPPER RIGHT: Dr. Stothe P. Kezios, Director of the School of Mechanical Engineering. ABOVE: Many hours are spent in the shop at the drill press. RIGHT: Student works on special problem assignment.



W. Wulff



N.E. Does Nuclear Propulsion Research



Although much of the glamour associated with the opening of the Tech Reactor Center, the largest on any campus in the United States, has since worn off, the Center continues to conduct necessary and vital research in the field of Nuclear Engineering. Noteworthy are the Reactor's research in the field of energy conversion and space power, nuclear propulsion and radiation utilization. To accomplish this research, the Reactor Center utilizes such facilities as a five megaton heavy water reactor, a pulsed fast neutron beam generator, a one mev Van de Graff generator and a 12,000 Curie cesium 137 radiation source.



J. D. Clement W. W. Graham M. R. Haroon

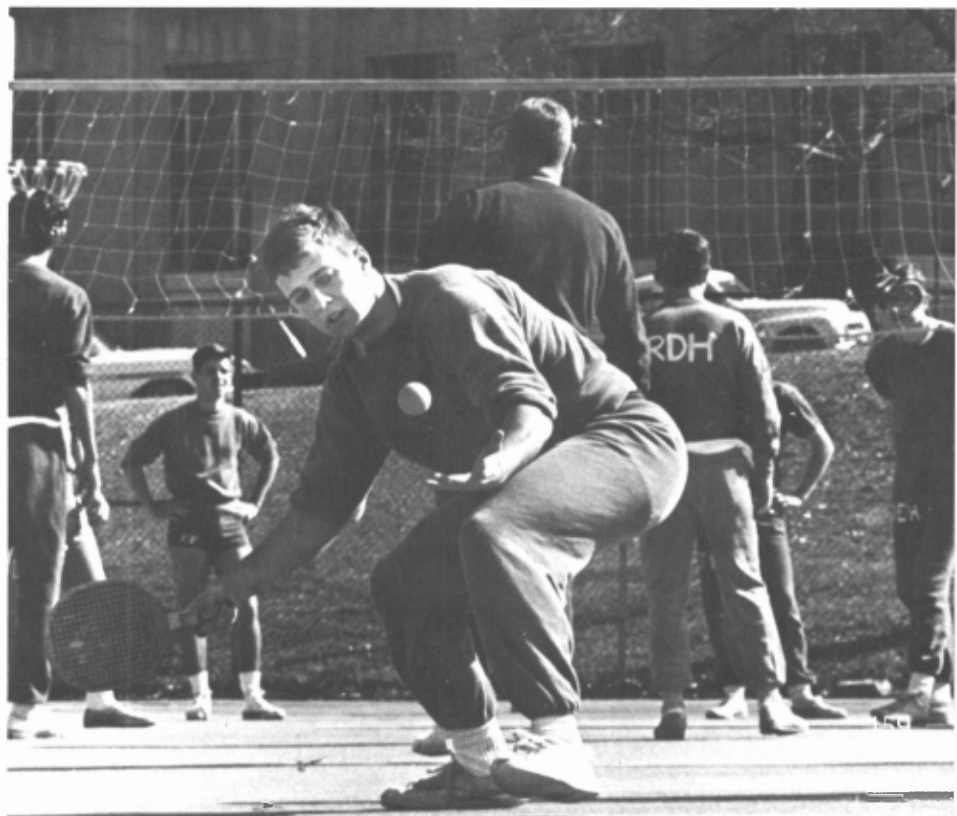


TOP: Studies in fast neutron species are researched by this graduate student. ABOVE: Dr. C. J. Roberts, director of the School of Nuclear Engineering. LEFT: The control panel for the nuclear reactor is located right above the reactor: a reminder not to make mistakes.

PT: A Sound Body and a Sound Mind

The PT Department, following the old adage "All work and no play makes Jack a dull boy" strives to even out the average Techman's busy academic schedule with a well-rounded physical program. Freshman courses include swimming, track and gym while the Sophomore enjoys the more recreational sports of tennis, football, and basketball. Also, the department offers a supplementary course for Juniors and Seniors who have completed the requirements of the basic courses. This course involves exercising once a week for students who are interested in keeping fit.

LEFT: Track is offered in the freshman year. BELOW: Mr. John McKenna, Director of Physical Training. BOTTOM: Handball is a favorite enjoyed by all.

