

# TECH NEWS

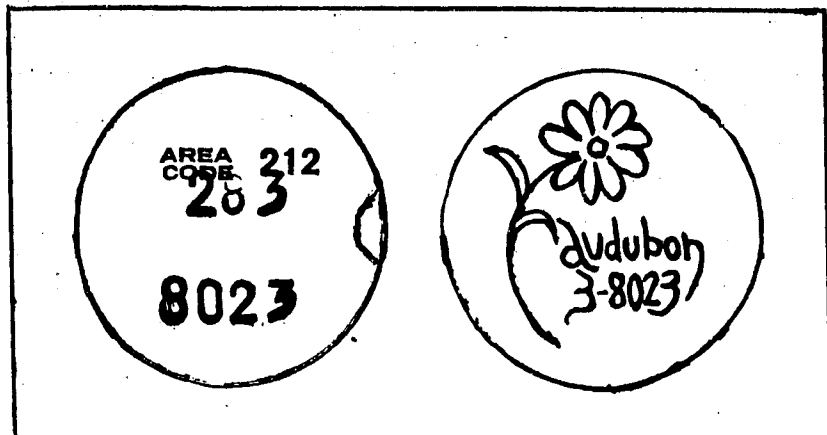


THE CITY COLLEGE

VOL. XXVIII — NO. 1

WEDNESDAY — 25 SEPTEMBER 1968

NEW YORK, N. Y.



A clandestine group of students have been replacing "functional-ugly" phone company dials (left) with their own "cheerful" ones (right) to protest all-digit dialing. The students' dial plate bears original exchange "audubon" which supplants the "impersonal" "28" on the phone company's plate.

## Pay Phones Here Sprouting Flower Dials

### Anti-Digit-Dialing Group Strikes!

By McPHILIP CANDLISH

Flower-motif telephone dials have been appearing throughout the campus on pay phones. But this aesthetic touch is not the work of the telephone company. It is the work of the Anti-Digit Dialing League of The City College.

The group, dedicated to preserving original telephone exchanges and halting the spread of all-digit telephone numbers, began its work last year. Its members have been removing the dials of the pay phones, taking out the telephone company's light blue identification discs, and replacing the dial with their own yellow flower-motif discs. The new discs bear the full exchange of the phone such as "AUdubon," "FOundation," and "ADirondack." The old discs bore the numerical equivalents, "28," "36," and "23."

The leader of the group, whose identity shall remain anonymous, angrily states that "the all digit phone numbers being instituted by the phone company today are impersonal. The old exchanges in this city have some meaning historically or geographically. Besides, it's easier to remember someone's phone number if you can associate it with that person's geographical location."

#### From the West Bronx

As an example, he cited the fact that "Kingsbridge 6-1771" is obviously the number of someone from the West Bronx. But under the phone company's new policy, that number would become "546-1771." "Where is it? Who's number is it? How can you memorize it?" asks the spokesman. A study done by the University of California at Berkeley under the direction of S.

I. Kayakawa, the noted linguist, showed that memorizing all-digit phone numbers was 80% harder than memorizing traditional exchange phone numbers.

"And besides," asks the spokesman, "are they trying to turn us into computer-type non-people? We live with too many numbers as is."

The wrath of the Anti-Digit Dialing League here is not solely directed against phone company impersonalization. It is also directed against phone company aesthetics. "The old dials are just plain functional-ugly, our are cheerful and bright," claims the group.

#### Pure Bullcrap

The New York Telephone Company defends its elimination of word exchanges with three arguments. The company claims it needs more available telephone exchanges for an ever-increasing demand for new phones and must institute number exchanges to accomplish this. It also pleads uniformity and convenience. These two arguments have been consistently refuted by the national Anti-Digit Dialing League (based in San Francisco); City's Phantom Phone-Dial Switcher terms these reasons "pure bullcrap." The third phone company argument is that people will no longer confuse the letter "O" with the number "0" or the letter "I" with the number "1." The company firmly intends to supplant every phone in the city with an all-digit number.

Opponents of the company's plans charge that the original exchanges in many cases designate communities, for example

(Continued on Page 12)

## Harlem's Struck Schools Assisted by Student Teachers



Students, unable to meet at public schools due to the teachers' strike, partake in out-of-school classes supervised by student teachers from The City College.

### Community Hails Strike Measure

By PAUL B. SIMMS

Arrangements have been made for the use of student teachers in many of the schools in Harlem during the present teachers' strike. The Education Committee of the Haryou-Act Community Corporation plus other organizations in the area have worked with the College in making these student-teachers available to the community.

According to Dorothy Orr, Associate Executive Director of the Haryou-Act Community Corporation, the College made available student teachers to assist in the Freedom Schools as well as the schools that remain open during the crisis. Mrs. Orr explained that this action will be greatly appreciated by the Harlem community, regardless of the reason stated by the Administration for sending them. She said that this will be the beginning of a new image for the College in the community and she hopes that it will continue.

#### In Private Schools

Professor Kindy of the Education Department, also Director of Student-Teaching at City College, explained that many students couldn't get into schools because of the strike, but course requirements demanded that they do a certain amount of student teaching. Therefore, arrangements were made for them to voluntarily go to non-public and parochial schools as well as to public schools to which they had been assigned, that remained open during the strike.

Prof. Kindy stated, "We do not force any student to go to private schools or Freedom Schools, but those students desiring to go can do so. But every student will meet his student teaching requirements. These arrangements, however, are temporary."

Another problem is that many of the Freedom Schools haven't opened yet. "Our principle concern is that all student teachers are able to observe classroom teachers, assisting them in any way possible, and also work with the children."

#### Not Scabs

Professor Kindy emphasized the relationship between the College and the strike. "This is (Continued on Page 2)

## Ettenberg Named E.E. Chairman

### He Helped Israel Develop Her Radar

By JERRY FROHLICH

At the close of last term, the department of Electrical Engineering elected a City College alumnus to replace Prof. George Clemens as its chairman. The new chairman is Prof. Morris Ettenberg, ('35 Mathematics).

received his M.S. in Edu-



Prof. Morris Ettenberg, the new chairman of the Electrical Engineering Department has, among other attributes, a nifty smile.

cation from The City College in 1936 and a Bachelor of Jewish Pedagogy from the Theological Seminary of America in 1938. His teaching career was interrupted by World War II, when he answered a naval call for mathematicians. The navy was in need of people to become acquainted with radar, a secret operation at the time. Mostly through self-education, Ettenberg became familiar enough with radar to begin teaching its techniques at the Brooklyn Navy Yard School.

#### Radar Specialist

Having been exposed to this field, Ettenberg joined the staff of Sperry Gyroscope in 1945. He was with Sperry's Electronic Tube Division, doing research and development with microwave tubes between 1945 and 1958. This period was interrupted by the war in the Middle East. From 1947 to 1949, Ettenberg was in Israel helping that country develop their radar system. He received his Ph.D. from N.Y.U. in 1950, after studying Physics and Electrical Engineering there.

(Continued on Page 13)

A SPECIAL SUPPLEMENT — INSIDE

# 50 Years of Engineering and Architecture at City

## Radical Education Aim of West Side Group

By JERRY MONDESIRE and  
PAUL B. SIMMS

There is a small nebula of enlightenment glowing in a basement in upper Manhattan's West Side. It is seeking to thrust some vitalizing light into the core of New York City's traditional Higher Education system. It's called Encounter House.

One of the founders and Director of Encounter House, Fred Newman, was interviewed about the establishment of this new radical association. Mr. Newman, by the way, was removed from his teaching position at City College last term, probably due to the fact that he gave out 183 'A's' in one year, a definite lack of "cooperation," with certain bureaucratic processes of the administration.

In conjunction with his other colleagues, Newman is attempting to establish a first rate radical education center with 25-30 permanent core members consisting of students and faculty. This will become known as Encounter House.

One point Mr. Newman raised was that "Radicals are and have been stupid in their approach to the problem. Now, it is hoped this school will grow out of the radical movement and be part of that movement. Nothing to date has come out of our movement except talk — something we seem to have an affinity for."

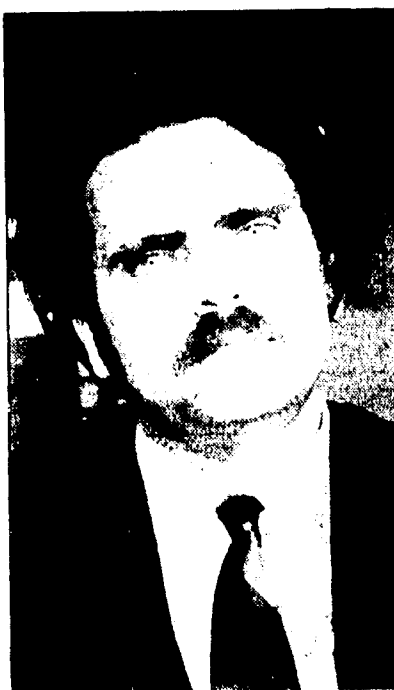
The atmosphere of the Encounter House will be, in the words of Mr. Newman, "An academic Livingroom, where the

courses will emerge out of an interaction between the participants and instructors." Mr. Newman did emphasize the fact that this would not be an accredited school but would be a school run by students. There will be a student Board of Trustees of some five thousand members — only students. To become a trustee, one must contribute five dollars per year for the maintenance of the institution.

Two housing facilities being considered at the moment. The first will be a Brownstone in the Heart of the City — this would serve as a dormitory and a school. The second housing facility is to be an extension of the first at Woodstock in upper New York.

The initial operating cost will be approximately \$25,000. For this a fund raising drive will begin at City College this October, with the fund raising program to be held at The Basement, 155 East 22nd Street on October 9.

Realistically speaking, Newman doesn't expect this educational center to be ready until the Fall of '69. According to Mr. Newman, "This will be the place to get a GOOD education — it will be the first and only radically based, humanistically oriented good school. The curriculum, will be decided by the 25 to 30 students at the school. The first course at the Encounter



Fred Newman, a founder and director of Encounter House, an organization devoted to the forwarding of a "radical education." He hopes to create an "academic living room" run by some 5,000 students.

House will be Symbolic Logic taught by John Wallace, a logician from Princeton. We plan to get 500 to 1,000 student trustees from this school alone.

Some of the other staff members will be Sue Larson (Barnard, Philo), Jerry Gold (City College), Peggy Dobbin (Brooklyn, Sociology), Raymond Sanchez (City College, Education), and Howard McCay (Antioch Graduate School).

Mr. Newman can be usually found at the headquarters for Encounter House at 651 West 190th Street; the telephone number for Encounter House is 569-4371.

## Student Teachers Help 'Freedom Schools'

(Continued from Page 1)

in no way a strike breaking technique."

The statement that the Dean of the School of Education, Doyle M. Bortner, released concerning the strike and student-teacher involvement reads: "... all students registered at City College who are assigned to such schools for supervised student teaching are advised that they should exercise their own judgment as to the appropriate course of action which they wish to take as individuals committed to the profession of teaching and undergoing the last stages of their educational experience prior to entrance into their chosen profession."

### Community Service

Some of the student teachers have been assigned to Good Shepherd Boys School, Good Shepherd Girls School, Corpus Christi School, The Freedom School of Public School 115 at the Broadway Temple, Annunciation School at 131st Street, and some Day Care Centers.

Today, student teachers will appear at P.S. 120 for the first time. Last week, about one-third of the students and the staff were present. According to Mr. King, Acting Principal of P.S. 120, the student teachers from The College are a service City College is offering to the community and student teachers are not normally assigned to the school. New York University has

student teachers also assigned to P.S. 120, but these students are on assignment as part of the teacher training program.

There were several meetings in the community, at which time the reassignment of City College student teachers came up. On Wednesday, Sept. 18, there was a rally for teachers working in the community, at which time the effectiveness of teaching efforts was shown. The District Supervisor Mr. Frey, who was formerly Principal of P.S. 120, participated in the rally and has been very instrumental in getting staff for the schools and keeping them open.



Prof. Kindy of the School of Education, made arrangements for student-teachers to fulfill their work requirements outside of struck schools.

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# The New College Bulletins: Really Great Fiction

## A Book Review

The 1968-1969 Bulletins of The City College of The City University of New York. Six volumes. Appx. 400 pp. Author(s) and/or Editor(s) unknown. Place of publication unknown. Paperback. No cost.

NOTE: Companion volume — Schedule of Classes, Fall 1968. Unpaged. Written and printed by I.B.M. 1040. Cost \$43.00.

By ROBERT KALISH

These works, which many regard as the greatest fictional pieces of our time, are unquestionable musts for every "with it" student at City College. For those who have seen the Bulletins of other colleges in this country, The City College Bulletins will surprise them in that, unlike all the others, not a piece of information is clearly presented, not a single institution, club, department, course, teacher, or activity is presented in an appealing manner, and no attempt is made to provide a graphically coherent publication. For those who have read previous editions of The City College Bulletin, they would be mistaken if they felt that they could get by without at least a swift perusal of the new ones.

The Bulletins generally sell the best just before students register for classes at City. But, in the past, these Bulletins have generally not been issued until about Christmas time. Apparently appalled by the lack of interest in these volumes as Christmas gifts, the City administration decided to issue these volumes this year in August and early September. And they are doing surprisingly well, despite the fact that they are difficult to obtain.

Since the story line of most of the six volumes of this year's Bulletin are the same, I shall content myself to fine-comb the largest of these volumes — entitled **College of Liberal Arts and Science** and mention parts of the others in passing. For I suspect that most students will read only one of the volumes

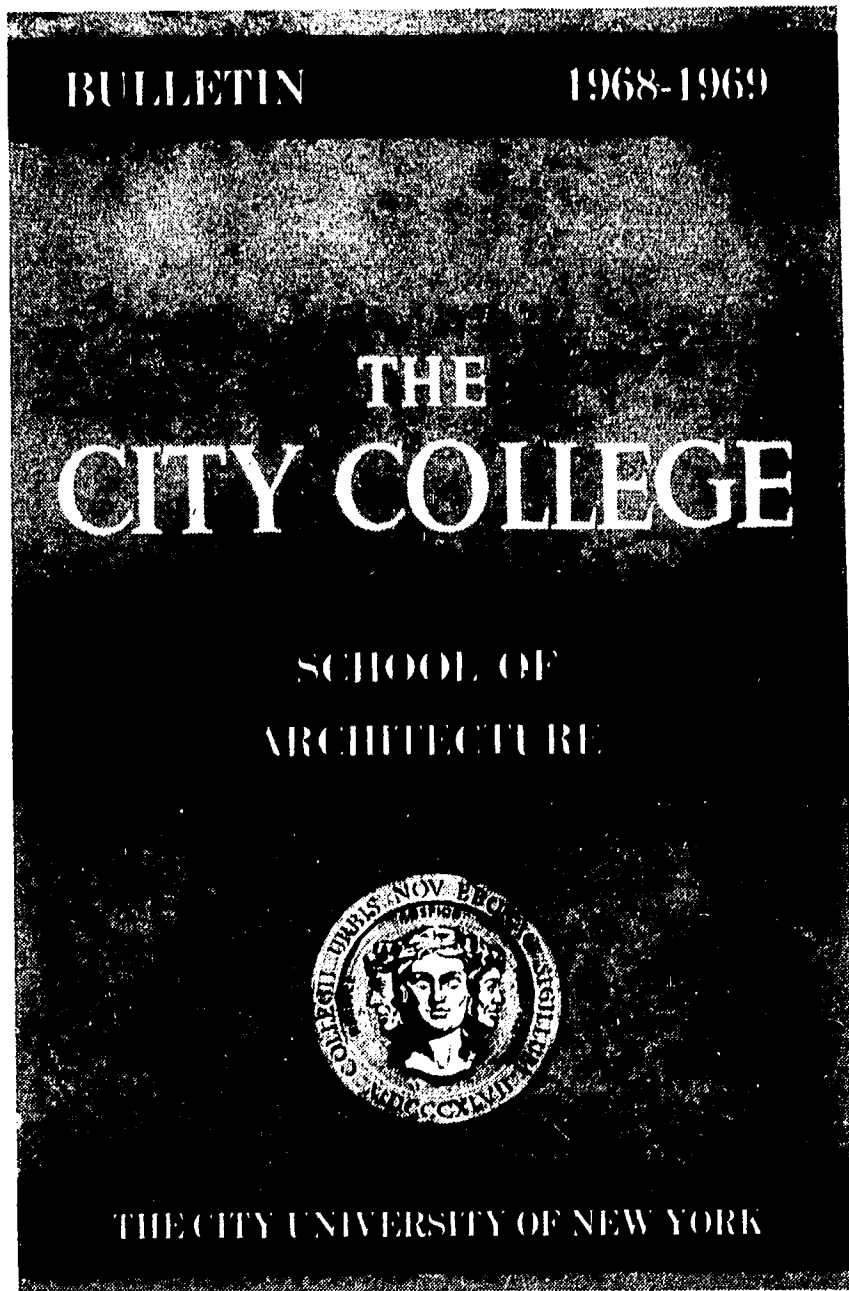
anyway. And they are all so repetitious, way past the point of boredom and disgust.

