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CITY COLLEGE OF NEW YORK

VOL. XX - No. 3

WEDNESDAY, MARCH 18, 1964

STUDENT FEES

## Prof. Javid Conducts Voice Research

By SAMUEL STANLEY EIFERMAN (Assisted by Prof. M. Javid)

Among the many research projects being carried out at ty College is one in the field of voice recognition, using ectronic digital computers. This project is being carried

t by Professor Mansour Javid the Electrical Engineering dertment. The aim of the project to develop a system which utites the logic and memory of a imputer to recognize and react spoken words.

The project was started with a ant from the National Science pundation, which paid six unergraduate students to particiate in research and developent. During one summer, these udents constructed a simple dece capable of recognizing ten boken words. This device did not se computer facilities and was ery limited in its ability to recnize the words if spoken by ersons other than the one to



Professor Mansour Javid

whom it was tuned. Since the expiration of the N.S.F. grant, Professor Javid has worked with two graduate students planning the more sophisticated system. The graduate school has given a time allowance to Prof. Javid, and is going to provide some funds for the purchase of equipment. The type of equipment used in this project is commercially available but somewhat expensive. Professor Javid obtained the major part of the equipment from IBM as a gift to the school. The remaining parts will either be constructed at the EE laboratory or purchased from manufacturers. Undergraduate students capable of developing digital circuits and willing to work on a voluntary basis, without pay, can par-

(Continued on Page 2)

New

By WALLACE GOTTLIEB

ment statistics for last term's en-

gineering graduates has been re-

leased by the Placement Office.

According to Mr. C. K. Meyer,

these figures are "more realistic"

than the ones which appeared in

the last issue of TECH NEWS be-

cause there are more men in-

cluded in the present list. "The

An up-to-date set of employ-

JOD

# **Tech Council Seeks Measures** To Control Tech Allocations

### Klaus Wants Separate Fees

By WALLACE GOTTLIEB

Tech Council's proposal for a separate student activities fee for students in the School of Engineering and Architecture is a repetition of action that was taken by tech student leaders during the fall term of 1961.

At that time leaders of the tech school claimed that engineering groups were being discriminated against by Student Government and that the distribution of the Student Activities Fee was unfair. They moved to increase tech students' power in SG.

Led by Mike Rukin (Tau Beta Pi), Judi Goldberg (President), and Samuel S. Eiferman (Tech News), the Technology Interfraternity Intersociety Council planned to circulate a petition calling for increased social activities and facilities on North Campus. The advocated TIIC control of fee allocations to tech groups. Rukin he had for it, there might be a "tech secession from Student Government."

(At the time, representation on Student Council was by schools, with the School of Technology and the School of Liberal Arts and Sciences each sending an equal number of representatives to Council.),

The controversy reached a peak when it was said that the College's federation of tech clubs might turn itself; into a North Campus Student Government be-



Larry Klaus

cause of "growing tech grievances with SG." This group would have complete and sole jurisdiction over fee allocations in the engineering school.

"Eventually," an old SG observer told us, "cooler heads preits proposals would not meet with away with it."

(Continued on Page 3)

### Action Tried Once Before

By RICHARD ROSENFELD

Tech Council has before it a eries of proposals aimed at equalizing the distribution of student fees.

The plan, drawn up by Larry Klaus '64, President of Tech Council, calls for separation of fees between the School of Engineering and Architecture and the School of Liberal Arts and Sciences. Tech Council would have complete jurisdiction over the distribution of all fees collected from engineering and architecture students.

The proposed motion, if passed by Tech Council, will be circulated on a petition; if a sufficient number of names are acquired. vailed," and TIIC realized that the motion will be placed on the ballots in the May election as a approval by the Department of schoolwide referendum. Plans are Student Life, although THC knew also being considered to submit petition's most important clause that technically they could get a motion to Student Council outlining a similar plan.