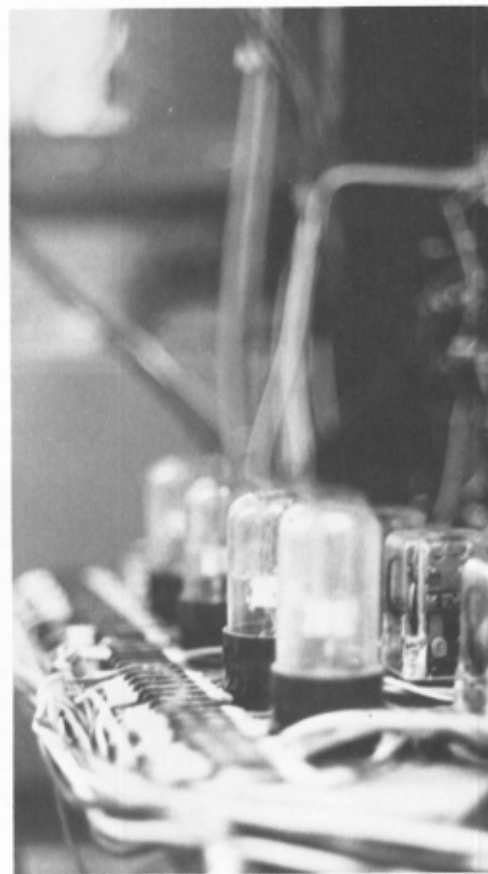


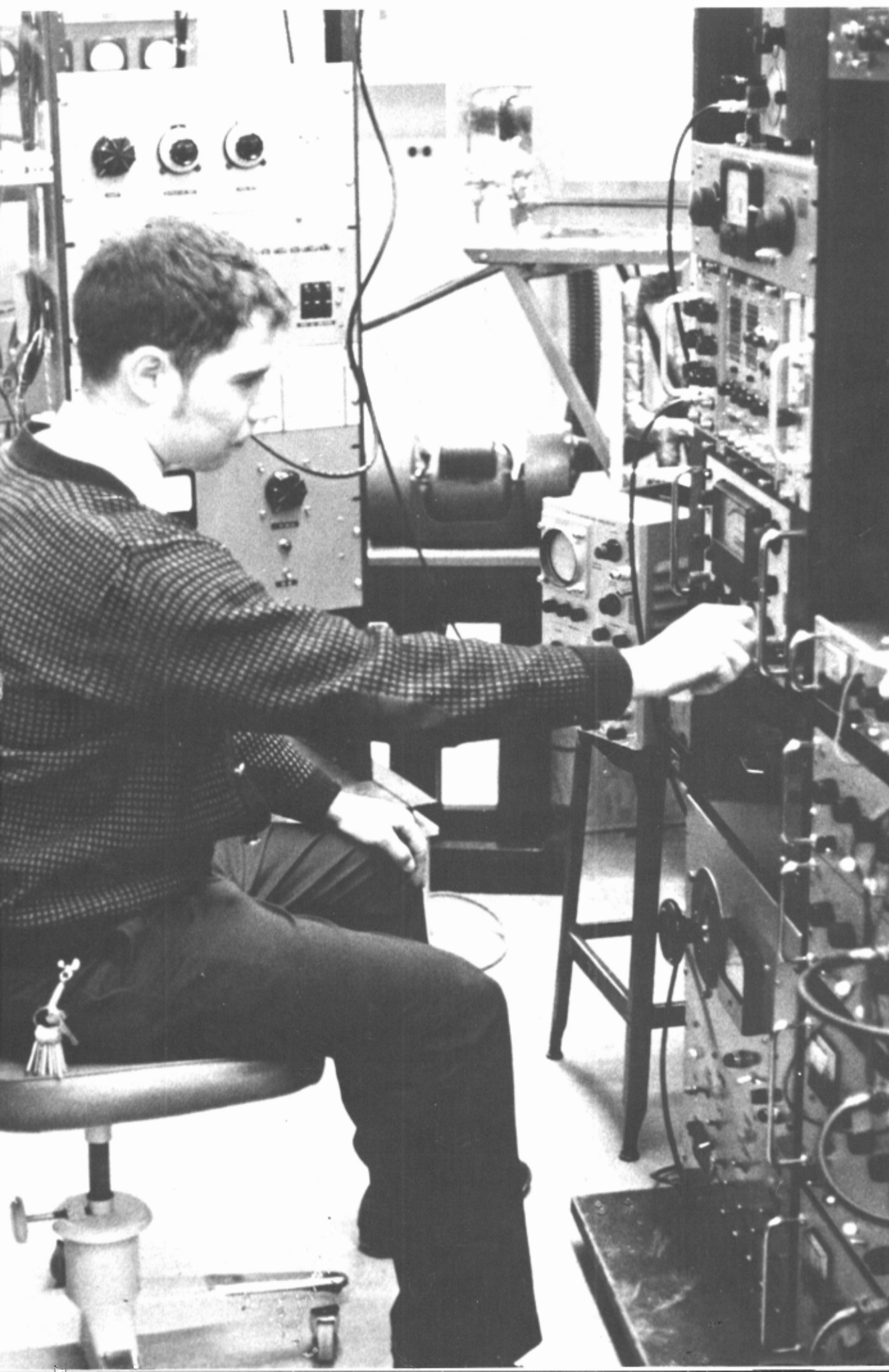
The Physics department has rapidly expanded its undergraduate and graduate programs. Current areas of faculty research specialization include theoretical studies in elementary particle physics, nuclear structure, many body problems, magnetism, transport properties and approach to equilibrium. Experimental areas include transport properties of ions in gases, collision ionization and excitation, ultrasonics, health physics, biomedical physics, lattice dynamics, low energy diffraction, low temperature physics, molecular spectroscopy, x-ray and neutron diffraction.