Some general items before I analyze **College of Liberal Arts and Science**. The style of writing in every edition might best be described as bloated-bland, a technique apparently pioneered at City College. The volumes are unattractive, both inside and outside; the covers haven't changed since the Year 1, only two sizes of type are used throughout everything, chapters and sections are very poorly defined, and the organization is atrocious. Errors abound, some of which couldn't even pass for James Fennimore Cooper's writing. There are no charts (except in a volume entitled **School of Engineering**) where they are vitally needed and no illustrations (which are generally an attractive feature of College Bulletins). There is a map, printed in all six volumes, for which The City College apparently commissioned one of the finest graphics artists around to produce; although he did it free-hand and covered up the site of the soon-to-open Architecture building with the map's legend.

I was quite surprised to find that **College of Liberal Arts and Science** has no title page. This is quite an innovation in literature. The reader is plunged into the Table of Contents, which should be, but isn't, sub-divided. Then there is a page giving an incomplete list of phone numbers of select offices (it doesn't even include Public Relations) on campus and giving their location but failing to explain the abbreviations used on the list. Apparently, the author(s) and/or editor(s) don't want you to find out anything.

Then comes the Collegiate Calendar which traditionally has given numerical dates but not the week days in question. An actual calendar, rather than list, might be helpful here.

Then there are four mystical lists, one for Board of Higher Education, another for City University, another for The City College, and another for School of Liberal Arts and Science. The lists are mystical in that the



The latest volume in the continuing series of City College Bulletins is the one on the School of Architecture. Like the others, it is bloated, bland, and unattractive. Reviewer finds Bulletins' organization "atrocious."

organizations and their relationships are not explained; functions and addresses are neatly omitted. On page 5 is an interesting set of footnotes which indicate to me that the person(s) who put together this and the other volumes don't understand the concept of tense (i.e.: past, present, future).

The History of the College (on pages 8 and 9) reads like **The New York Times** circa 1860, factual and boring and not in the least bit interesting. Readers of the volumes should skip over

this in their Bulletins. They won't learn much from it anyway.

The Admissions section is indispensable and, as such, can't be commented on. It's like motherhood.

The new revised Curriculum section is a coup. It's the most confusing, baffling, and ultra-cross-referenced thing to hit the bookstalls in a long time. This section could probably be condensed into a few intelligible charts. Instead, the author(s) and/or editor(s) give us intel-

ligible gibberish. The same goes for the next couple of sections.

The plot thickens on page 29, where we are introduced to the Departments and their offerings. The introduction on the top of this page sets the tone. The writer, by virtue of his facts, shows he doesn't know what the hell he's talking about (to wit, line 5).

Anyway, each department lists its dramatus personae by rank and, for some inexplicable reason tells you nothing about the educational institutions attended by all the lecturers and many of the higher-ups. Misspellings, wrong dates, and miscredits abound in these listings. The Chairman of the **School of Architecture** (in their Bulletin), for instance, graduated first in "1965" and is now a full professor.

Within each section is also a high-flown list of courses, none of whose descriptions have anything to do with the course itself — ask any student. There is also a list of student organizations within each departmental section. And those organizations unaffiliated with any specific subject are totally forgotten in the Bulletin.

The surprise climax of the **Liberal Arts and Science** Bulletin comes when **Yiddish**, the last alphabetical course listing, flows right into **Library's** listing. The **Library** section here is more accurate than the Library's own publication on its services and might very well be useful.

The book comes to a quick paced end as . . . Well, actually, I shouldn't be telling you the end of the whole thing. But I might suggest glancing at the **Bedesem Award** description, which is fascinating, and knocking your brains out attempting to figure out as many department abbreviations in the Index as possible.

The whole Bulletin is an organizational, descriptive, and graphical failure. This reviewer offers **The New School** bulletins and the **Hunter College** bulletins as shining examples of what can be done if a college really cares about disseminating information and presenting an organized, graphically elite book.

## DISENFRANCHISED? DISENCHANTED? ALIENATED?

Dissatisfied with today's American politics? If you are realistic, and wish to institute a change, then **you know** that is must start on the local level. No state or federal rearrangement is possible without first working locally.

This is why Nelson Rockefeller and Gene McCarthy did not receive their party's nomination despite strong popular support. If we do not make our local government a popular one, we can never expect representative government on any other level.

We, the Collegians for Political Action, were organized with this in mind. Our purpose is to bring about popular government on the local scene. For popular government is good government.

Mayor John V. Lindsay has said, "I know what this generation can accomplish. When I ran for Mayor in the Democratic stronghold of New York City, 95% of my campaign staff consisted of volunteers, and the great majority of them were students. There were 30,000 of them and they ran a campaign . . . that New Yorkers had never seen before. But when those New Yorkers saw the lights in those headquarters burning late into the night, and they were canvassed at home and in the street by volunteers, they thought, 'If they're willing to work that hard for this Lindsay, maybe he **can** get something done in this town.'

"And that's how I got elected."

The phrase "Political Action" is a very significant one. We in Collegians feel there has been far too little action for far too long. We

do not call a stagnated state legislature one of action. We do not only realize the need for change but our entire function is geared towards initiating this change. We aim to elect popular qualified candidates. Our primary work is in campaigns. Thus "Political Action" is not merely political discussion but political movement.

For discussion is not enough. In order that discussion be effective and constructive, a progressive, moderate, government must lend a concerned ear and a will to move. Much of today's elected government is not progressive, not moderate, and just not listening.

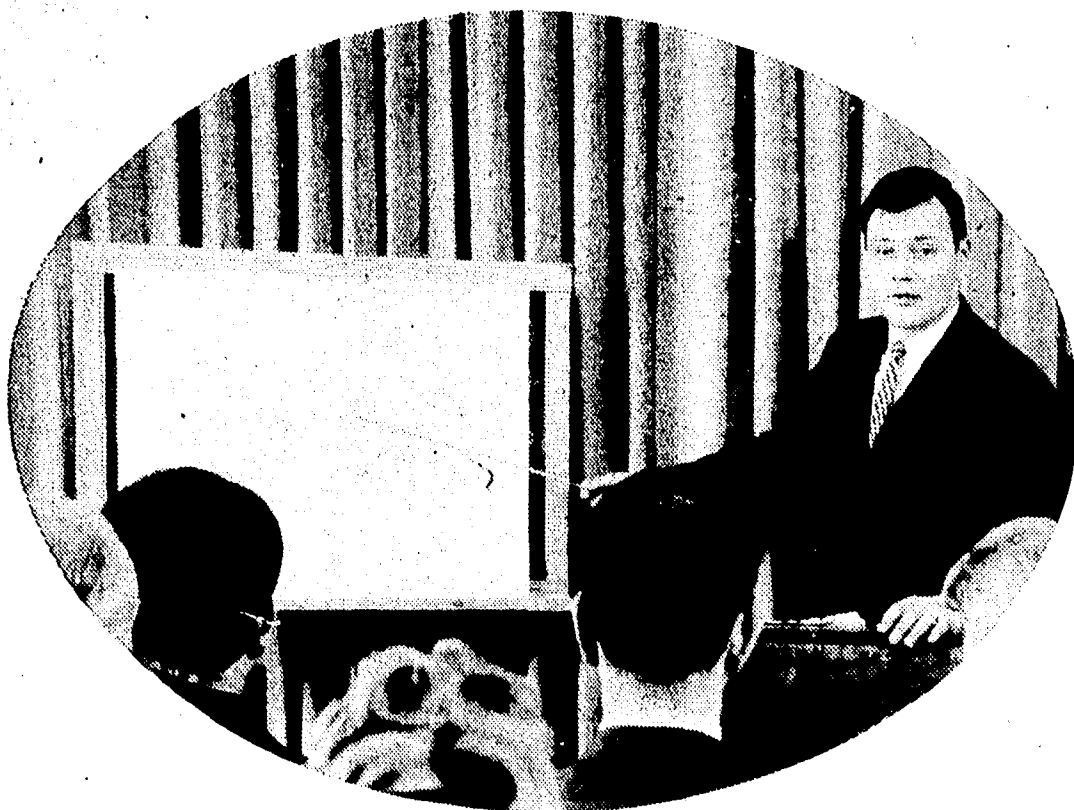
The solution is not a simple or a swift one. It is a complex problem with a complex solution. We cannot promise a new government within a week, a month, or even a year. We cannot promise that every inequity in our system will be gone in that same time. However, we **CAN** promise a constructive effort towards making good government possible.

Join with us in time for the fall campaign!

Fill in the stub and mail to: **Collegians for Political Action**  
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The City College  
of New York  
School of Technology  
Founded 1918

A  
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SUPPLEMENT

50

YEARS | ENGINEERING + ARCHITECTURE

# An Unabridged History of Engineering at City

"Technology is changing the world electronic speeds." A deceptively simple statement by the computer-age oracle Marshall McLuhan to describe the revolutions occurring not only in science, business, and everyday worlds; but also in the way people regard the world. To supply competent professionals educated in the increasing body of technical information and respect of the obligation to use it for the benefit of mankind, The City College established the School of Technology in 1918. Since its creation the School's story has undergone revolutions as drastic as those unleashed by its engineering graduates on the world and as suffered from some of the same inadequacies.

The history of engineering at City begins back in the nineteenth century when The College was called the Free Academy and located in the original twenty-third Street building. In 1851, four years after a referendum to the people of New York City, which charted a tuition-free college, nine main fields of study were recognized by the academy. One was called Civil Engineering, placed in the curriculum by the Executive Committee to offer a well-balanced education for the young men of that time. The course was taught by Professor Joel T. Benedict, graduate of the University of Vermont, a practical engineer, and teacher of mathematics. He owed his appointment to a fortunate relationship with the President of the Board of Education, but was described as "a good teacher, austere and strict, but quite capable in his special field."

## Progress Stalled

The next major change occurred in 1873 when a young, enterprising professor named Alfred George Compton proposed that a course in Civil Engineering be established for post-graduate students. With great reluctance, the Board of Trustees adopted the proposal and by 1875 the first three students to complete the Engineering course were awarded certificates by the faculty. But when Professor Compton suggested that a degree in Civil Engineering be given to the graduates, the board overwhelmingly defeated it. So strong were the forces of academic conservatism that, within a few years, the course was officially discontinued, despite Compton's protests. Even ten years later, in 1885, a motion by Professor Ogden Doremus to establish a special course in Electrical Engineering was defeated by the Faculty.

The progressives in the faculty and trustees bided their time until 1890 when a five-year Mechanical Course was finally approved. The distinctive feature of this new division was five years of workshop practice, integrated with the most important liberal arts subjects. It was not until the spring of 1912 that plans for a fully developed engineering school were drawn up by President John Huston Finley.

In a written communication to the Board of Trustees, Finley asked them to "consider the advisability of organizing a School of Mechanical and Electrical Science, its work to be carried out chiefly in the Mechanical Arts Building [Compton Hall] and to be differentiated from the other work of the College only in providing, through special courses, advanced training toward preparation for engineering."

## Impressive Alumni

During these years, however, City

College alumni were making important contributions in the fields of engineering and architecture. Noteworthy among these were Peter Wright [1855], pioneer in fire-proof construction and a leader in the drafting of legislation to regulate architecture; Cleveland Abbe [1857], organizer and first chief of the United States Weather Bureau; George Washington Goethals [1877], the man chiefly responsible for building the Panama Canal; William Tuthill [1875], designer of New York's Carnegie Hall; Gano Dunn [1891], described as a master engineer, builder, director of important banks and industrial corporations. He represented the United

States at a number of international commercial, scientific, and engineering conferences; and David Barnard Steinman [1906], the world's most prolific bridge designer, having been responsible for more than four hundred of them throughout the world. Some of his most renowned designs include the Mackinac Straits Bridge in Michigan, five miles long and noted for having perfect aerodynamic stability at all wind velocities to infinity; the Henry Hudson Bridge in New York City; the Thousand Island Bridge over the St. Lawrence River; the Carquinez Strait Bridge in California, which is the longest cantilever span in the U.S.; and

the Bronx-Whitestone Bridge, New York City.

## Further Expansion

The First World War and post-war years created a stimulus for the setting up of more rigid professional standards to handle the new technologies that always accompany the outbreak of hostilities. The City College, in response to the time, reacted accordingly and ceased to be a simple liberal arts college. In February of 1917, the Committee on Curriculum of the Faculty recommended that the College extend its work in engineering instruction. This time the Board of Trustees concurred and provided for the election of four distinct courses of study leading to a Bachelor's degree in Chemical, Electrical, Civil, and Mechanical Engineering. However, the Faculty was determined to maintain the high standards of liberal arts education despite the new emphasis on technical training and included a rider for "the liberalizing of such courses by the introduction each term of a study drawn from one of the other two faculties." A year later the Board created a separate division of Engineering in the College, whose first Professor was Charles Parmly of the physics department. The new department had a separate budget, custody of Compton Hall, and offered a great number of prescribed liberal arts courses as well as the specialized technical subjects.

## A Separate School

It was not until Sidney E. Mezei, President of the College, returned from another Paris Peace Conference, this time negotiating the "war to end all wars," that the Board voted on June 17, 1919 to establish a separate and distinct Faculty of Technology. A few days later, Professor Willard Fox was appointed Acting Dean of the new School of Technology and Associate Professor Steinman was among the first faculty members appointed.

Dean Fox was educated at C.C.N.Y., graduating with the second highest honors in the class of 1884. He worked for a while for a newly developing company called Brown and Sharpe, before being appointed as a tutor to the College. A remarkable scholar, he actually taught every portion of the work in mechanical drawing, descriptive geometry, elementary physics, advanced and analytical mechanics, optics, acoustics, hydrolics, thermodynamics, wind and water power, heat-engineering, electrical engineering, strength of materials, design of mechanisms, surveying, and astronomy. Fox also began to sponsor radio work while he was a member of the physics department, making possible the establishment of a course in radio engineering, the first ever given in an institution of higher learning. Early in 1915 with his help, an elaborate transmitter was constructed at the College, the second largest in the world at that time.

## First Dean

In February of 1920 the first formal enrollment of engineering students took place, consisting of 27 out of a total student body of 1,856. A year later, Professor Frederick Skene, former State Engineer of New York, was appointed Dean of the School of Technology. Under his guidance a steady program of improvement and growth went on. Enrollment increased from less than 40 in 1927, to 132 a year later. In 1929, ten years after the formal

(Continued on Page 7)

## Faces From the Past



Deans of the School of Technology:  
Top: William Fox / 1919-20, Frederick Skene / 1921-40.  
Bottom: Albert Newman / 1940-47, William Allan / 1947- present

## Beginning of School Noted

### IN THE BEGINNING —

On April 3, 1917, the following letter was written to The Board of Trustees of the College of the City of New York;

The Department of Physics has always stressed the applications of the science. In recent years, especially, the technical branches have been fostered and developed. The sympathies of almost the entire teaching force have been with that particular phase of the subject. As a result the correlation of the various branches has been complete, and, we believe, the work has been well done.