Finally, TIIC decided to form The purpose of these moves as suggested that if the petition its own slate for the December, stated by Council President Klaus. failed to achieve the purpose that 1961 Student Government Elec- is "to correct the inequities in tions. They formed "Your En- the distribution of student fees." gineering Slate" which was based Tech students pay approximately on the alleged fact that "present \$14,000 in fees and are allocated facilities of the College are over-only about \$3,000, not including whelmingly geared to the South publications. Klaus feels that

(Continued on Page 2)

# New Curriculum **ChangesNextTerm**

By HARVEY HOFFMAN

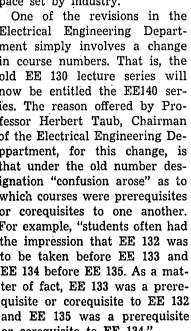
It has been only two years since the last major engineering curriculum changes were made. But, last term the chemical engineering degree program was readjusted and now this term the electrical engineering curriculum has been

changes was offered by Dean+ John R. White (C.E.) who said that "our courses are revised so that we may keep up, if not stay ahead, of the demandding pace set by industry."

One of the revisions in the Electrical Engineering Department simply involves a change in course numbers. That is, the old EE 130 lecture series will now be entitled the EE140 series. The reason offered by Professor Herbert Taub, Chairman of the Electrical Engineering Deppartment, for this change, is that under the old number designation "confusion arose" as to which courses were prerequisites or corequisites to one another. For example, "students often had the impression that EE 132 was to be taken before EE 133 and EE 134 before EE 135. As a matter of fact, EE 133 was a prerequisite or corequisite to EE 132

or corequisite to EE 134." It is hoped that students will

partially revised. One of the reasons for these constant





Professor Herbert Taub

now understand that EE 142 is a prerequisite or corequisite to EE 132, etc.

Professor Taub also stated that 'as EE 137 is a course on communication systems" and not, in actuality, an electronics course,

(Continued on Page 3)

## Katkin Announces His Candidacy

Student Government Vice Present Danny Katkin has thrown is hat into the upcoming Presiency race. He is the only anounced candidate so far. Most G. veterans were taken by surrise at the announcement, since he election is still many weeks way. It has been customary for G. hopefuls to announce themelves only a few weeks before he election, but many S.G. policians feel that Katkin has been lanning to run for the presidency om the day he entered Student overnment, three years ago. anny has never been defeated in n S.G. election having held a ouncil seat, the Treasurership nd the Vice Presidency.



Danny Katkin

His platform is based on two oals: a continued and forceful nti-tuition campaign and an inease in the quantity and quality programming on campus. Katn elaborated on his second goal ating that, "We will try to help ampus organizations have better nd more varied programs."

When asked if he would stand | EE n his record as Vice President, e said, "You bet!"

Sandler

average and low salaries stated last time have gone down, of course," Mr. Meyer said. In commenting on this term's employment situation, Mr. Meyer mentioned that "this is a good group of engineers. They are trying to make a good impression, and are signing up for a lot of interviews; in fact there have been less 'no-shows' this term than there have been in the past.

to write the company a letter of apology."

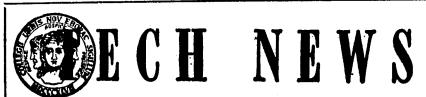
Diausiics

Mr. Meyer also mentioned that chemical engineering students are doing quite well this term. "I never saw such an enthusiastic group of Chem.E's," he said. Chemical engineers have been signing up for many interviews, more than they have in recent years.

When this reporter suggested that the reason for the abovementioned phenomena might be the fact that this is a bad year for engineers, and for EE's in particular, Mr. Meyer replied, "You're probably right."

The following figures for the graduates of January, 1964 are complete through Friday, March 13 (Registered with the Placement Office last term were 71 And when a fellow doesn't show EE's, 37 ME's, 24 Ch.E's, and 21 up for an interview he is quick CE's):

	-	Private	Civil	Grad	Not Didn't Heard Grad				Salary		
		Empl.	Svce.	School	Milit.	From.	Etc.	Avg.	High	Low	
l	EE	44	6	5	1 -	. 10	5	615	700	565	
	ME	21	4	1	1	7	3	602	658	540	
•	Ch.E	. 12	1	5	0	1	7	588	630	530	
	CE	7	10	0	0	4	0	607	640	588	



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## House Divided

By a geographical quirk — the south campus gate — and a difference of temperament, engineers and liberal arts | So he can be happy and rich, and majors rarely see eye to eye on how to manage school affairs. To add to this highly undesirable schism, Larry Klaus, President of Tech Council, would like engineers to purchase a separate bursar's card. The proof that you are a real engineer will now rest in your wallet pocket.

Tech Council and Larry Klaus are fed up with the way the engineering student is being treated when disbursements He studies long and hard and are given out. They claim that we contribute forty per cent of the student fees and get back only ten per cent. Actually, we contribute less than this amount and get back much more than the ten per cent. The fact that engineers join other than technical groups seems to have eluded Mr. Klaus' thinking.