An appreciable faculty effort is being extended in an endeavor to keep the undergraduate curriculum updated in both content and presentation. New techniques and media, such as computer assisted instruction and programmed material which are designed to assist the student in self study are being employed.

Physics Explores Computer-assisted Instruction

BOTTOM LEFT: Dr. James R. Stevenson, acting Director of the School of Physics. BELOW: Outdated vacuum tubes are being replaced by electronic circuits. RIGHT: A graduate student does research in collision ionization.





R. K. Davenport



J. R. Stevenson



T. L. Weatherly



J. Q. Williams



L. A. Woodward



L. D. Wyly



Psychology Does Human Factor Research

Trying to exceed its reputation as the smallest school on campus, the Psychology Department offers a degree in Applied Psychology. After a rigorous curricula of mathematics, chemistry, physics and biology, the department tries to emphasize statistics applied to psychological investigation, experimental method and learning theory to mention only a few.

After taking over the basement floor of the old physics building, the department has been able to expand its research facilities into a larger area as well as scope.



J. V. Manatis



C. V. Riche



TOP: Dr. Edward Loveland, Director of the School of Psychology. ABOVE: Research is being carried on with Armadillos. RIGHT: Pigeons also are subjects of research areas.

Being practically the only school in which Techmen can take a variety of elective courses, the School of Social Sciences is working to expand its curriculum to meet the rising interest of Tech students in this field. This year the department began two new courses directed toward involving the student in the social and economic reforms present in contemporary society. These were described as S.S. 357—"Special Topics in Urban Problems," and S.S. 321—"Afro-American History." The latter's objectives, according to Mr. William Peace III who teaches the course, are to understand race problems in the U.S. through a study of racism in the history of our society, to provide an accurate picture of Afro-American history, to understand the history of Afro-American resistance to oppression and injustice, and to appreciate the Afro-American contribution to the growth and development of the U.S. society.

RIGHT: Students discuss the role of democracy in today's society. ABOVE RIGHT: Several new courses involving Black History in America were offered during the 68-69 year. BELOW: Dr. George Hendricks, Director of the School of Social Sciences.