The Department of Physics therefore, in the event of the adoption of this new curriculum, respectfully recommends to the Board of Trustees the establishment of a separate Department of Engineering. Although it is felt that future development will require a further subdivision, at the start a single composite department will be sufficient. The Department of Physics further recommends that Professor Parmly be placed in charge of Department of Engineering, because he is familiar with all the requirements and

because of his undoubted ability as an organizer.

Respectfully submitted for the Dept. of Physics,  
William Fox

Professor of Physics

As a consequence on March 11, 1919, the Faculty sent the Board of Trustees of the College of the City of New York recommendations "relative to courses in Vocational Subjects and Civic Administration." The Board named a joint Faculty-Board committee to consider the recommendations.

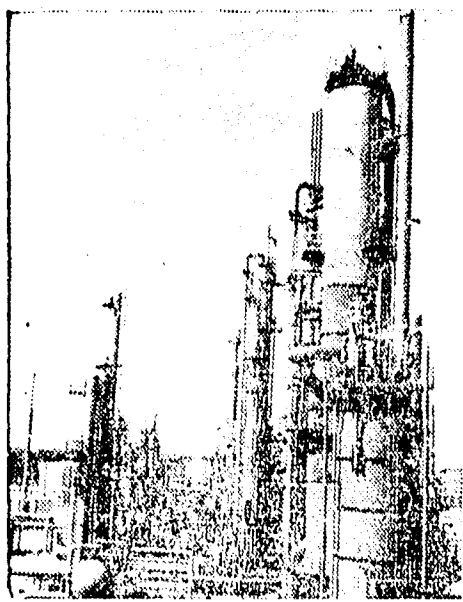
Among resolutions presented by the joint committee and adopted by the Board of Trustees at its meeting on June 17, 1919, was the following:

**RESOLVED**, That a Faculty of Engineering be and hereby is established to have pedagogical supervision over all courses of study approved or hereafter to be approved by the Board of Trustees for credit toward general certificates, diplomas or degrees in Engineering, and to recommend all modifications of such courses of study.

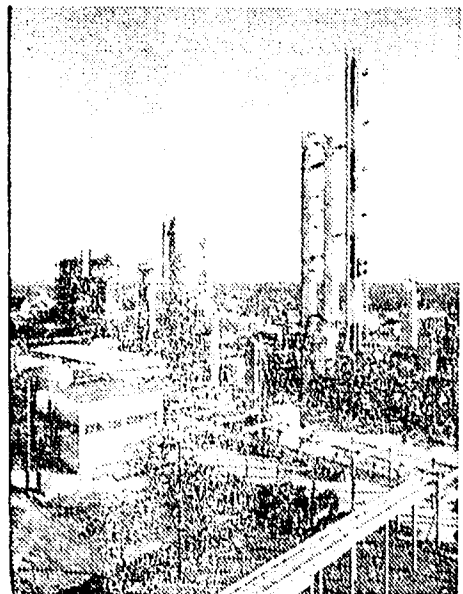
AND IT WAS SO!

William Allan  
Dean, School of Engineering

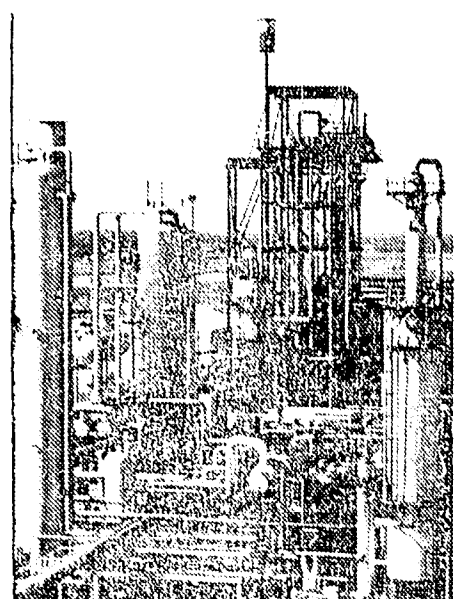




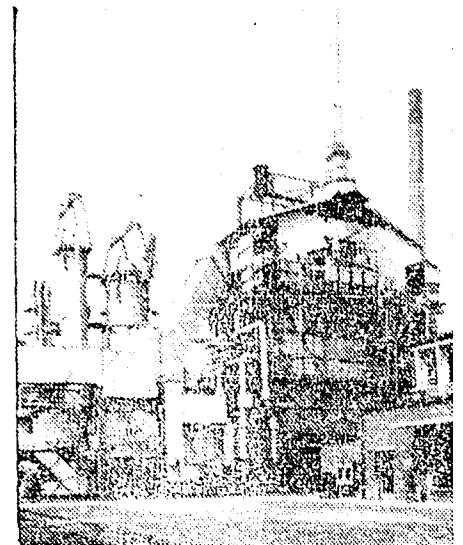
Oil Refining Facilities



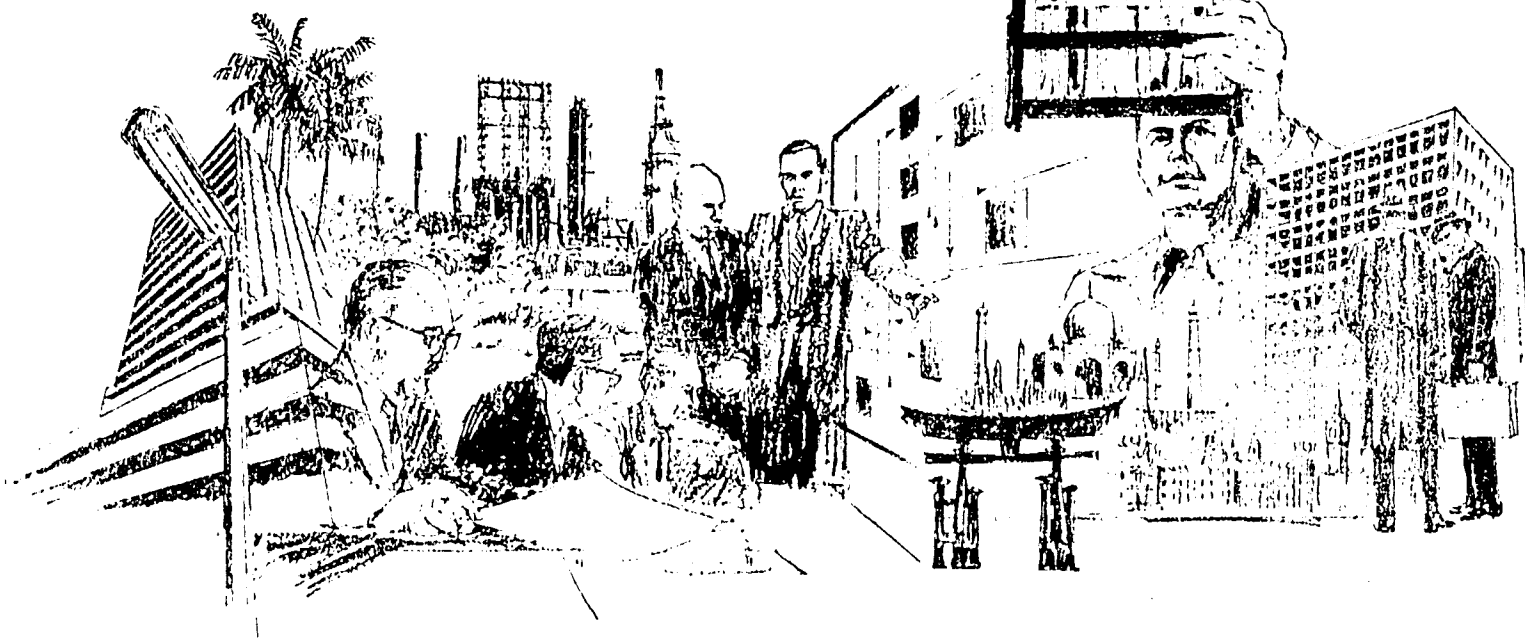
Ethylene-Olefin Plants



Ammonia Plants



Hydrogen and Synthesis Gas Plants



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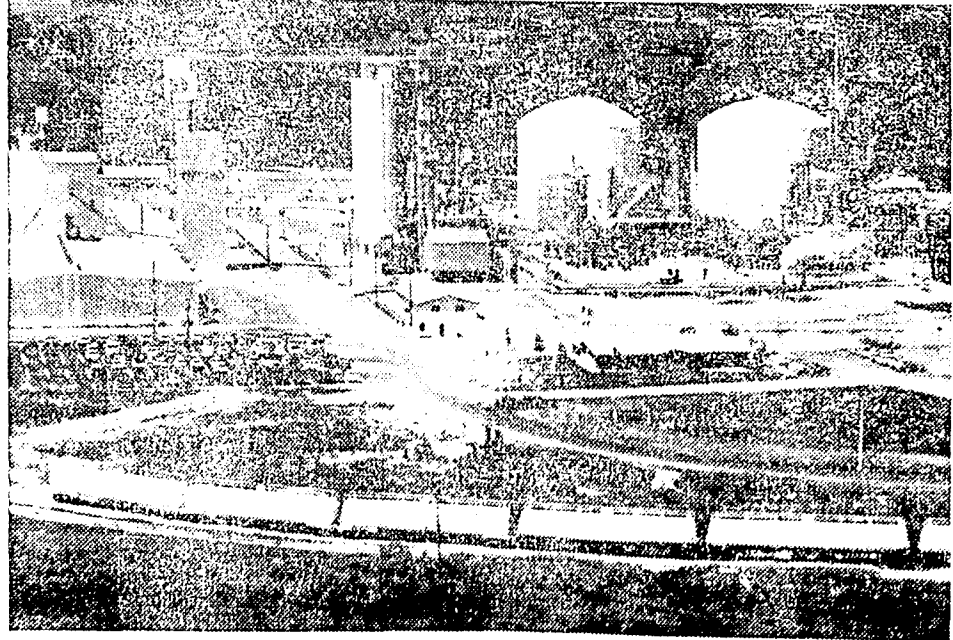
## THE M.W. KELLOGG COMPANY

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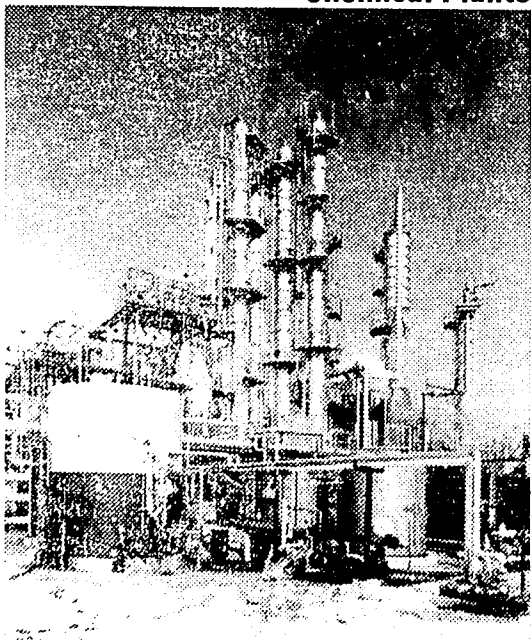
A Division of  
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KELLOGG INTERNATIONAL CORPORATION, LONDON ■ THE CANADIAN KELLOGG COMPANY, LIMITED, TORONTO ■ SOCIETE KELLOGG, PARIS ■ DEUTSCHE KELLOGG INDUSTRIEBAU, G.M.B.H., DUSSELDORF ■ COMPANIA KELLOGG ESPANOLA, MADRID ■ KELLOGG OVERSEAS CORPORATION, SYDNEY ■ KELLOGG PAN AMERICAN CORPORATION, BUENOS AIRES ■ KELLOGG TECHNICAL SERVICES COMPANY, TOKYO

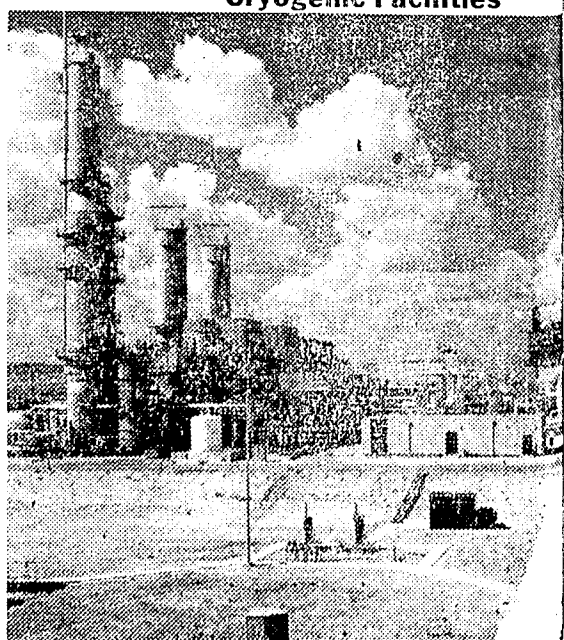
Fertilizer Plants



Chemical Plants



Cryogenic Facilities



# Engineers Survive World War II & New Building

(Continued from Page 5)

foundings of the School, it had reached 214. This phenomenal growth prompted the planning of a new engineering building adjacent to the old one able to accommodate the then astronomical figure of 500 engineering students. By the time it was ready for occupancy in September, 1932, the engineering enrollment had reached 832. Dean Skene reported a year after the construction of the new building, called Goethals Hall, that "the classrooms, drafting rooms, and laboratories in both the new building and Compton Hall are now being used to capacity morning, afternoon, and evening."

Dean Skene, "a gaunt, tactful and yet determined man," was known to at one time have held classes in the corridor just outside his office. He had disagreements both with Frederick B. Robinson, President of the College, over curriculum and undergraduates over his "high-handed" methods of discipline. In a private letter after his retirement, Skene wrote, "The faculty functions as a disciplinary rubber-stamp. It does not seem to have any other function, so that its regular meetings are simply 'yes' meetings on routine matters that are decided before they are submitted. Some of us have even asked the question, 'Why a faculty?'" Some things never change with time.

## One Girl Student

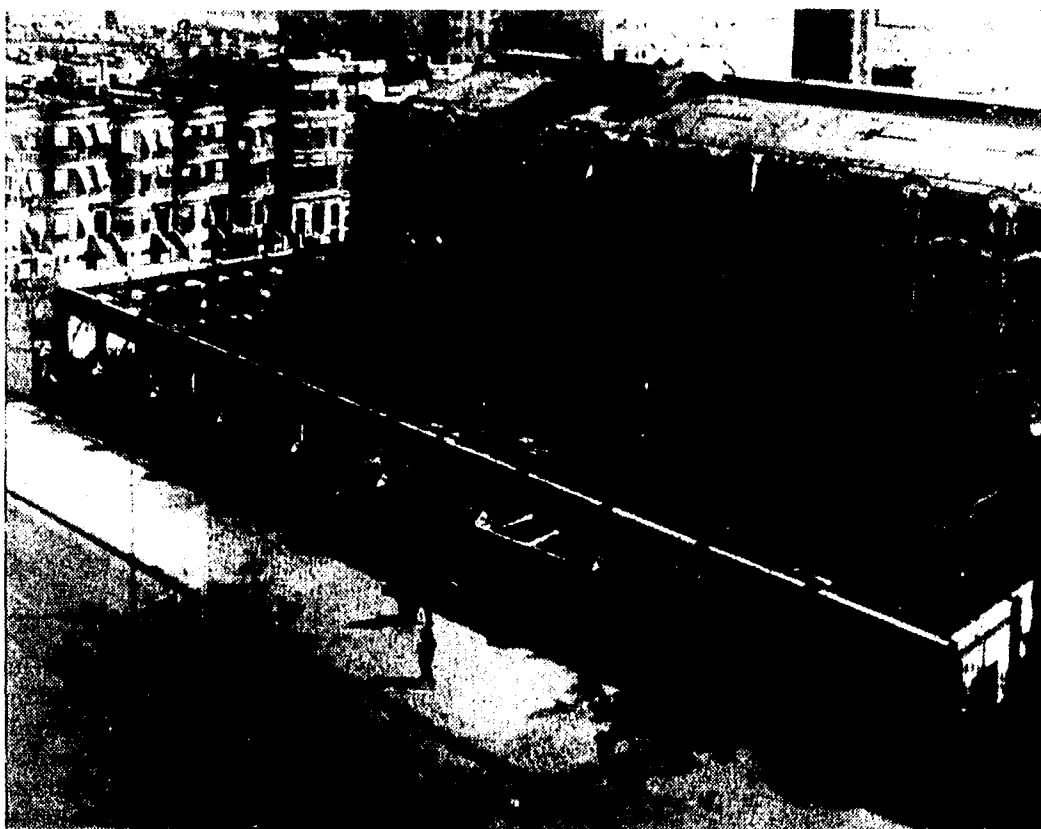
In 1939 the School was twenty years old, and had 1,400 students taught by 61 engineering faculty members. A year before, Miss Gladys Lovinger discovered a flaw in the entrance requirements and after doing some legal research, including the preparation of a brief, she became the first female student admitted to the School. She was quite a celebrity, "posing for photographers and counting the hairs on manly chests." However, the strain proved so great she was forced to drop out. That year 99 percent of the graduates found jobs, despite a recession. The School had a big year with Tech Council, "the most influential and active body of the College" sponsoring forums, dances, dinners, boatrides, smokers, seminars, and employment committees in addition to coordinating the government of the societies. In February an "Open House" was held "to publicize to private industry the excellent facilities of the school and the high caliber of its students." The female population also doubled.