In order to remedy this alleged disparity, Tech Council has proposed that a referendum be submitted to the students in which they can decide how the money is to be divided the engineering school and everybody else. The engineering student is to purchase a separate bursar's card, and his money will be delegated to Tech Council for disbursement to engineering organizations. Being somewhat realistic, it is also proposed that a pro-rated portion of all this money will go to those groups having engineers as members but not under Tech Council's control.

There are two things to be considered: the alleged inequity and the proposed solution. We feel that the former needs qualification, while the latter is ridiculous. As a member of Tech Council and speaking as engineers, we doubt very much that the engineering groups have been discriminated against. Larry Steinhauer, Student Government Treasurer, has rejected Tech Council's charge. The main source of irritation to some of the engineering organizations is that they have large membership (larger than most liberal arts clubs) and get a disproportionately small allocation. This happens to be true, but it is also true that many of these clubs are not asking for anything more than a minimal amount or have been totally unrealistic about what they should get. As an example, one Tech Council member said that it would like money so it could send delegates to a national meeting, if only because Student Government sends delegates to the National Student Association. The fallacy in this analogy should be clear to all. Student Government, ideally, represents the entire student body and not one hundred people.

As for this act of secession, who is kidding who? The extra clerical work that would be required by the Bursar's and Business Office in dividing the "loot" is foreboding. It is also doubtful, judging by its present membership, if Tech Council would be able to handle the added responsibility.

TECH NEWS, as the newspaper of The School of Engineering and Architecture, believes that if this referendum is brought before the student body, it should be turned down. Any further split between the engineering and the liberal arts schools is unjustified and undesirable. The sciences can complement one another's work. As City College students first and engineers second, we can air many of our just grievances by working within, not out of, the framework of Student

For a start, let's elect some engineers to S.G. Council in the next election.

## Letters

LIBRARY NOISE

To the Editor:

If you can editorialize for quiet in the library why not do something for noise in the library. There are times when it is essential and necessary to talk in the library. Squads have to meet to write up lab reports and there is always a time when you want a problem explained. Seeing that the library is built on two levels, why can't the upstairs section be set aside for consultation? This will solve the problem of both the students who want quiet and those who wish to talk.

Larry Smith, 606

#### **EMPLOYMENT POEM**

To the Editor:

This is dedicated to the graduating seniors who are encountering difficulty in obtaining employment.

The Ballad of an Engineer (or "I didn't get bags under my eyes from watching the Late Show")

A young man in high school must decide on a career

so the neighbors won't sneer. he's done well in Physics, Chem., and Math,

The profession of Engineering he may choose as his path.

So he goes to City College And tries to get some knowledge.

woman he knows not, For the subjects are difficult and

the teachers want a lot. But the years go by and a senior he does become,

Though he's forgotten a lot and is still pretty dumb. The struggles have been many

and have taken their toll, he'll be glad when it's over and he's out of this hole.

That's why it's so sad when you hear him sob,

Damn it after all this and I can't get a job."

Philip M. Cunningham, 807

## Klaus . . .

(Continued from Page 1)

many of the requests for money by Tech groups were unfairly cut or denied by the Fee Commission.

Commission member Marty Kauffman stated that "in almost all cases Tech groups received the amounts they asked for." Further objections to the plan have been raised by those who feel Tech Council is not a representative body and not entitled to distribute student fees. others have also complained that tech organizations are self-limiting while all students may benefit from membership in activities supported by Student Government.

The move by Klaus is reminiscent of one which occured in 1961, when Mike Rukin, then Treasurer of Tech Council, threatened to secede from Student Government if his demands for a greater share of fee allocations were not met. Klaus, too, has hinted that he would be satisfied if a permanent seat of Fee Commission were set aside for the Treasurer of Tech Council.

The next meeting of Tech Council will be on Monday, March 23, at 5 P.M. Until that time there will be much speculation and discussion which will have great bearing on the outcome of the upcoming meeting.

## Club Notes

There will be a meeting of the Institute of Electrical and Electronics Engineers on Thursday, March 19, in the Harris Auditorium. Discussed at this meeting will be the Student Activity Day. There will be a prize paper contest. This will also be the last meeting to sign up for the IEEE field trip to the Army research and development center in Fort Monmouth, New Jersey to be held on March 30. The meeting will start as usual at 12:30 P.M.