J. M. Lenowitz



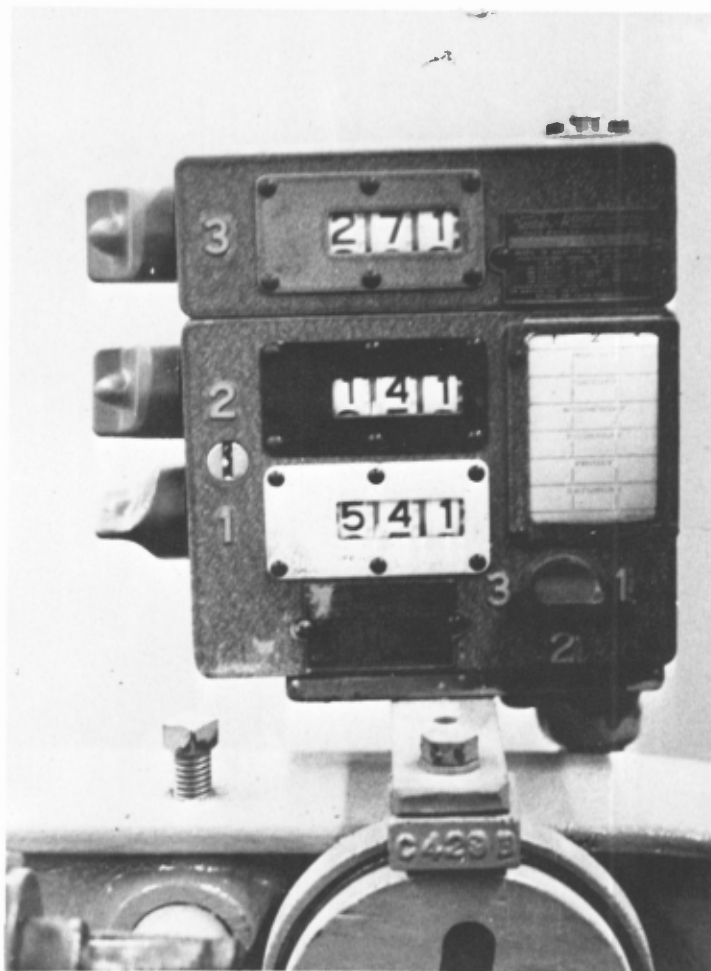
J. D. McBrayer



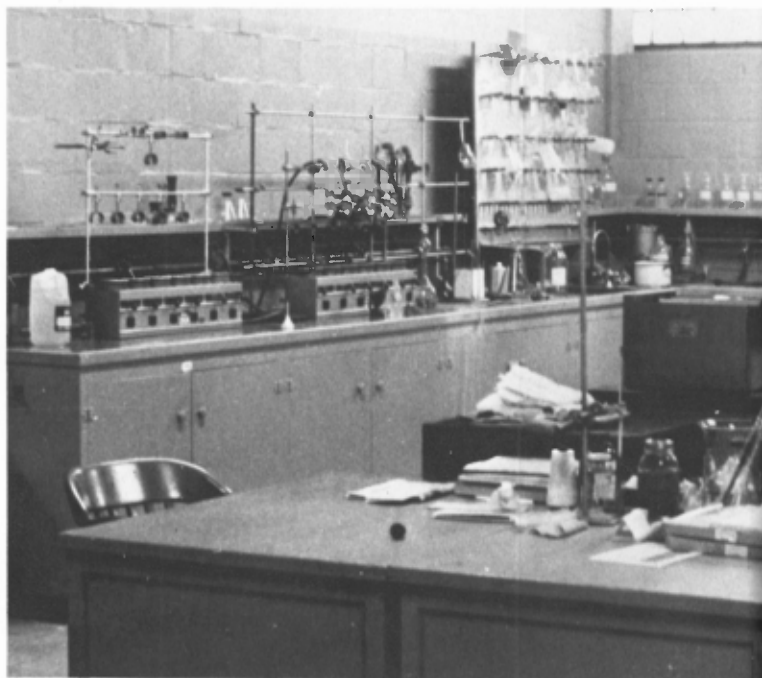
G. N. Sisk



SS Offers Courses on Black America

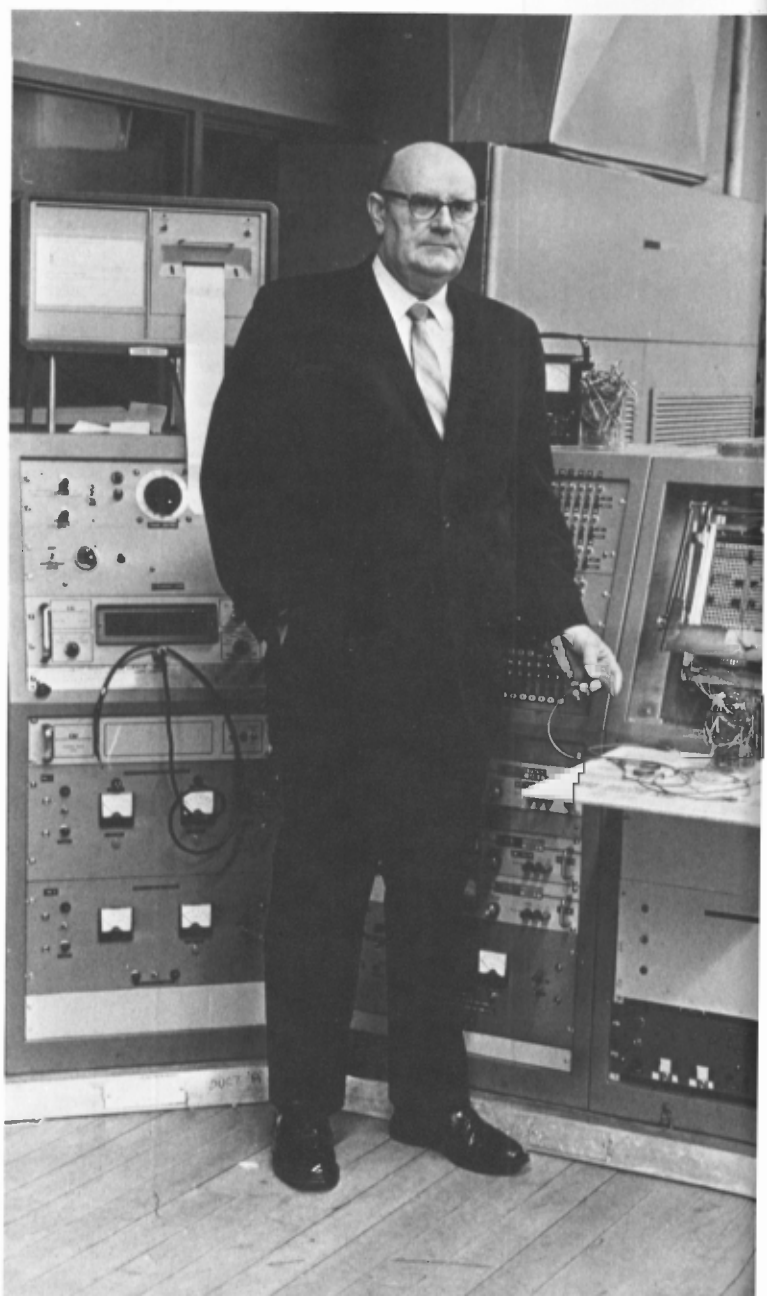


LEFT: Meter on loom keeps count of the number of yards run on a certain pattern. BELOW: Analytical lab is used to test fibers and dyes. BELOW FAR RIGHT: A color-eye spectrophotometer is used to analyze color of dyed cloth by using monochromatic light.



The swift advance of the textile industry into unconventional fiber processing areas demands that the emerging textile graduate be equipped to cope with a new variety of problems. The textile engineer of the 70's must have a strong basic knowledge of all fibrous materials and the effects of processing forces on these fibers. The entire field of synthesized polymeric materials and of inorganic fibers has advanced rapidly in recent years. Numerous fibers, films, and matrices have been developed. These range from nylon and polypropylene to fibers of carbon, boron, and metal whiskers. These have introduced many new engineering materials, methods, and concepts that were virtually unknown and unconsidered in the textile school a few decades ago. These bring a need for a reassessment of current "textile education" methods and the conversion of the present system to the broader study of fiber science and technology. An expansion of the present Textile School curriculum is planned to cover the area of Fiber Materials and Technology. This would include, in addition to textiles, paper, fiber composites, inorganic fibers, and polymer films. The objective of the program is to bring these related studies into a single school where all elements of fiber properties, processing and applications could be treated as an integrated technology.

RIGHT: Dr. James L. Taylor, Director of the A. French School of Textiles.