## World War Two

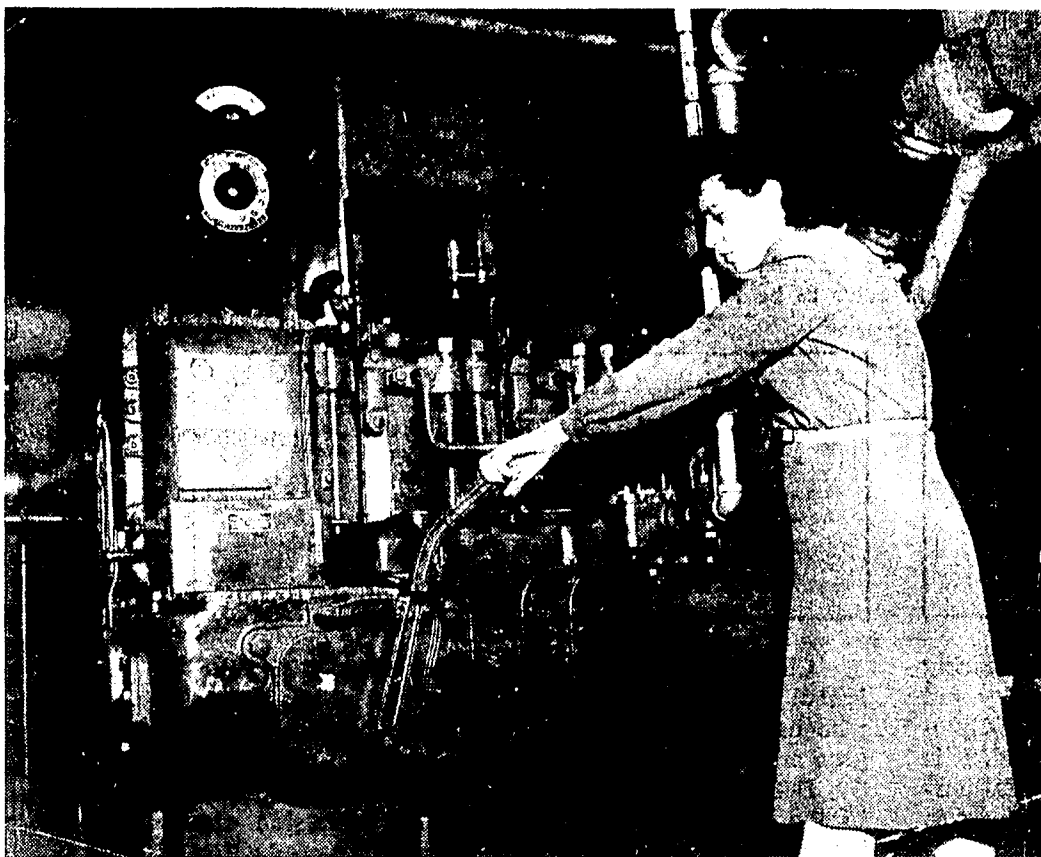
The Second World War came and engineering students were forced to take accelerated schedules and war-training courses. The enrollment saw-sawed between 1,400 and 2,800 depending on the mood of the Selective Service Administration. Professor Albert B. Newman succeeded Dean Skene and headed the School from 1940 to 1946.

The years of 1939 and 1942 saw modernization and revision of the old engineering curriculum. Foreign language was eliminated as a requirement for engineering students. However, one Tech student reported in the *Campus*, "Despite the rather belated surgical work done by the Board of Higher Education on the curriculum, the engineering aspects remain virtually unchanged . . . in mechanical engineering, only one extra course was added on theoretical shop processes . . . As for civil and electrical engineering, nothing has happened aside from a general shake-up of course designations."

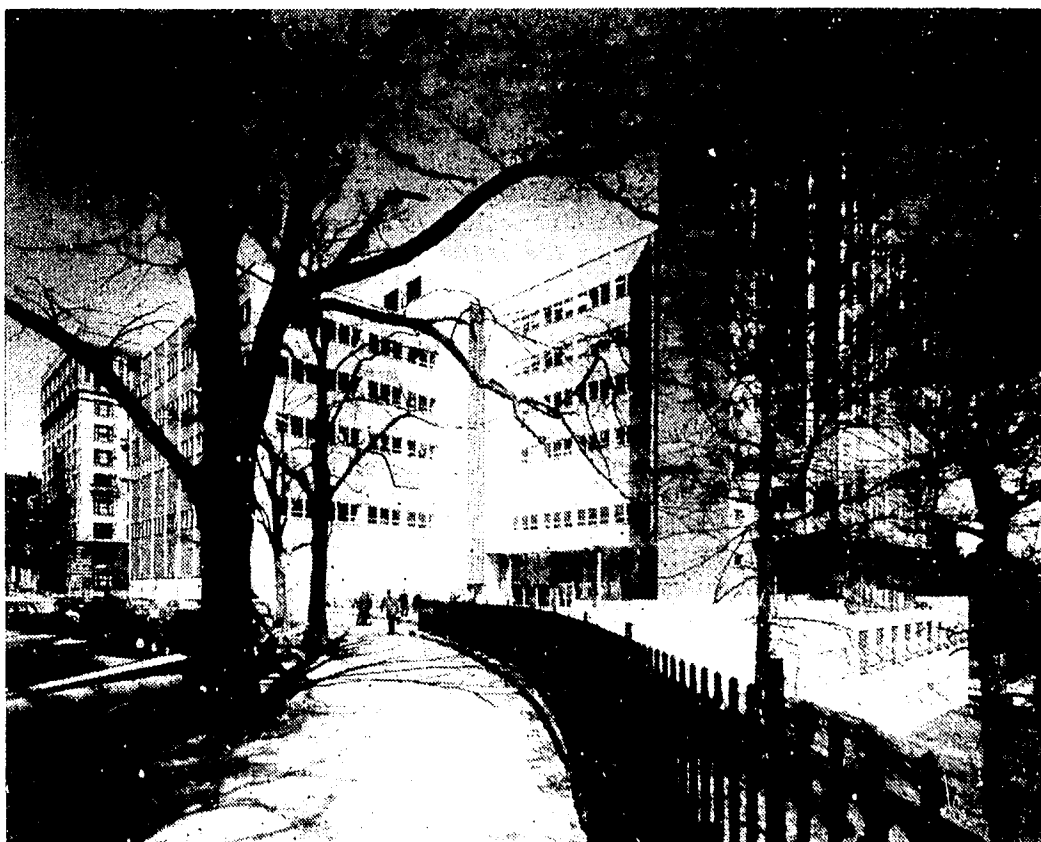
A five story engineering building scheduled for construction between the Technology and Chemistry buildings was cancelled. First there were steel priorities due to the war, then the Work Project Administration withdrew its labor supply for defense work. Some of the construction material already



Goethals Hall, the home of the School of Technology until 1962, is shown here under construction in 1931. It now houses the School of Architecture, which will move to a newly renovated building on Broadway this year.



One of the first female students to enroll in the School of Technology is shown here operating an engine in the old basement labs of the Mechanical Engineering Department in Goethals Hall. These were replaced by new basement labs when all the engineering departments moved across Convent Avenue to Steinman Hall. When they did move, they took along quite a few female engineering students.



This is the one and only Steinman Hall. Designed by the engineering firm of Lorimer and Rose, it has been criticized by many at the College and by neighborhood residents as being one of the largest eyesores ever to be erected anywhere. It does, however, contain a wealth of laboratories and shops which are extremely well equipped and advanced.

piled on the College grounds was sacrificed to the New York's World's Fair.

The very existence of the School was threatened by the War. "Blackout curtains laced the windows of Goethals Hall to protect the building in case of an attack on New York City. The thermodynamics laboratory of the ME department was threatened with a curtailment of operations because a ration card for the necessary 300 gallons of gasoline for its engines could not be obtained. Many courses had to be withdrawn for lack of both students and teachers, many of whom were drafted. A survey conducted by *The Campus* in 1944 found "a serious depletion of the staffs in all technology departments. . . . The CE department had 22 professors in the Fall term and only 14 in the Spring. . . . The EE department has hired a drafting professor to teach certain of its courses."

With the War over, the outlook for the future of the School was improved. In 1948 an "Open House" was held as part of a week long celebration dedicated to world peace. Featured among the exhibits for the technology department were such modern inventions as radar, reaction rockets, wire recordings, and brain waves. Dean Newman began planning the post-war expansion of the School and the construction of a new building with money promised by the City Budget Commission.

Then, suddenly and without explanation, President of the College Harry Wright asked for the resignation of Dean Newman. *The New York Times*, commenting on a reason for this unexpected move said, "he [Newman] had tried unsuccessfully to enlarge the program and services of the School." A surprised and irate Dean Newman said, "It seems clear that my future was decided while I was on leave representing this country in important negotiations overseas [post-war economic aid to Europe]." Appointed in his place was Assistant Dean William Allan, of the Civil Engineering Department, who had been in charge in Newman's absence.

In 1961, an architectural curriculum was added to the School. A Department of Architecture and Graphics was set up and a Bachelor of Architecture degree was offered. On July 1, 1963, an independent School of Architecture was established, severing that curriculum's ties with the engineers. [See page 11.]

In 1962, the School had become the third largest at the College, with a total enrollment of 4,406 students. That year, the Board of Higher Education relented to requests by faculty members to change its name to the School of Engineering and Architecture. Giving one of its reasons, the BHE said "there is a difference between engineering and technology. In essence it is that engineering is a way of doing things in contrast with technology which is essentially a body of facts and techniques related to the industrial arts."

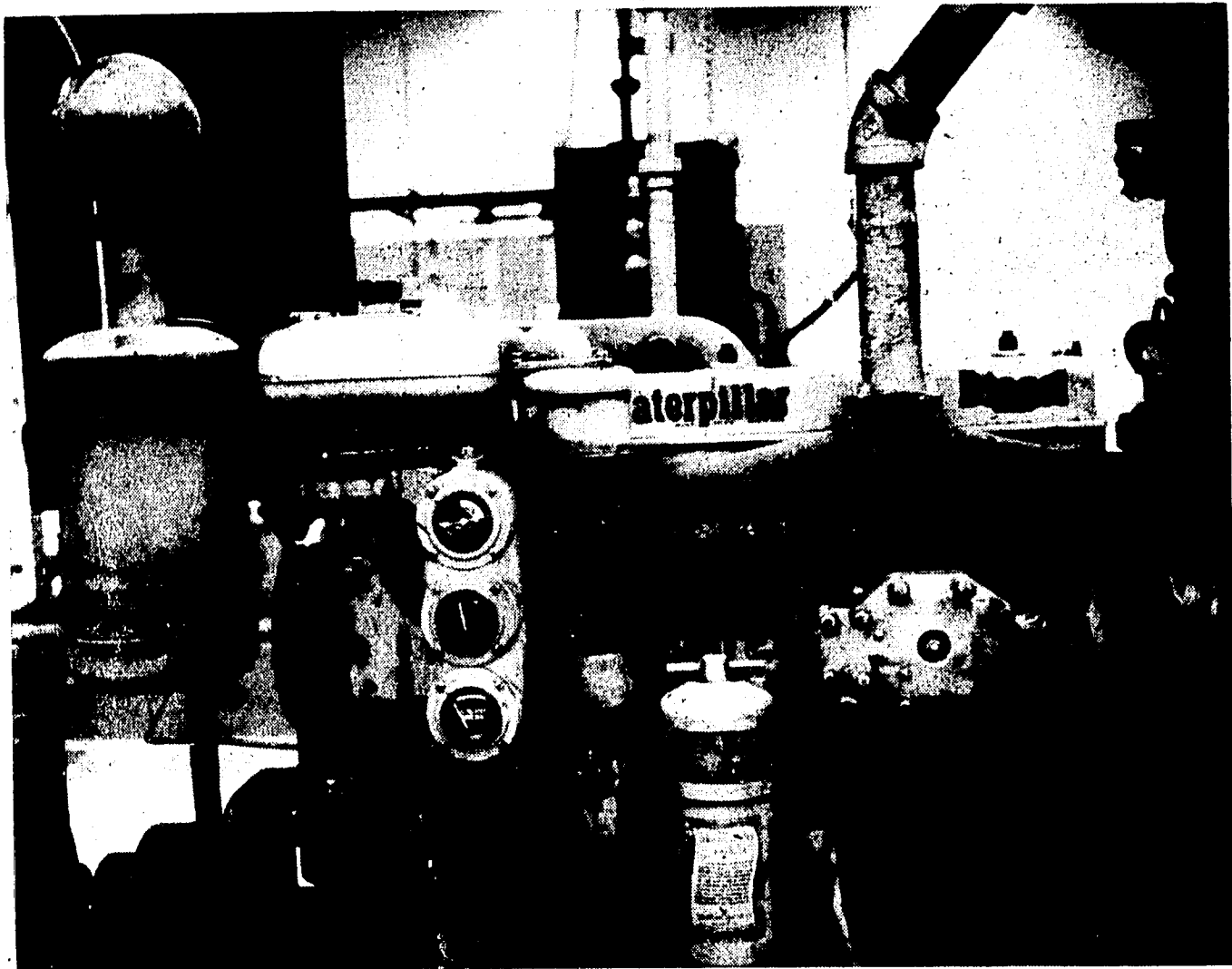
On a quiet Saturday afternoon in May 1963, a nine-million dollar building was dedicated to David Steinman, and becoming the home for the engineering departments, containing all the laboratories and a library. Since then the School has continued to grow in enrollment and in the addition of new courses in computer sciences and biomedical engineering. Since 1963, the School has been offering advanced study leading to both Master's and Doctorate degrees.

Now the School faces the same problem technology in general faces. That is the adjustment to a rapidly changing world without a loss of excellence.

—OTTO HAMMER



## A SURVEY Engineering At City Today



This Caterpillar Diesel is one of the many test engines in the Mechanical Engineering labs. While quite an artistic subject for a news photograph, it really has to be seen in color to be fully appreciated.

### ELECTRICAL ENGINEERING

The City College's School of Electrical Engineering is rated one of the finest in the country. Its faculty and students are the finest in the area, and a CCNY diploma in EE is highly regarded throughout the field. It is said that when a student drops out of City's EE curriculum and transfers to another school, the standards of both institutions are raised.

Engineers at City also take two years of what is known as pre-engineering. Included are the basic physics, math, and other science courses which are necessary prerequisites for the more involved analysis courses that follow. The student takes a wide variety of liberal arts and general interest courses so that he may become an individual integrated into modern society, instead of merely a human adjunct to some complicated machine or computer.