#### Stamp and Coin Club

The Stamp and Coin Club will meet Thursday, March 19, in 014 Harris to trade and discuss. Noncollectors are advised to bring items for appraisal and possible sale. Ephraim Himelsten '65.5 will talk about and display Soviet Russian stamps.

## $extbf{\textit{Javid}}\dots$

(Continued from Page 1)

ticipate in this work after being interviewed by Prof. Javid.

Prof. Javid indicated that his reason for choosing this particular project is that it entails both analytical and experimental work, and is a good means of training graduate students.

On the experimental side, digital circuitry must be put together to change the continuous audio signal produced by spoken words into binary coded digital form suitable for presentation to the computer. The audio signal is sampled at rates as high as 20,000 samples per second; each sample is measured and converted into a six digit binary number.

On the analytical side, programs must be provided for the computer to compare an incoming data (sound) with standard sound patterns and decide the category to which the sound belongs. A good deal of work must be done in accumulating relevant statistics about the patterns of various sounds.

Professor Javid is the co-author of three textbooks used in the electrical engineering depart-The opinion of many members | ment for the circuit analysis seof Student Government is that quence. He discontinued the com- ferences. Application forms 157 this proposal is unjustified. Fee pletion of a fourth textbook when the City University was estab- the computer center startibles, e lished and the need for research April 15. Completed forms muchts ar was emphasized.

#### ATTENTION GRADUATING **SENIORS**

All engineering or architecture students who will be graduated (Conti June or September 1964 and was de electi have won awards, assistanshi in the scholarships, etc. please conta 173." Dean White (A205) before Ap n enti 15, 1964. Physic

### Computer Course The to P **Schedules**

been

The City College digital contant th puter — the IBM 7040 — is schele bee uled to be delivered on April ices h and it is expected that by Ape that 15 is will be fully operational. Include

According to Dean Deltoro, "tronic the interest of providing instructed El tion in the use of the 7040 count "we puter two series of lectures a senio being offered. The lectures w able. deal with the basic principles the computer programming usining FORTRAN IV language. Detaile to g explanations will also be gived ide on how to use card punches ale d prepare card decks in order rses enable persons to prepare prote malems for solution by the computable er. Moreover, illustrative proctronic lems written in the MAD (Michel for gan Algorithm Decoder) langua**ll**o tha will be discussed. All persons 🥞 EE 1 tending the lectures will have o**r** been portunities to use the computes co for assigned problems." des to

The lectures are open to corator members of the faculty and sures, w dent body of the City Univers er t in both the day and evening sough sions. No college credit will symen given for the courses and themb as are no prerequisites for the ereste The schedule is as follows:

#### SERIES I

Wednesdays: April 8, 15, 22, and May 6. Time: 4:00 to 5:10 P.M.

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131

E 133

**J**URSI

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**E** 151

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The

Place: Steinman 123. Lecturer: Prof. G. D. Brandt

SERIES II

Thursdays: April 9, 16, 23, and May 7

Time: 5:00 to 6:10 P.M. Place: Steinman 123

Lecturer: Professor D. Eitze No advance registration or fo nal enrollment is necessary.

During the Summer Sessid 155 full length courses will be giv with one section meeting on Tugurse days from 1:00 to 3:00 p.m. a 157 another meeting on Thursda from 1:00 to 3:00 p.m. The cours 159 will include computer theory, 163 signed problems to be worked the computer and individual co these classes will be available be returned by May 1. 

#### JOIN THE FUN

ALPHA PHI OMEGA is sponsoring the trip of the Spring Term to Stratford, Connecticut

See:

#### MUCH ADO ABOUT NOTHING -- MARCH 31

The price of your ticket — \$5 includes Shakespeare's Best and Round-Trip Bus Ride

Inquire in Room 343 Finley — The Home of Alpha Phi Omega

#### SIGMA ALPHA

the Honorary Service Society

Invites All Upperclassmen with at least a B- Average to its

SEMI-ANNUAL INTRODUCTORY

Friday, March 20, 4-6 P.M. — F438

#### GRADUATING IORS

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as follows:

April 8, 15, 22, May 6 5:10 P.M. nan 123.

f. G. D. Brandt.