Textiles Expands Into Area of Fiber Materials and Technology



R. B. Belser



W. C. Beteler



W. C. Carter



Herman A. Dickert



C. W. Ferguson



R. E. Flege



G. B. Fletcher



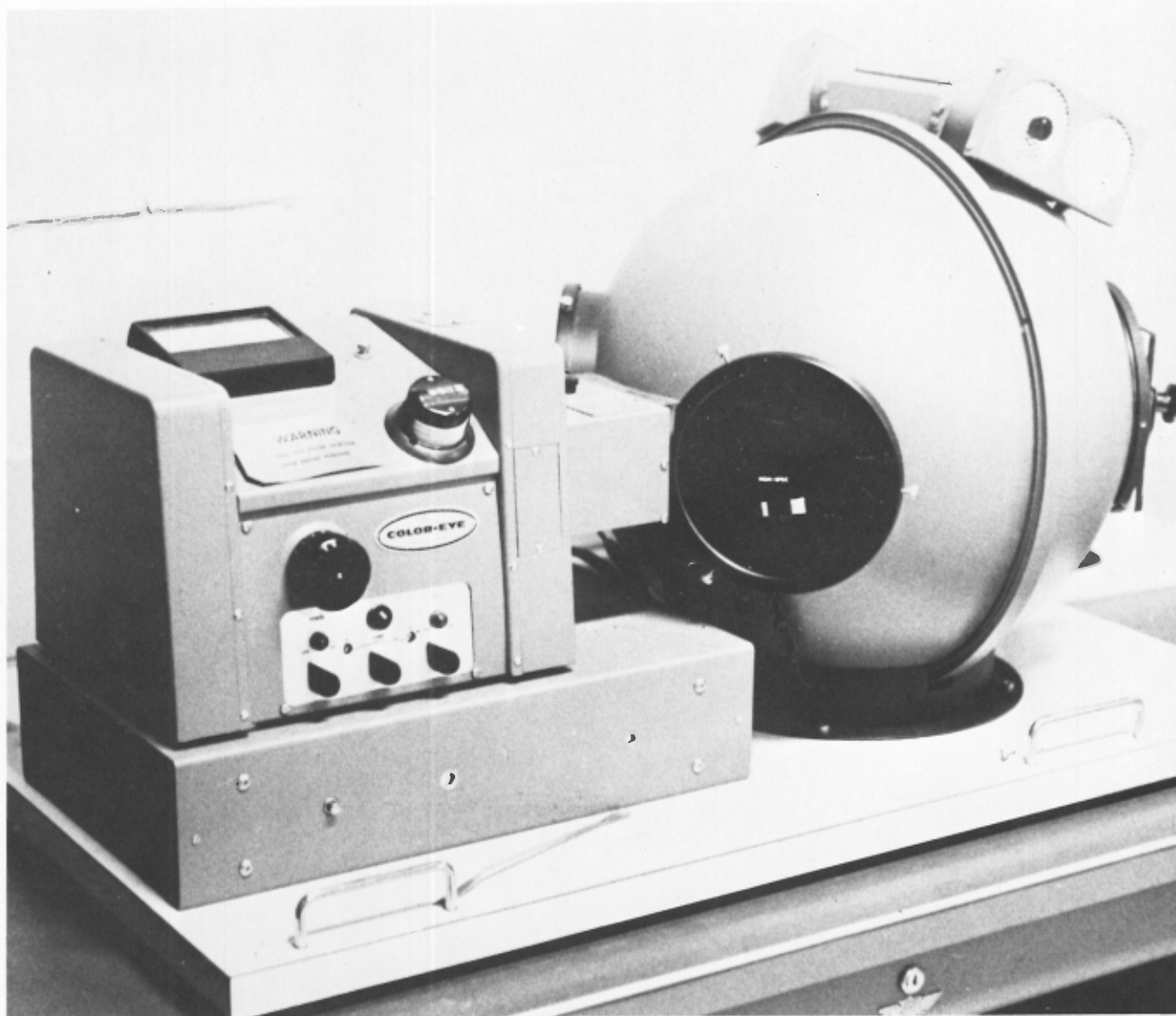
R. C. Lathem



William Myddelton



R. A. Porter





B. G. Albritten

J. F. Frakes

C. Leonard

A. Littleton

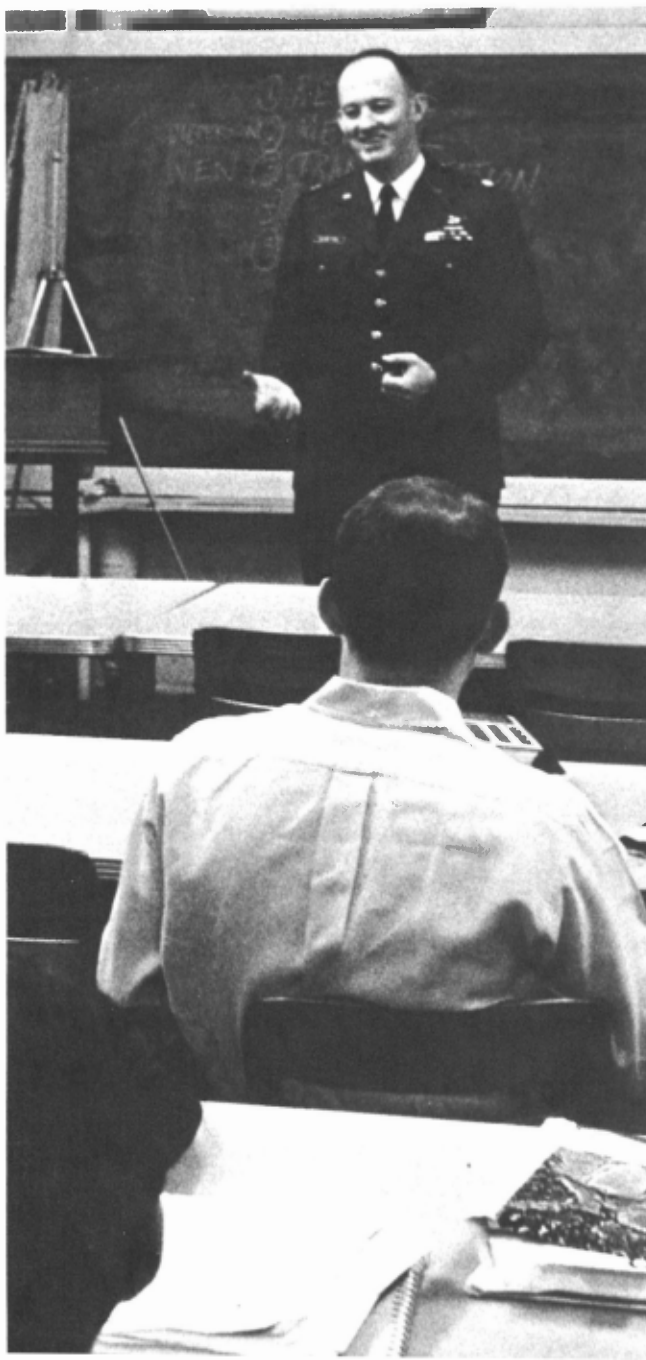


G. Peters

R. E. Pollard

T. W. Tillman

D. R. Toomey



Air Force, Navy and Army ROTC Promote Leadership

Georgia Tech's ROTC units continue to provide the finest means of officer training. The Department of Air Force Aerospace Studies, has the mission of producing qualified officers to serve in the regular and reserve components of the United States Air Force. This year Juniors and Seniors in the Professional Officer Course applied classroom command and staff theory in organizing and operating the Cadet Wing while Sophomores assumed command of drill units in preparation for summer Field Training.

NROTC Unit Georgia Tech, one of the original Units commissioned in 1926, is the fourth largest of fifty-four Units established throughout the country. The mission of the Naval Reserve Officers Training Corps is to provide a source from which qualified officers may be obtained for the Navy, the Marine Corps, the Naval Reserve, and the Marine Corps Reserve. Particularly desired in this nuclear age are candidates for Nuclear Power School, with subsequent assignment to nuclear surface ships and submarines.

Army ROTC still boasts to be the largest of the three units on campus. One of the outstanding units in the country, Georgia Tech's Army ROTC has expanded into areas such as combat drill as well as other related areas. Summer camps provide for additional training in these areas. The Army ROTC emphasizes training in military leadership and includes subjects common to all branches of the Army.



F. C. Auman

D. R. Blakely

B. Crook



W. Fleming

R. G. Kirkland

F. Woodrow



E. A. Allman

B. Reynolds

D. Reynolds

RIGHT: Lt. Colonel James D. Freeman, Commandant of Aerospace Studies; Colonel C. B. Drennen, Commandant of Military Science; Colonel Payton Harris, Commandant of Naval Science. FAR LEFT: Classes in Air Force ROTC provide for the training of military leaders. TOP LEFT: Army ROTC requires strict inspection rules. LEFT: The Navy ROTC unit captured first place at the Ramblin' Reck Parade.