City's Computation Center, located in Steinman Hall, is equipped with an IBM model 7040 unit which handles all computer requirements. EE students are required to take a programming course in which they learn the fundamentals of computer programming by working with the IBM machine. This training has proven invaluable in modern engineering work.

The EE faculty is highly rated. It includes experts from such diverse corners of the field as communications, design, and power. The student is exposed to all of these areas of his field, and more in the analysis, electronics, and power class, and laboratory sequences that make up the first part of the curriculum after pre-engineering. Later, up to ten credits of engineering electives in any special area of interest are provided for. These electives can include advanced math, physics, engineering, or other courses related to some branch of EE.

The academic course of study at City is enhanced by a full honors and leadership program. Students of high standing may be elected to the local chapter of Eta Kappa Nu, the EE national honor society, which is quite active at City. Students may also become active in any of over twenty engineering organizations including the IEEE, Tau Beta Pi, (the national honor society for all engineers), **TECH NEWS**, and many others.

All of the above facts have made City College so well known in the field of electrical engineering, producing engineers among the best to be found anywhere.

### CHEMICAL ENGINEERING

Chemical engineering as an organized discipline, is still very young. Today 85 per cent of all the people who have graduated with a chemical engineering degree are still active in their fields.

Before the appearance of the chemical engineer in the present understanding of the profession, the industrial chemist was called upon to solve production problems and to design new equipment. Each individual industrial chemist had his own approach for solving a problem and since his approach was due to his individual preferences he has to be considered more of an artist than a scientist. As these problems became more and more complex a systematic method of analyzing and solving them was developed, and the profession of chemical engineering developed.

#### Wide Range

A chemical engineer's range is as wide as the use of chemicals in the world today. This may range from foods to exotic metals for the aerospace industry. The chemical engineer may involve himself in basic research studying basic problems such as catalysis, process development where he scales production from the test tube quantities of the research lab, to the ton quantities demanded by industry, production where he is responsible for the quantity and quality of products or sales. All of these positions can invariably lead to some aspect of management in the company in which the engineer is employed.

The chemical engineering degree is one of the most flexible, because of the great demand by industry giving the individual the latitude to make his life whatever he wishes.

#### Equipment

The department of Chemical Engineering provides separate laboratories for the study of unit operations, measurement and control of process variable, metallic and nonmetallic materials and research.

In the Unit Operations Laboratories major items are distillation columns, packed absorption towers, apparatus for study of flow meters, fluid flow, heat transfer, drying, filtration, etc. This equipment is of pilot plant size and permits study of design theory and industrial chemical technology practice.

The Process Control Laboratory is equipped with transducers for process variables, pneumatic and electronic controllers, and examples of thermal, liquid and pneumatic process systems. For simulation of pro-

cess dynamics, an electronic analog and a pneumatic analog and a pneumatic analog computer are available.

The Metallic Materials Laboratories contain equipment for preparation of samples and for microscopic and x-ray examination of metals. A minor amount of physical testing may also be performed.

The Nonmetallic Materials Laboratory contains equipment for the preparation, compounding and testing of rigid and elastomeric non-metallic materials. The apparatus includes an x-ray diffraction unit, roller mills for compounding rubbers and plastic materials, hydraulic presses, plastic injection molding machine, plastic extruder, Instron tensile and compression testing machine, Scott tester, colloid mill, resin reaction apparatus and polymerization ovens.

### MECHANICAL ENGINEERING

Mechanical Engineering covers a wide range of professional services, from theoretical work in research and development to industrial applications in design, production, and sales.

The scope of activity includes all aspects of the mechanics of equipment and processes used in the technical era. Mechanical engineers play a major role in our space program, in the design of both conventional and nuclear power plants, in the automotive field, in heating and air conditioning, refrigeration and cryogenics, and in the fields of automation, fluid machinery, production, and processing machinery, consumer goods and appliances. They have responsibility for research, design, development, testing, control, and manufactures in these many and diverse fields. Many mechanical engineering graduates assume positions of management, while others prefer a career along technical and professional lines.

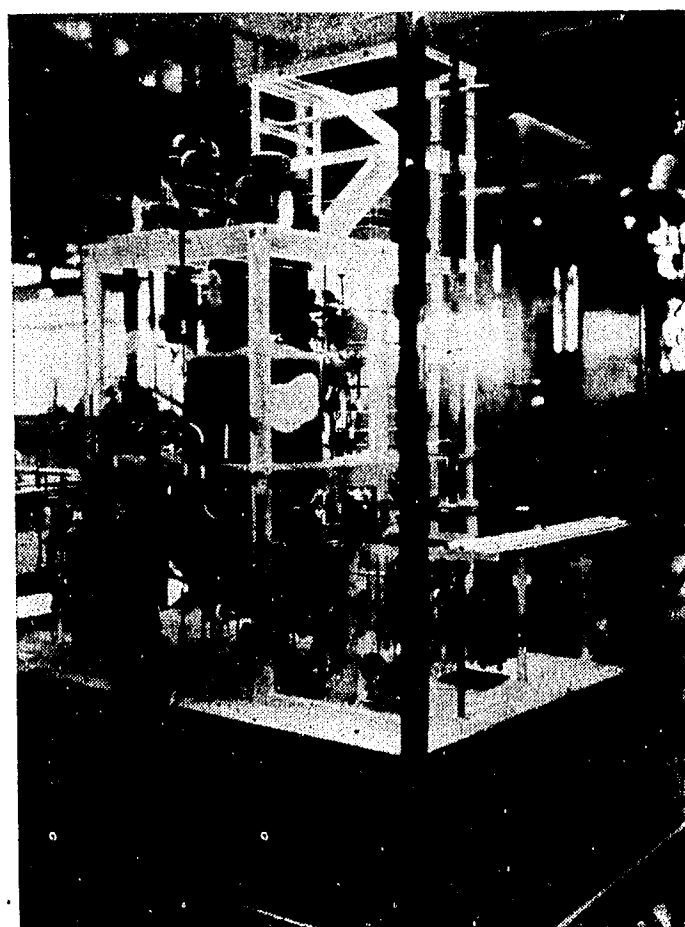
The aeronautics industry has become one of the primary employers of mechanical engineers to solve problems in aerodynamics, structures, and missile systems.

#### Laboratories

City College Mechanical Engineering Laboratories include experiments in energy conversion, internal combustion engines, gas turbines, and steam engines. In the field of production there are laboratories in foundry process, metallurgy, heat treatment, motion and time studies, plant layout, and machine tools. In other areas there are experiments in mechanics, fluid flow, heat transfer and the nuclear reactor.

The Metallurgy and Materials Science laboratories of the Department are extensive in both teaching and research. Complete metallographic facilities are available, including a darkroom, Leitz metallograph and X-ray diffraction equipment.

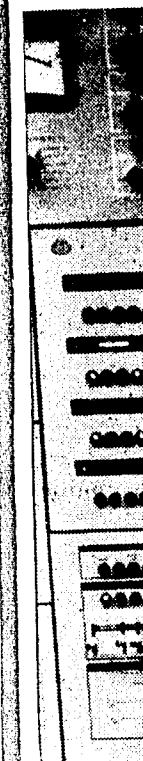
The Nuclear Laboratory is shared by all the engineering and science departments. It houses a water-moderated sub-critical reactor fueled with over 2½ tons of uranium and equipped with a neutron source. The laboratory contains counting equipment, gamma ray spectrometers, survey meters and dosimeters. Neutron flux measurements may be made by foil activation as well as by submarine boron trifluoride detectors.



This is a model of a chemical distiller in the Chemical engineering labs. Students have yet to find a way to make liquor in it.

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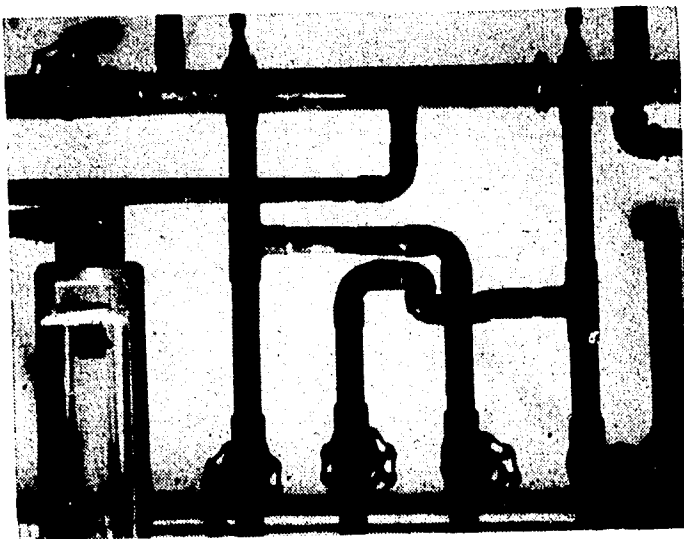
## CIVIL ENGINEERING

Civil engineering is the branch of engineering concerned with the development and construction of large facilities in the public interest. As with all other fields of engineering, the purpose of civil engineering is to apply the principles of science in an economic way to the needs of mankind. With this aim, civil engineers design, construct, and operate a large variety of works and structures. These projects include many phases in building of roads, railroads, waterways, bridges, airfields, and water supply and sewage systems.

### Divisions

Of the divisions within civil engineering, structural engineering is the largest. Civil engineers in this specialty are involved with the design and planning of environmental buildings, industrial facilities, and public works and utilities. A civil engineer must have a knowledge of other branches of his profession, such as materials, soil mechanics, and foundation engineering.

Other divisions in civil engineering are hydraulic engineering, which is concerned with structures to utilize and control water; highway engineering, a field in which civil engineers locate, design, and maintain the nation's roadways; and city planning, in which the engineer is involved with the comprehensive plan-



"Pipes," an artistic photograph taken in the Mechanical Engineering labs by one of our ace photographers.

ning of new communities and the redevelopment of existing cities. In all, the American Society of Civil Engineers lists seventeen divisions which are affiliated to the profession.

The nature of a civil engineer's work requires not only the knowledge of the physical sciences, but also an awareness of the economic and social significance of his work. The largest number of civil engineers is employed by various agencies of the government which require his diversified knowledge. The country depends on its civil engineers for the functioning of all of the vital public facilities.

### CE Departments

The Civil Engineering Laboratories contain modern tension, compression, torsion and hardness-testing machines. For advanced study and research, a large size Bausch and Lomb metallographic microscope with camera attachment and magnification capacity of 2800 diameters is available. Experimental stress analysis equipment includes two photo-elastic stress analyzers, soap film apparatus, and resistance bridge for performing electric strain gage analysis.

The additional facilities of the soils and materials laboratories make possible the study of mineral aggregates and their blends, soil-stabilization phenomena, and mix-design and properties of portland cement concrete.

The Soil Mechanics Laboratory is equipped to perform such tests as the determination of soil grain size distribution, liquid and plastic limits, shear strength and coefficient of consolidation. Facilities are available to study retaining walls, footings, seepage flow under dams, and dynamic loads on structural foundations.

The Experimental Stress and Structures Laboratory can be used for experimental analysis of engineering components subjected to various loads and devoted to photo-elastic, x-ray and brittle lacquer experimentation. Equipment is available for the making and testing of structural models, both large and small. A special area is assigned to research and development problems.

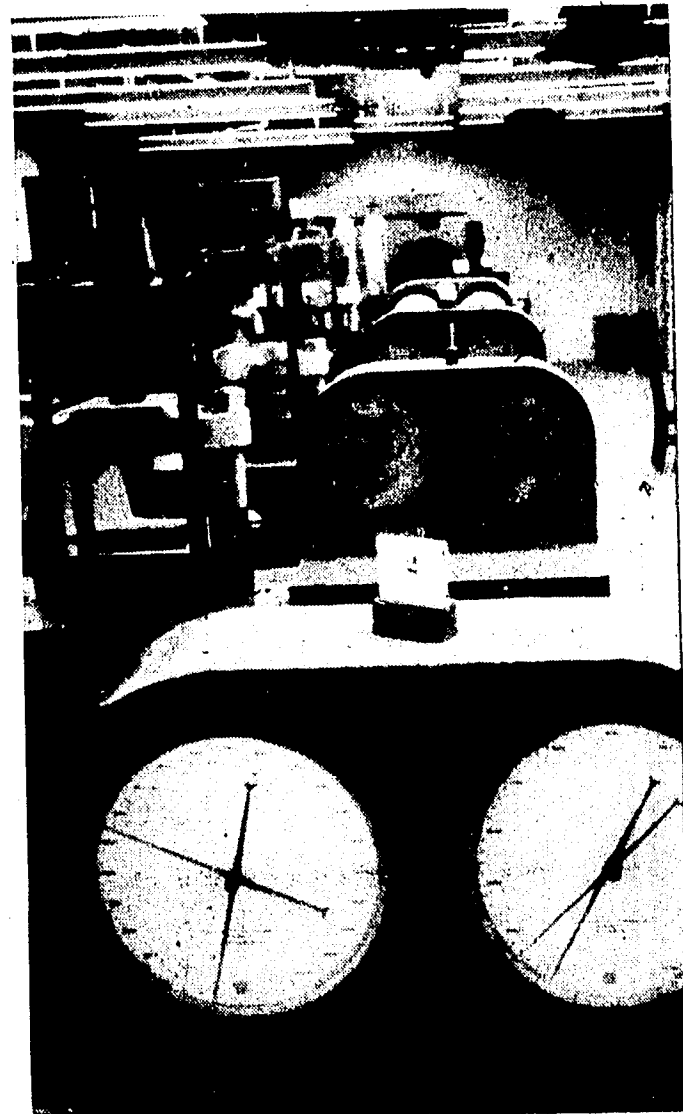
The Fluid Mechanics Laboratory is equipped for experimental study of both compressible and incom-

pressible fluid media. Flow rates of up to 5 cubic feet per second of water are provided by each of three independent high pressure systems.

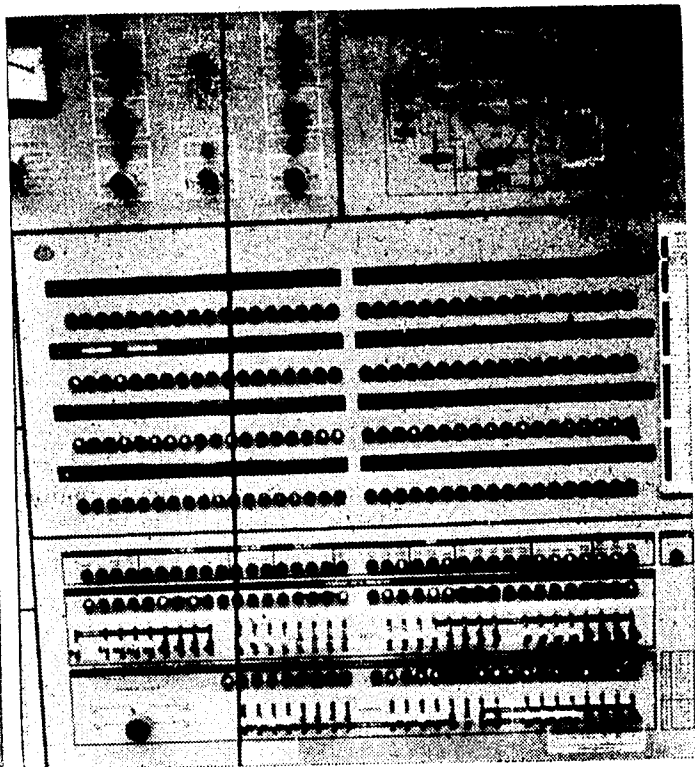
The Sanitary Engineering laboratories consist of pilot plants for the study of processes for the treatment of water, waste and polluted waters, and a fully equipped laboratory for sanitary engineering analysis and bench scale studies. Processes available for study include chemical mixing, coagulation, sedimentation, filtration, ion exchange and aerobic and anaerobic stabilization.

The photogrammetry laboratory is equipped with a three-projector Multiplex, stereoscopes, stereo-plotters and a sketch master. Aerial photographs and diapositives of many areas are available.