ofessor D. Eitze

April 9, 16, 23, May 7 6:10 P.M. nan 1**23** 

egistration or fo is necessary. Summer Session rses will be give n meeting on Tud to 3:00 p.m. a ng on Thursda 0 p.m. The cours mputer theory, s to be worked nd individual co

ill be available

May 1. CHRHHHHHHHH

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#### MARCH 31

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pha Phi Omega

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Y TEA F438

## **Curriculum Changes**

Il be graduated (Continued from Page 1) ber 1964 and wavas decided to take it "out of electronic sequence and put c. please contain the system sequence as

n entirely new course entitl-Physical Electronics (EE 163) been added to the curricu-The reason for it, accordto Professor Taub, is that have found that the elecnics area is getting so crowdlege digital coming the new applications that 17040 — is scheel been found for solid state vered on April ices have become so extented that by Ape that it is no longer possible ly operational. Include all the material in the Dean Deltoro, Etronic courses. So we introproviding instructed EE 163." He also stated of the 7040 count "we will save EE 163 until s of lectures a senior level so that we will The lectures whable, at that level, to count pasic principles the maturity and previous gramming usining of the student" to be anguage. Detail e to grasp the rather compliill also be gived ideas introduced in solid card punches ale devices. "The earlier ecks in order rses will have some solid to prepare prote material taken out." The

n by the computated analysis of solid state illustrative proctronic components will be the MAD (Micked for EE 163.

Decoder) language that room could be made d. All persons a EE 163, the power sequence ures will have of been reduced from three lecuse the computes courses and two laboragles to two lectures and one are open to coratory. The question then uisites for theterested in utilities will have architecture students.

an adequae preparation for service in that industry."

As a final word, Professor Taub mentioned that these revisions "will not affect anybody who by September 1964 has taken EE 151."

A list of the changes and a description of the new courses appears at the end of this article.

Changes in the civil engineering curriculum have also been announced. Professor Paul Hartman, Chairman of the Civil Engineering Department, stated that CE 112 and CE 230 are being dropped as of next September and will be replaced by CE 114 and a new CE 230 course. These new courses will total the same amount of credits (4) as the old courses. In the new CE 230 course there will be a "greater emphasis on the material sciences."

As mentioned at the beginning of the article, the Chemical Engineering Department instituted several curriculum revisions at the beginning of this term. Further changes are not being contemplated at the present time.

No changes are presently being considered in the mechanical engineering curriculum.

The courses in the Architecture Department are in a cone faculty and stees, will students desiring to stant state of flux. Dean White ne City Universiter the power field have and evening sough knowledge to gain emge credit will syment in this field? Professor courses and them assures us that "students than are now being given to the course and them assures us that "students than are now being given to the course and them are now being given to the course and them are now being given to the course and them are now being given to the course and them are now being given to the

#### DEPARTMENT OF ELECTRICAL ENGINEERING **CURRICULUM CHANGES** EFFECTIVE SEPTEMBER 1964

JURSE NUMBER CHANGES esent Number New Number

131	EE 141
133	EE 142—Prerequisite or corequisite to EE 132
135	EE 143—Prerequisite or corequisite to EE 134
137	EE 173—Prerequisite or corequisite to EE 136

DURSE CHANGES

The follo	wing courses will be discontinued;		7
arse No.	Title	Last Offe	ering
151	Electrical Machinery I	Summer	1964
152	Electrical Machinery Laboratory I	Fall	1964
153	Electrical Machinery II	Fall	1964
154	Electrical Machinery Laboratory II	Spring	1965
155	Electrical Machinery III	Spring	1965
The follo	owing courses will be introduced:		
arse No.	Title	First Off	eriņg
157	Electromagnetic Devices	Fall	1964
158	Electromechanical Energy Conversion	Spring	1965
159	Electrical Power Laboratory	$\mathbf{F}$ all	1965
163	Physical Electronics	Fall	1965
	<del>-</del>		

DESCRIPTION OF NEW COURSES ication forms i 157 ELECTROMAGNETIC DEVICES. Application of circuit cuits, core losses, Princenter startibles, equivalent circuits and operation of transformers. Basic conpleted forms mulpts and applications of saturable reactors. Common principles of ptional electromagnetic devices.

class hrs. wk., 4 cr. Prereq.: EE 104. Prereq. or coreq.: EE 105, 124

158 ELECTROMECHANICAL ENERGY CONVERSION. Applition of the laws of electromagnetism for energy conversion and ntrol. Characteristics of d-c, synchronous, and induction machines. class hrs. wk.. 3 cr. Prereg.: EE 157

159 ELECTRIC POWER LABORATORY. Experiments on transmers, magnetic amplifiers, motors and generators. B lab. hrs. wk... cr. Prereq.: EE 158 Lab Fee \$3.00.