The Highway Laboratory offers facilities for investigating the properties of the basic materials and mixture that comprise pavements. A sliding plate microviscometer, a variety of strength and stability equipment and other apparatus are available for determining rheological and physical properties, and for experiments in the design and testing of bituminous mixes.



Machines in the Civil Engineering lab. Facilities for Civil Engineering courses enable students to test almost any construction material and perform almost any experiment. Students who need to vent some of their anxiety can crush a nice column of concrete.



This is the operating control of City's newest Analog computer. The computer center is the organization control center for the entire College. This machine hasn't fouled up a registration yet.

## Engineering Departments Plan Technical Conferences

(Continued from Page 16)

William Rose, U. S. Department of Housing and Urban Development.

Vincent G. Terenzio, Deputy Chief Engineer, New York City Board of Water Supply.

John J. Theobald, Executive Vice President, New York Institute of Technology.

Roger H. Gilman, Director of Planning & Development, Port of New York Authority.

Herman Hillman, Assistant Regional Administrator, Housing Assistance Region I, Dept. of Housing & Urban Development.

John Kaiser, Department of Traffic, New York City.

The alumni members of the planning committee include Seymour W. Brown '37 ME, Raphael H. Courland '37 CE, and Philip A. Wolf '50 CE. The late Henry A. Barnes, New York City's Traffic Commissioner, had been an active member of this committee.

The basic areas of discussion will consist of (1) water resources, (2) transportation and circulation, and (3) land utilization and housing. They embrace many of the technical problems associated with the physical development of the urban region. At the same time, they involve all the perplexing problems of governmental structure, legislation, economics, finance, and the social desires of the community.

The format of the conference will consist of an opening plenary session on the first morning, followed by three half-day sessions with concurrent meetings discussing each topic, and conclude with a half-day plenary session. All participants would attend the opening plenary session at which a panel drawn from representatives of each topical area will discuss the future needs of the urban region as affected by population trends, industrial and commercial trends, and zoning and land use patterns. The concurrent sessions will follow the general format: "Definition of the Problems" — first half day, "Statement of Alternatives" — second half day, and "Recommendations" — third half day. Speakers will be invited to summarize their papers, previously preprinted and distributed, in a half-hour presentation, followed by answering questions from the floor. Each chairman will summarize the results of his session at the final plenary meeting. The entire proceedings will be published.

In addition to the technical meetings, social functions, including luncheons and dinners and ladies' entertainment, will be held.

### Seminar Series in Biomedical Engineering

The School of Engineering will also present a series of three seminars entitled "New Advances in Biomedical Engineering" during the latter part of

the 1968 fall term. The seminars will be held in the Steinman Hall Auditorium, 140th Street and Convent Avenue, under the leadership of Professor Gerner A. Olsen, its Biomedical Engineering Coordinator.

The first seminar scheduled for 4 p.m. on November 21st, will feature Dr. R. Bowling Barnes, president of the Barnes Engineering Company, Stanford, Conn., who will speak on "The Application of Infrared Techniques to The Field of Medical Diagnosis." Dr. Barnes, widely known for his speaking ability, is one of the nation's foremost authorities on infrared technology. In recent years, he has been applying the techniques of the relatively new science to the field of medicine. His talk will include exciting new developments in this area.

Dr. Robert S. Ledly, president of the National Biomedical Research Foundation, and a nationally recognized authority on computers, will speak on "The Use of the Computer in Medicine," at the second seminar to be held at 3 p.m. on December 5th. Dr. Ledley, who holds a D.D.S. degree from New York University, is also a specialist in mathematical biophysics applied to physiology and other fields.

At the third seminar to be held at 3 p.m. on December 12th, engineering and medicine will join forces in presenting a solution to one of the more difficult problems in orthopedics — the

stabilization of the lateral-rotary deformation of the human spine—known as scoliosis. Professor Gerner A. Olsen of The City College, School of Engineering, the first speaker of the seminar, will present his theory of the stability of the human spine. He will be followed by Dr. Darvis Flinchum, orthopedic surgeon at the Georgia Baptist Hospital of Atlanta, Georgia, who will present medical evidence concerning the effectiveness of rib resection as a means of stabilizing the scoliotic spine. The corroboration of medical practice with engineering theory as revealed in these two papers will undoubtedly encourage a fresh look at this most perplexing problem.

Straddling the time period including these three seminars will be an exhibit of medical paintings by the internationally known illustrator, Dr. Frank Netter, '27. These paintings will be exhibited at the Cohen Library and the School of Engineering lobby through the courtesy of the Ciba Pharmaceutical Company.

There will be no charge for these seminars. However, alumni desiring to attend are urged to write for seat reservations, indicating the seminar or seminars in which they are interested.

### Departmental Conferences

The Chemical Engineering Department under the direction of Professors H. List and A. Squires proposes to

(Continued on Page 12)

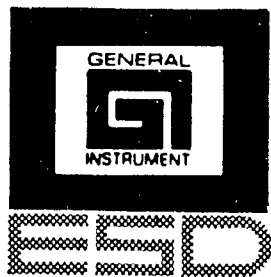
# CONGRATULATIONS

The Electronic Systems Division of General Instrument Corporation and the many alumni of CCNY on our engineering staff join in congratulating CCNY School of Engineering, now celebrating its 50th year of achievement.

At Electronic Systems Division, as at CCNY, we are striving constantly for engineering excellence. Here the engineer's role is recognized tangibly. He works in small, project oriented groups that permit the fullest utilization of individual talents and desires. Personnel policies acknowledge professional prerogatives and needs, encouraging studies through a fully paid tuition refund plan. He is provided with the maximum opportunities for initiative, creativity and professional growth in the following fields:

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**ORDNANCE ELECTRONICS**  
**RECONNAISSANCE AND SURVEILLANCE**  
**INSTRUMENTATION • DIGITAL SYSTEMS**

Engineers and Scientists interested in exploring career opportunities at our company are warmly invited to contact Mr. E. C. Lester



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ELECTRONIC SYSTEMS DIVISION

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*(We're Celebrating our 47th Year)*  
An Equal Opportunity Employer



# Architecture At City: A Legend In Its Own Time

Last term, a group of maintenance men walked into an architectural design room in Goethals Hall. They stared at the macabre scene and ran to the Buildings and Grounds Department to drag some officials to the room. After having been duly unimpressed by what they saw, the officials persuaded the Architecture departmental office to post a now infamous edict. This proclamation forbade repainting of rooms and hallways, moving desks and cabinets, and put an official censure on the practice of welding old school equipment and furniture together to form "sculptural centerpieces" in design rooms. The Buildings and Grounds office asked that their men be allowed to carry out any redecorating requests of students.

Students asked what would have happened if some union maintenance men had been given the task of executing the ceiling of the Sistine Chapel at The Vatican in lieu of Michaelangelo's skilled hand. Then the students reeled off lists of hundreds of instances of Buildings and Grounds Department non-maintenance and mal-maintenance, then went right ahead maintaining their design rooms and surrounding hallways to their own liking.

## Bubbling Cauldron

In effect, the students and faculty of the School of Architecture are part of a close-knit bubbling cauldron of creativity, progressiveness, and "good-natured anti-establishment" rebellion. When the heat is turned on too much, the cauldron will bubble over and hundreds of architecture students will burn an engineering dean in effigy, or carry picket signs protesting the design of a new building on campus, or actively protest the desecration of trees and lawns "like the South Campus Liberal Arts students."

The fact that architecture students are indeed more like "the South Campus Liberal Arts students" than they are engineers has been at the root of a psychological schism between 'engineers' and 'architects' at the College. This year, the 'architects' severed their ties with the 'engineers' and, as an independent School of Architecture, started drifting ahead as their own creative entity.

## The Worst Battles

The path of this drifting raft is now impeded by two obstacles. The first is a delay in the opening of their new temporary quarters, which is expected to serve the School's needs for five years. The second is the failure, after more than a year of searching, to find a suitable administrative dean, a problem The City College shares with many architectural schools across the country.



The old admonishment: "Would you do this in your own living room?" has never worked on architecture students. Parking signs, psychedelic-painted walls, graphical tidbits, and banners abound in student design rooms. Creative energy is also spent in city planning and architectural projects, which are the academic face of these rooms.

But the brunt of the problems have been solved, and the worst battles are over for the School. After some wavering, the architecture degrees have been accredited by the State and the National Architectural Accrediting Board. The students have their own modern library. There is an architectural model shop. The curriculum has been completely overhauled and is now one of the most thorough and modern in the country; it will require six years of work and will lead to a Masters degree in an architectural field.

## Parking Signs and Posters

When school opened this term, the various design classes in the School of Architecture restructured their environment. They do this every term since, within each class, each student has his own exclusive drafting table and thus has some personal feeling for his surroundings. Students may also, as a class, request 24-hour use of their studios for any night when the work load gets large. So some bring in their

own easy chairs and sleeping bags and make themselves to home.

The students in design studios thus live in the midst of a constantly changing series of wood panels, poles, graphical innovations, paint jobs, parking signs, and posters. The academic side of their stay at City College is attested to by the sheaves of tracing paper, piles of books and catalogues, architectural magazines, and skeletons of models of projects in the making about the design rooms.

The quality of an architecture student is maintained by high design standards. But not only do architecture students do well in their chosen field, some are the most brilliant students in Sociology and Art. No architecture student, however, does well in courses taken at the School of Engineering.

## Environmental Studies

At present, architecture students take 110 Architectural Course credits and 56 other credits for a Bachelor of Architecture degree. Architecture stu-

dents graduate in five or six years, depending on the rigor of their program and their interest in other fields. Under the new curriculum, 194 credits will lead to a Master of Architecture degree.

The administration is anticipating specialized Masters degrees in architecture, in such fields as Landscape Architecture, Architectural Technology, Urban Design, and City Planning. The School of Architecture will become the School of Architecture and Environmental Studies if the City University Master Plan holds out.

It is expected that the School will be restricted to 350-400 students total enrollment, a figure recommended by professional and academic organizations.

## Active Students

Extra-curricular activity amongst architecture students includes a very active American Institute of Architects chapter, a group which is the voice of the student in most contacts with administration, which sponsors trips to architectural landmarks and new cities throughout the northeastern U. S., which shows films and sponsors renowned speakers (such as C. Moore, Paul Rudolph, Robert Venturi, and Philip Johnson), and which maintains contact with other Schools of Architecture. The A.I.A. chapter is planning bulk purchase of art and architecture materials in reaction to poor stock and high prices at the College's and surrounding stores. It hopes to eventually found a student Co-op, such as at Harvard.

The architecture students issue weekly a highly satirical, warm, personal, and informational bulletin called 'Footings.'

## An Unusual Contact

The students, administration, and faculty of the School of Architecture are bound by a common enthusiasm for their profession and school. The personal contact between all three echelons is remarkably high, even for City College. Classes are generally quite personal and small.

Students, faculty, and administration of the School of Architecture are co-operatively involved with Master Planning of The City College, insofar as regulations let them. (They have not yet been granted permission to blow up that newly constructed eyesore of an Administration Building.)

They are all bound to survive; maintain the uncommon school spirit; and learn as much as they can to try to remake our cities into environmental gems for people to exist in, and to try to leave nature and ecology alone.

If only those highway engineers would learn. . .

—ROBERT KETCHEL

## Finger and Radkowski Are Featured Speakers

(Continued from Page 16)

Finger has been on the NASA Headquarters staff since it was established in October 1958, as Chief of the Nuclear Engine Program. On March 5, 1961, he was appointed Assistant Director for Nuclear Applications.

Finger joined the National Advisory Committee for Aeronautics, the predecessor to NASA, in 1944 as an aeronautical research scientist at the Lewis Flight Propulsion Laboratory in Cleveland. In 1952, he was named Head of the Axial Flow Compressor Section and in 1954, Associate Chief of the Compressor Research Branch. Three years later, after nuclear training at Lewis, he was made Head of the Nuclear Radiation Shielding Group and of a Nuclear Rocket Design Analysis Group.

He earned a B.S. degree in Mechanical Engineering from CCNY in 1944. He was awarded an M.S. degree in Aeronautical Engineering at Case Institute of Technology in 1950.

Finger has specialized in research on turbo-machinery, gas turbine engines, nuclear rockets, and shielding. Author

of numerous technical papers, he was co-winner of the 1957 Society of Automotive Engineers Manley Award for the best paper on aeronautics and received the AIAA's James H. Wyld Propulsion Award for 1968. He is a member of the American Institute of Aeronautics and Astronautics.

Before joining the AEC, Dr. Radkowski was an associate nuclear physicist at Argonne National Laboratory. He is the author of numerous technical publications and holds several patents. He is editor of the "Naval Reactors Physics Handbook" issued in 1964. Radkowski has been secretary of the U.S. Atomic Energy Commission's Advisory Committee on Reactor Physics since 1959.

Dr. Radkowski was the recipient of many honors and awards in the course of his career. These include the Meritorious Civilian Service Award of the Dept. of the Navy in 1946 for "Outstanding Services to the Navy During World War II," a citation from the U.S. Atomic Energy Commission presented by Vice Adm. H. G. Rickover in

1953 for "Exceptional Services to the Nation," and the Distinguished Civilian Service Award from the Dept. of the Navy in 1954 for Contributions to the Naval Nuclear Power Program. In 1964, Radkowski received a \$25,000 award from the Secretary of the Navy for an invention resulting in greatly extending the life of nuclear powered ships. He was awarded the Outstanding Achievement Award in Science in 1965 by the Catholic University of America Alumni and Yeshiva University's Mordecai Ben David Award in 1967.

Radkowski received his bachelor's degree in Electrical Engineering from CCNY in 1935, the AM degree in Physics from George Washington University, and the PhD in Physics from Catholic University of America. He is a Fellow of the American Physical Society, and a member of Sigma XI and Sigma Pi Sigma.

Mr. Murray Shainis, '48 EE, is organizing special tables for Engineering Alumni by class or other preference. Please use the form below to make reservations.

## RESERVATION FOR THE 88th ANNUAL ALUMNI DINNER

Please make ..... reservations for me and my guests at the 88th Annual Dinner of the CCNY Alumni Association to be held at the Hotel Roosevelt on Wednesday, November 20, 1968, at 6:00 P.M.

Subscription: \$12.00 per person  
\$6.00 per person for Young Alumni, Classes of '63-'68

Please draw checks to the order of the Alumni Association and mail to Finley Student Center, New York, N.Y. 10031.

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Class .....

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City .....

State ..... Zip Code .....

List the names of your guests below:

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.....



# School to Host Experts...

(Continued from Page 9)  
conduct a series of three or four colloquia on **Food Production**. The lectures will cover aspects such as food from petroleum products, utilization of chemicals in fertilization, economics of required chemical plants and general problems of planning programs. The lectures will cover social-economic and technical details on a world-wide basis. Tentative suggestions for main speakers are:

Dr. Albert Champagnet, an expert from France, speaking on food from petroleum, followed by several representatives of local petroleum companies.

Professor Morris Asimow of U.C.L.A. with several other speakers.

An engineer and an economist familiar with problems of getting projects underway in developing countries (e.g. Hoelscher of U. of Pittsburgh, Rosenstein-Rodin of M.I.T. or Ralph Hofmeister of U. of Minn.).

**Professor of Civil Engineering** Professor D. Cheng has arranged for Dean Henry J. Cowan, University of Sydney, Australia, to speak on October 17 (Thursday) and October 18 (Friday) on the following:

**Australian Concrete Structures.**  
Model Analysis of Structures.

**Soil Dynamics.** A three-day seminar under the direction of Professor C. Costantino, Department of Civil Engineering, tentatively scheduled for Spring 1969.

**The Electrical Engineering Department** under the direction of Professors Brown, Mekel, Krane, Karmel, Vural and Wiener proposes to conduct two-day conferences on each of the following subjects:

Control Systems.  
Wave Interactions in Solid State.  
Computer in Engineering Education.  
Transportation Problems with solutions developed from Model Theory. This affair will probably tie in with a Transportation Conference to be held in New York City.

The I.E.E.E. Metropolitan Group in cooperation with the Electrical Engineering Departments of City College, Columbia University, New York University and Brooklyn Polytechnic Institute will hold an all-day symposium on the subject of **Information Theory**. Professor H. Taub of the Electrical Engineering Department and Professor Schilling of the Polytechnic Institute of Brooklyn are coordinating the meeting, which is scheduled to be held on Thursday, November 14, 1968.

**Mechanical Engineering Department** under the direction of Prof. S. Weinbaum will be host this fall to the annual regional meeting of the American Institute of Aeronautics and Astronautics. In conjunction with this meeting and the special anniversary program, high school students will be invited to attend a special seminar on the final day. Faculty and outside experts will lecture to the students during the morn-

ing session to introduce the various aspects of "Aerospace Engineering" to them. The students will then be guests of the School for lunch. The afternoon will be devoted to a tour of the engineering laboratories and related facilities. The meeting will be scheduled on a Saturday in January.

"The Future of Mechanism Design: Theory and Application," under the direction of Professor G. Lowen, Department of Mechanical Engineering, will be the topic on Thursday, October 3, 5 p.m., Rm. T163, Steinman. The speakers will be the internationally known mechanisms experts: Prof. Ferdinand Freudenstein, Columbia University, Ing. Kurt Hain, Institute for Agricultural Research, Braunschweig, Germany, and Prof. Christian Peleculi, Center for Mechanics of Solids, Academy of Rumania.

**Symposium on Fluid Mechanics and Heat Transfer** under the direction of Professors S. Weinbaum, B. Hamel and C. Anderson, Department of Mechanical Engineering. This symposium will support our graduate program in Fluid Mechanics and related Engineering Sciences and will be held on December 27, 1968.

The School of Engineering of The City College will be host to the **Association of Engineering Colleges of New York State** for its "Winter Meeting" on Friday, December 6, 1968, under the direction of Dean W. Allan.

## Research Report

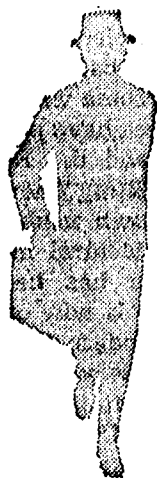
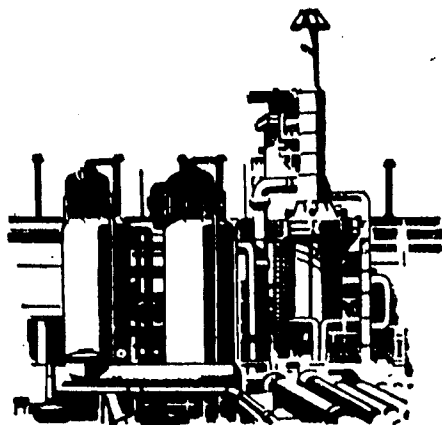
Dean Morris Silberberg '53 CE of the City College Research Foundation has announced the publication of the first Engineering Research Report covering the academic year 1967-1968. He and Dean Egon Brenner '44 EE of the Graduate Division compiled the material submitted by the individual researchers as a report which lists all CUNY and Federally supported research projects by department in the CCNY School of Engineering. The following information is presented for each project:

- Title
- Sponsor (CUNY, NSF, etc.)
- Project Director
- Graduate Research Students
- Objectives (abstract)
- Results obtained
- Publications

The design of the cover was assigned to an Architectural class. Mr. Jon Delisc's design was chosen as the best over several other outstanding designs.

This report ties into our 50th Anniversary Celebration and will be distributed to selected leaders of industry, government, universities and alumni. Interested alumni may request copies from Dean M. Silberberg, The City College Research Foundation, The City College of the City University of New York, Convent Avenue at 138th Street, New York, New York 10031.

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## News Brief In Paper Here



Editor-in-Chief of The Campus hanging paper chains.

The Campus, undergraduate newspaper of The City College since 1907, embarked upon a new format last week in an attempt to establish themselves as a major campus newspaper here.

They propose to come out as a weekly 12 page newspaper, most of which will be chock filled with fraternity and sorority ads. Sports will be a major feature of the paper. We do not yet know whether they propose to run editorial comment; their early editions this term gave us no indication.

## Phone Dials

(Continued from Page 1)  
"FLushing," "Jamaica," "Coney Island," "CHelsea," "Murray Hill," "BAyside," "ASToria," "SAaint George," or "TRemont." Among the phone company antagonists are businessmen and upper crust residents with prestige exchanges such as "Murray Hill," "BUTterfield," "PENnsylvania," and "Riverside" which they don't want to lose.

### What's More Cheerful?

The phone-dial switchers on campus admit that what they're doing is "probably illegal." They are very careful in removing and replacing the dial to that they don't break anything. They don't change the phone number either; they just put in the original exchange. "It probably doesn't bother the phone company too much," says the chief phone-dial switcher.

## Get 'em While They're Hot

The 50th Anniversary issue of VECTOR promises to be the best in the 30-year history of the School of Engineering's award-winning magazine.

This issue will be greatly expanded and will contain:

Articles by and about prominent Alumni and Faculty.

Interviews with campus personalities, faculty, and alumni.

A report on the special departmental technical conferences.

A report on the 3-day School Conference on the "Urban Environment and Its Future" to be held at the Waldorf Astoria Hotel.

A report on the campus seminars in Biomedical Engineering.

A science fiction article by a student. All this in addition to the regular VECTOR features!

Some of these familiar features are:  
**Engineering Highlights** — describing the latest theoretical and technical advances.

**Vector Volts** — Challenging problems for the reader.

**Vector Crossword Puzzle.**

**Vector Analyses** — The Editor's Corner.

This issue is guaranteed to be a collectors' item, since the limited edition will be distributed mainly to key Engineers in industry, government and education.

Alumni can place orders for copies with this form. A nominal charge of \$1.00 per copy is necessary to help defray the cost of publication and distribution of this special issue.

### ORDER FORM

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## City College Fund Story

The City College Fund serves as the alumni fund-raising arm for the College, raising money for direct financial aid to students and to support programs of educational importance that are not covered in the tax budget.

Alumni fund-raising was begun as an organized activity in 1945 when the Centennial Fund was incorporated in anticipation of the 100th Anniversary of the founding of City College, in 1947. Following the celebration, the Centennial Fund became the City College Fund and an annual campaign for monies was undertaken, beginning in 1952.

Last year, in its 14th annual campaign, The City College Fund raised over \$530,000 in contributions from almost 10,000 alumni and friends of the College. Since the first annual campaign was undertaken, the City College Fund has received a total of over \$4,325,000 to meet the needs of the College and its students. Almost half that sum has been given in the last five years, indicative of the quickening response of City College alumni.

Alumni giving through the Fund provides for graduate and undergraduate financial aid through a program of as-

sistantships, fellowships, scholarships, grants-in-aid and loans. The Fund also supports the Student Center and the Placement Office, underwrites the program of Visiting Professors and Guest Lecturers, provides funds for the Library, faculty research and scholarly publication and a variety of student programs on the campus and in the community.

The Fund has encouraged alumni and non-alumni friends of City College to establish Scholarship Funds, to endow Teaching Chairs and has given alumni the opportunity to exhibit a new sense of responsibility for the college and its students.

In addition to the general areas of support in which Engineering students share with all other students of the College, The Fund has for the past several years made available funds for the Engineering Laboratory Teaching Assistantships and raised the money for the mural in Steinman Hall. Graduates of the School of Engineering sit on the Fund's Board of Directors and Tech alumni have played an important part in the growth of the Fund.

— Lawrence Weiner '47

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### JOIN TECH NEWS

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## Ettenberg...

(Continued from Page 1)

Ettenberg rejoined the academic community in 1958 when he joined the faculty of Brooklyn Polytechnical Institute. He remained at Brooklyn until 1963 when he became a member of the staff of The City College.

During the academic year 1961-62, Ettenberg was at Israel's Technion as a visiting Fulbright lecturer.

In 1959 he was program chairman of an international conference with the Soviet Union. In the same year he was invited to the U.S.S.R. He repeated this trip in 1961, and in 1968 as a member of the Institute of Electronic and Electrical Engineer's delegation to its sister society in the U.S.S.R., the Popov Society.

He also finds times to participate in the Conference on 'Science, Philosophy, and Religion' sponsored annually by the Jewish Theological Seminary of America. At present, when time permits, he plays cello in a chamber music trio with Professors Stein and Clement.

### The Future

As far as his plans for the Department are concerned, Ettenberg has a couple of ideas. He feels that an important contribution may be made to urban problems if a course in Urban Systems Analysis Engineering were to be given at The College. He would also like to have more undergraduates take part in research.

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# TECH NEWS

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## An Educated Move

We feel that the Education Department should be praised for its position with regards to student teachers and the strike. One could imagine that student teachers could be assigned to remain at the City College for the duration of the strike. The option given to the students by the Education Department indicates a positive action by the school with the community children directly benefiting.

As indicated in the news story (see page one), this action has been noted by the community as an attempt on the College's part to improve relations between the College and the community and this is something that this College needs very badly. Gentlemen, good move!!

## A Commemoration

In June, 1969, the CCNY School of Engineering will be 50 years old. This event will be commemorated in a year-long celebration commencing in September, 1968. We will, of course, demonstrate our own pride at reaching this jubilee in a series of social and academic activities. At the same time, there is another, and perhaps more serious, side to these events — we are presented with the opportunity to enhance the public image of City College by spotlighting the School's great accomplishments and contributions to New York City and the nation for industry, the academic community, and the general public. One of the major goals of the anniversary celebration is to improve the placement potential of CCNY alumni, not just the recent graduates, but also those who have already made their mark in the profession.

Free higher education and the accomplishments of CCNY alumni in all walks of life will be stressed in the various activities planned for the anniversary year. The rapid and successful development of the graduate program has added a new dimension to the stature of the overall CCNY education in engineering and this, too, will be publicized. At the same time, University status has imposed on us an added obligation — to foster excellence in research by helping to find sources of grants in industry, foundations, and governmental agencies, while at the same time retaining our excellent undergraduate education undiluted in purpose and undiminished in stature.

As the importance of a higher education increases and college enrollments expand, it is important to continue to maintain the high standards of CCNY undergraduates. An engineering education at CCNY should continue to be the goal of worthy high school students of the City. It is hoped that the anniversary celebration will help to attract students of high calibre to CCNY.

## The Roamin' Forum By JUDY LEIBOWITZ

QUESTION: Since City College students don't live on campus, what makes college life meaningful for you at City?

Elaine Meiseles, junior,  
Psychology.  
The People.



Meiseles Schmidt

Larry Schmidt, 1601,  
Psychology.

For the most part it certainly isn't the teachers. It could be, but it just isn't. I found myself turning to the student body — to see how I could generate an interesting time for them and for me in the same blow. So I joined Freshmen Orientation because it's open to anyone . . . the melting pot of CCNY where everyone merely by committing themselves to other people generates an atmosphere of warmth and accomplishment that would make IFC and HPA envious. I can do my thing and there are others doing theirs, and everyone takes out of it what they want to.

Barbara Bullied, 1101,  
Political Science.

At City, every student is completely on his own. This could be a very frightening experience. However, it seems that there is a place for just about anyone at City. All you have to do is find it.



Bullied Helfgott

Stephen C. Helfgott, 1630,  
Psychology.

I have found that although I have learned a great deal in the classroom, most of my learning and meaningful experiences come from the extra-curricular areas. First of all, I actually do live on campus; my residence is at my fraternity (Zeta Beta Tau) and I am gaining the experience of living with nine other students. We have thus developed a relationship with and a feeling for each other that is uncommon for almost all students at The College. Freshmen Orientation and IFC Leadership Training Committee have also served as invaluable experiences. They have permitted me to examine myself in many roles and have enabled me to learn about different types of people.



Sobolewski Meyers

Gloria Sobolewski, 1103,  
major, undecided.

I find the students here much more friendly than in high school. The entire atmosphere is  
(Continued on Page 15)

## THE CLASSIFIED

### For Sale & Wanted

For Sale: 1967 Datsun Rdstr. Excellent throughout. Call Lee after 6 p.m. TU 2-0958.

1962 V.W. Very good cond. \$500 or best offer. Call (516) PR 5-5202.

1964 MG Midget (white) Perfect working cond. & body, \$1,000. EV 8-5620. (Hank).

1966 Mustang convertible GT, 33,000 miles, V-8, 4 speed synchro, 4 bar curb, R&H, Disc brakes, rully pack, \$1450— call CL 2-4817.

1964 V.W. Body & motor excellent, \$800. Call 015-0068 (Ned Barber).

Triumph TR 4 \$1050 1965 blue 2 tops wire wheels lugrack call CA 8-3664.

1965 Olds 442 High suspension Mags Sun Tach New Hurst 4 speed call KI 9-3724.

Honda CB 100 blue 1967 Helmit lug rack \$380 (mech. owned) Ken 584-5261.

50 CC Honda Automatic clutch electric starter 400 miles \$100 543-7870 (evenings).

1968 Olds Cutlass excell. cond. \$2850 or best offer 655-1465 (Gary).

1960 Ford Thunderbird 2 Dr hardtop (white) 352 cu. in. dual exhaust \$500 or best offer call TA 4-0618 after 7 PM.

1959 Mercedes Benz 220S semi classic tower \$420 or best offer call 584-5261.

1967 Olds Cutlass Supreme \$2500 call 364-5080.

RIDE WANTED to Cornell Univ. in Ithaca, N.Y. will share all expenses call Joan 877-0192.

### Apartments & Services

Apt. to share in CCNY-Morningside Heights area. Up to \$60 a month call 964-2559.

Apt. to share in Columbia-CCNY area. Up to \$75-m Gene Newman 882-8456.

Large apt. to share private bedroom, couples approx. \$90, near W. 158 St. in Manh. Write Simon Bullion, 845 Riverside Dr., Manh. N.Y.

West side pref. Columbia area. Up to \$100-m call Bob 533-4163 (evenings).

Apt. & Roommate desperately needed in N.Y.C. call Harold CL 1-2723.

Furnished rm. for rent, \$30-25-10 weekly, W. 80th St. 873-4810.

Looking to do typing—will treat your word as my own. Call 013-0564 after 6 PM. Laura.

3 rm. apt. in Bronx off Concourse wanted. Will pay up to \$85-m call Bruce OL 3-2984 (evenings).

### Miscellaneous

Education without dignity is invalid. No man is any more than the context to which he owes his existence. The victory depends not on the enemy not coming, but on your being ready to receive him when he knocks.  
— Ron Karenga

Nixon & Agnew vs. Humphrey & Muskie, 1964 revisited.

IF YOU LIKED HITLER,  
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"Technology . . . the knack of so arranging the world that we don't have to experience it."  
— Max Frisch

The New Lost City Ramblers are alive and well in 1930.

The Young Tradition  
will be back in November.

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"How many more generations will pass before it will become nearly impossible to be alone even for an hour? . . . Perhaps when the time comes that there is no more silence and no more aloneness, there will also be no longer anyone who wants to be alone."  
— John Wood Krutch

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— Mark Twain

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TO EARN OVER \$100

Write for information to:  
Mr. Ed Benovy, College Bureau  
Manager  
Record Club of America,  
Club Headquarters  
York, Pennsylvania 17401

The editors and staff of TECH NEWS wish to congratulate Robert Kalish on his engagement to Judith Ketchel.

Congratulations are in order for Lehman College of the City University which changed all their course numbers but couldn't issue their course bulletin on time. That was a registration day to remember. Ah, yes; another C.U.N.Y. first.

IF YOU LIKED MAYOR DALEY,  
YOU'LL LOVE WALLACE!

"Meanwhile, just across Convent Avenue is the most beautiful and gigantic hole, out of which will rise 15 stories of scientific laboratories and a magnificent gymnasium."  
— Pres. Buell G. Gallagher,  
Commencement, 1968;  
Lewishohn Stadium.

— A beautiful what? —

With Rep. Gallagher, the State of New Jersey doesn't need the Secaucus dumps.

"The state of New Jersey is a testament to the vulgarity and stupidity of man."  
— Dr. Ian McHarg, 1966.

SELL THE POST OFFICE DEPT.

We demand better quality toilet paper in City College bathrooms!

—C.C.N.Y. Ad Hoc Committee  
on Toilet Paper

Wouldn't it be great if we could get them to tear down New Jersey too?

Wouldn't it be great if, when they tore the huts down, they also accidentally tore down that ugly Administration Building also?

There is a new animal on the scene—somewhat rodent-like; it's known as a Humphreymuskie.

"Looking at Joe Korn is like smelling an artificial flower."  
— Mustang Sally

### KAPPA RHO TAU HOUSEPLAN

is seeking to merge  
with a  
Freshman or Sophomore

### FRATERNITY

For Information Call:

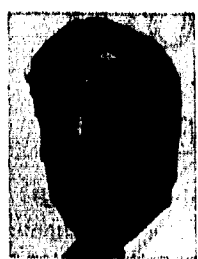
JERRY — TA 4-5256

or DAVE — TR 2-7721



## Tech Life

BY AL GERSHMAN



Public unrest seems to be the fad these days. Some may object to the word fad as a little out of place. Let's analyze the problem and see. Take yourself back awhile to the disorders on the C.C.N.Y. campus. Site six to be exact. Students sat in trees and in front of bulldozers to protest the destruction of the south campus lawn. The first thing that struck my mind when I first heard of this disorder was the fact that so many students were disturbed by such an insignificant and trivial thing as the site six issue.

My answer came when I questioned friends and fellow students about the incident. Over half of the answers I received were that the protest gave them something to do, or an excuse to cut classes, or it was right to jump on the bandwagon to support their fellow students regardless of the issue. Here's the point. How many people involved in civil disorders really know the issues or really care about the issues? Is all of this discontent due to bandwagons and fads?

It seems fashionable also these days to attack the police forces of our cities. Two phrases that will almost always start a riot are overaction by police and the far less gentle phrase police brutality. Take the Chicago political convention of a few weeks ago. Mayor Daly was sorely criticized for overaction taken by his city's police force. To understand police brutality you must imagine yourself as a policeman. You're a person like anyone else. You have lots of friends on the force. Let's say you're called into riot duty to disperse a crowd of demonstrators. Things get out of hand, your buddy gets knocked unconscious by a thrown bottle. What's your first reaction?

Now switch parts again. You're a demonstrator who could care less about the issue involved. You're a bandwagoner. Suddenly you're attacked by an enraged policeman. Now we have two parties with a genuine beef. One claims police brutality, the other self defense. The next time there is a disorder the policeman and the demonstrator may not be so gentle.

Ocean Hill-Brownsville has been the issue of the past few days with local residents wanting control of local school boards and unions wanting reinstatements for dismissed teachers. But what is the real issue? If decentralization were the real issue then every school district would be as militant as Ocean Hill-Brownsville. The real issue is power. The community wants the power to control the local school boards. The union is afraid of losing its necessary power to curb hasty action by these local school boards. The purpose of the union is to protect the rights of its members from such actions. The teachers' strike is a show of this union's power to the local board. Meanwhile the students are not getting their schooling.

How many of us are guilty of being hanger-ons or joiners just for the sake of being one of the crowd and not really interested in the issue? What ever happened to individual thinking? Latest rumors are that there is a move by community rebel rousers to decentralize the police department. Here come the bandwagoners and the fadists.



From the looks of that fraternity and sorority parade on Convent Avenue last week, you'd think that City College had a monopoly on stupid antics, clowns, and giggly girls. We don't; it goes on at every college campus in the country. But as Mark Twain would say; "It's things like this that give City College a bad name."

## Notices

If you don't want to enter the world from which you have been sheltered these past four years coldly and without preparation, then let the Placement Office facilitate the traumatic transition from college womb to the world of the full-time employed.

The C.C.N.Y. Placement office has a program to assist, guide and facilitate your entry into the professional world. For example, we have set up visits by some 300 companies and organizations from all over the country to conduct interviews here on our campus. We are in contact with many others. We can help you to prepare your resume and give you valuable tips on how to conduct a successful interview. In our Brochure Library you will have access to information on thousands of potential employers. Career guidance is available to you if needed.

To participate in this program, we request that you first attend one of our orientations. This briefing, which lasts about 45 minutes, is necessary in order for you to (1) receive necessary materials, (2) learn of the full range of possibilities available, (3) become acquainted with our procedures. You may attend any one of the orientation sessions listed below:

September 26, 1968—  
Townsend-Harris Auditorium  
12 Noon

September 26, 1968—  
Townsend-Harris Auditorium  
1:00 P.M.

October 1, 1968—  
Finley Center — Room 330  
6:00 P.M.

October 3, 1968—  
Finley Center — Room 330  
12 Noon

Please note that this year, as opposed to the procedure in years past, the June graduates will be permitted to take a limited number of "on-campus" interviews in the fall as well as the regular number in the spring. August grads may register in the fall but must wait until the spring to take interviews on campus.

Regardless of your draft status or of your graduate school intentions, companies and organizations are eager to speak with you. You will certainly learn and profit from the experience.

For more details or clarifications, contact Larry N. Cooley, Assistant Placement Director, The City College Placement Office, Finley Student Center, Room 423.

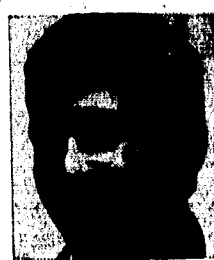
## Roamin' Forum

(Continued from Page 14)

different. For example, students here are freer to do what they want. This school is more active than my high school with more opportunities to join clubs, house plans, etc.

Stuart Myers, junior.

Meeting my friends on the grass and discussing the high points of the day. The personal contacts I've met in this endeavor have proved most rewarding.



## Grosserie

BY JEFF GROSSMAN

S is for the subways that were slowed down;  
T is for the teachers who walked out;  
R is for the railroad "stalled" at mid-town;  
I the inconvenience — a new route.  
K is for our kind and gentle Mayor,  
(He hears their plight and offers his pity);  
E is for Excedrin pills and Bayer,  
That you must take to keep alive in Fun City.

(The following, a major part of my exciting (yawn) summer, is not necessarily in chronological order.)

### Dream sequence #1:

Need a summer job — go to agency — tell them I want to go to camp — mother receives first postcard from Camp Drum.

### Dream sequence #2:

Want to get out of city for a few days of peace and quiet — buy plane ticket to Chicago.

### Dream sequence #3:

First chance to vote in presidential election — feel proud to make my vote count (a pre-convention dream).

### Dream sequence #4:

Sweat, slave, sacrifice — sweat, slave sacrifice — am finally driving in my 1968 green Porsche with 5-speed gearbox, Abarth carb (?), Blaupunkt radio and all other racing goodies — pull up at stop light next to '56 Plymouth driven by pimply high-school kid in T-shirt — light turns green and he just up and walks away from me.

### Dream sequence #5:

4:15 A.M. in North Bronx — zero shekels in my pocket — police radio car pulls up — kindly cops drive me home to Queens.

### Dream sequence #6:

Go on Freshman Weekend to get some much needed rest — and get it!!!

### Dream sequence #7:

Write a radical, leftist, revolutionary tract on Chicago, Columbia, politics of confrontation, etc. — Wake up and find out that I've performed (another) first — written a Tech News Classified in my sleep.

### Dream sequence #8:

First chance to vote in presidential elec . . . (sorry, a summer re-run).

I'm really glad I came back for a last, and hopefully final, fling at City College. (Actually I've been flinging it at City College for four years now.) I see that there are some great new courses being given by some really ace teachers:

**Art 17.3:** "Graffiti as Art" given by cafeteria manger Larry Bee.

**Military Science 43:** "Law and Order — Our Great Heritage" a series of lectures by Richard Daley. (Field work assignments may be given.)

**Home Economics 101:** "Barbequeing for Fun and Profit" given by Prof. Johnson. (There is an interesting story about this course. It seems that there was a conflict in the department as to whether to offer this, the main course, or a second course, "Southern Soul Cooking," given by Prof. Richard Gregory. From the little information that can be gotten about the whole incident, it seems that Prof. Johnson's course was pushed through in a somewhat less than open convention of Home Ec delegates. As the outcome, Prof. Gregory is inviting all interested students to his house for the class. One session has already been held, with large numbers of both sides showing up.)

**Political Science 18.5:** "How to Pick up the Pieces" a series of talks given by guest lecturer Andrew Cordier of Columbia University.

**Political Science 95:** "The Electoral College — Why Abolish It?" given by Prof. G. Wallace. Hint: never call him "Professor" in class as he is embarrassed by his own intellectualism.)

**Sociology 63:** "Marriage and the Family" given by (Mrs.) Alice Crimmins. (Meets Tu-Thur 9, 10 in cell 203, Queens County Jail.)

I left for last, because of my immense modesty, the mention of the course that I am giving. Unlike last term, this course will be open to boys also. **Journalism 15.2:** "How to get bags under your eyes and influence people" will meet the night before each issue deadline in the instructor's kitchen.

# E & A Alumni Sponsor 50th Year Events

## Technical Conferences

## Anniversary Dinner

A large number of conferences of very high technical quality are being sponsored by the four Departments of the School of Engineering during the fiftieth anniversary year. American as well as foreign experts have been invited to participate in these functions, which are designed to present the latest technical information in selected fast developing engineering fields.



Prof. David L. Muss of the Civil Engineering Department organizer of conference on environment.

### The Urban Environment and Its Future

The CCNY School of Engineering is sponsoring a major technical conference "The Urban Environment and Its Future" to be held March 17-19, 1969, at the Waldorf Astoria Hotel in New York City. This large-scale meeting is being planned to attract the participation of some 1500 people from all over the country. It is designed to elucidate the problems of our increasingly urbanized society and indicate some possible solutions. The College hopes that in organizing such wide-ranging sessions it can perform a distinct service to the community in the New York Metropolitan Region, which supports one of the world's greatest densities of urban population. A critical examination of the New York urban complex should, therefore, produce documentation of information and experience useful in the continuing development of the

area as well as to other areas just beginning the process of urbanization.

The Conference is being organized by Prof. David L. Muss, Civil Engineering, who succeeded Prof. Richard G. Coulter, Civil Engineering. An advisory committee of experts was formed to assist in preparing the technical program. The members include:

J. Douglas Carroll, Jr., Executive Director, Tri - State Transportation Commission.

Alfonso A. DiMeo, Division Director Housing & Facilities Production and New York City Housing Authority Development Administration.

Joseph Kennedy, Chief, North Atlantic Water Supply Studies, U. S. Army Corps of Engineers.

(Continued on Page 9)

The 50th Anniversary of the Engineering School will be the theme of the 88th annual Alumni Dinner to be held on Wednesday, November 20, 1968, at the Hotel Roosevelt. The featured speaker will be Mr. Harold B. Finger '44 ME, Associate Administrator for Organization and Management of the National Aeronautics and Space Administration. Dr. Alvin Radkowski '35 EE, Chief Scientist in the Office of Naval Reactors, U.S. Atomic Energy Commission, under Vice Admiral H. G. Rickover, will be one of the recipients of the Townsend Harris Medal.

Mr. Finger reports directly to the Administrator of NASA and is responsible for the evaluation and strengthening of agency-wide NASA programs and activities. He provides executive

leadership for the offices under the direction of the Assistant Administrators for Administration, Industry Affairs, Technology Utilization, University Affairs, and Special Contracts Review and Negotiation. In addition, elements responsible for audit, inspection, Headquarters administration, and organization and management planning report to him.



Harold B. Finger ('44), Administrator for Organization and Management of N.A.S.A.

Previously, Mr. Finger had been Manager of the Space Nuclear Propulsion Office of NASA since August 1960. This office is responsible for nuclear rocket development for both NASA and the Atomic Energy Commission and isotopically-heated rocket thruster work for the AEC. From November 1961, he has served as Director of Nuclear Systems for NASA's Office of Advanced Research and Technology. In this capacity, he managed research, development and flight testing of nuclear electric power systems and electric propulsion and the flight testing of nuclear rocket systems. During this period he was also named Director of AEC's Space Nuclear Systems Division in June 1965. Here he headed a new Space Electric Power Office, administering space reactor and isotope electric power systems work.

(Continued on Page 11)

## Summary of Scheduled Events

### BEGINNING IN 1968

M.E. Conference on The Future of Mechanism Design	October 3
Long Island Chapter's Special Anniversary Lecture	October 16
C.E. Lectures on Concrete Structures by Dean Henry J. Cowan	October 17-18
I.E.E.E. all-day symposium on Information Theory	November 14
Alumni Association Annual Dinner	November 20
Biomedical Engineering Seminar	November 21
Society of American Military Engineers National Student Conference	November 21-23
Engineers Day (tentative)	November
VECTOR Special Issue	November
ALUMNUS Special Issue	November
E.E. Conference (tentative)	November
Biomedical Engineering Seminar	December 5
Association of Engineering Colleges of New York State Winter Meeting	December 6
Biomedical Engineering Seminar	December 12
M.E. Symposium on Fluid Mechanics and Heat Transfer	December 27
ENGINEERING RESEARCH REPORT	December

### BEGINNING IN 1969

American Institute of Aeronautics and Astronautics Student Seminar	January
E.E. Conference (tentative)	February
Engineering School Conference on The Urban Environment and Its Future	March 17-20
E.E. Conference (tentative)	March
Engineering & Architecture Alumni Annual Dinner	Spring
EMPLOYMENT BULLETIN Special Issue	Spring
C.E. Seminar on Soil Dynamics (tentative)	Spring
E.E. Conference (tentative)	April
Charter Day	May 8
Ch.E. Colloquia on Food Production (tentative)	June
50th ANNIVERSARY JOURNAL	June

## Special Activities

A joint Faculty-Alumni-Student Committee, sponsored by Dean William Allan and the Engineering and Architecture Alumni, and under the direction of H. Susskind '50 ChE, P. Brousal '52 ME, R. H. Courland '37 CE, and Professors A. F. Baldo and A. L. Steinhauser, ME Department, has been actively at work for the past two years to develop and implement a suitable program of activities to commemorate the Anniversary.

### Charter Day 1969

Plans are underway to honor the School of Engineering at the Charter Day ceremonies to be held at the Great Hall of the College on Thursday, May 8, 1969. On this occasion invitations will be sent out to all sister institutions in this area, as well as the professional societies and engineering firms. A special luncheon will be held for the honored guests. Special Anniversary medals will be bestowed on distinguished engineering alumni.

### Story of the First 50 Years

A Golden Anniversary Journal of the history of the School of Engineering is to be published at the culmination of the 50th anniversary. The Journal will consist primarily of many articles relating the "School of Engineering" story — the history of our birth, of 50 years of growth, and of the achievements and contributions to society by the Alumni and Faculty. A section of

the Journal will be devoted to brief biographical sketches of all Alumni who respond to a special survey. This section will be a complete directory of all Engineering Alumni.

All the activities of the 50th Anniversary program will be reported with pictures and articles. The Journal will also serve as a vehicle to raise funds for the City College Fund and also to defray the costs of our program through the solicitation of advertising. The major purpose, however, is to record for posterity the story of our School. Mr. Michael Pope '44EE and Mr. Sidney Gilbert '35CE have agreed to serve as Co-Chairmen of the Journal Committee. Mr. Robert Tovar '51ME will serve as Journal Editor.

## Congratulations



Judge John M. Murtagh ('31), President of The City College Alumni Association.

For the past 50 years engineering graduates have been among the most loyal supporters of City College. They have manifested their support by joining the Alumni Association in ever increasing numbers and they have demonstrated their concern for students by devoting time and energy to developing programs for their benefit. City College engineers have brought credit to the school by succeeding in their profession and have thereby paved the way for current graduates.

On behalf of the Alumni Association, I congratulate you on the occasion of the 50th Anniversary of the School of Engineering.

### TO MAIL RECIPIENTS

This week's issue of TECH NEWS contains a special supplement commemorating the 50th Anniversary of the founding of The City College School of Technology.

It was prepared by the staff of TECH NEWS in cooperation with, and by special funding agreement with the Engineering and Architecture Alumni Association.

Alumni Association of  
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New York 10031

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