163 PHYSICAL ELECTRONICS. Application of physical prinles to the analysis and design of electronic devices. Thermionic, niconductor and electron beam devices. Introduction of micro-

class hrs. wk., 3 cr. Prereq.: Phys. 119, Prereq. or coreq.: EE 143

IL CIRCOLO ITALIANO LA SOCIEDAD CULTURAL HISPANA INTERNATIONAL HUMOR SOCIETY BETA BETA PI

"CONTINENTAL CARNIVAL DANCE"

invite all to their

Friday, March 20, 1964 — 8:00 P.M. MAIN BALLROOM OF FINLEY CENTER

#### **WORKSHOP ON SCHOOL** INTEGRATION

CCNY CORE has invited Velma Hill, CORE field secretary and education expert to discuss the following topic: "Crisis in New York City - School Desegregation."

Place: Rm. 128 F. Time: 12:30 P.M. Date: Thurs., March 19, 1964. ALL ARE INVITED.

### IEEE Contest

In preparation for the Student Activities' Day Fair to be held at the College on Saturday, May 2nd, sponsored by the Metropolitan Council Branch of the Institute of Electrical and Electronics Institute, the Student Branch will sponsor a paper reading tomorrow at 12:30 in Harris Auditor-

The \$25 cash award will be presented to the person who is judged best on the basis of his oral presentation and his understanding of the subject matter as evidenced by his ability to answer questions presented by the presiding judges.

Lawrence Presser, Co-Editorin-Chief of Vector, the College's Engineering Magazine, will present his article titled "Introduction to Molecular Electronics" which appeared in the January issue. The paper traces the trend in the Electronics Industry towards miniaturization and increased reliability by means of smaller and fewer components. Solid-state circuits, the modular concept, thin-films, and the Molecular Electronic Concept are thoroughly handled, as well as the various processes involved in the production of these various types of networks. Mr. Presser will also compete May 2nd for the \$200 first prize.

The second and only other paof Mr. Anthony J. DiNardo, a nel Communications System." His experiments, calculations, and the circumstances on which a two channel system will remain independent will be discussed. The article will reflect on Mr. Di-Nardo's research and analytical Latin America. work in the field.

followed by a question and answer period.

ties available to the students in the field of their major endeavor while undergraduates, Mr. Presser commented: "I have long been aware of the growing apathy, both on this campus, and on a national scale, on the part of students in the School are continually made aware of the fact that Vector will consider any paper submitted by them. There are some courses in the curricula which require the submission of term papers which would be very suitable for publication. The annual I.E.E.E. paper competition is open to any student majoring in a technical field. All that is required is the submission of an appropriate article. And yet only one paper was submitted from this College last year and only two were submitted this year! It seems to be the old problem of the availability of the facilities, but no one is interested enough to use them."

#### E.S. HOUSE PLAN

Evening Session House Plan Association will hold an organizational meeting for old and new members this Thursday, March 19, in room 428 Finley at 7:00 P.M.

## Grad. Program Doing Well

By JOSEPH BOCK .

new doctoral program.

in the program, mostly in chem- \$50,000 this year." ical and electrical engineering, set by Dean Seymour Hyman of uate Studies, as the earliest possible date for the first students to digital form. graduate.

"We have a number of fellowships available," Dean Hyman stated. He listed as examples fellowship grants from the National Science Foundation, The National Defense Education Act and The National Aeronautics and Space Administration. In addition to these fellowships there are research and graduate assistanships.

With regard to the equipment being acquired for the various research projects in the doctoral program, Dean Hyman had this

### Latin American Conference

Current problems and issues facing Latin American nations, particularly those relating to education, will be explored in a conference to be held at City College on Saturday, March 21.

"Aids to Understanding Latin America" is the theme of the conference which is being sponsored by the New York Chapter of the New Education Fellowship, in cooperation with City College's Center for Latin American Studies. The half-day conference will be held on Saturday from per to be presented is the work 9:30 A.M. to 1 P.M. in the College's Finley Student Center. senior in electrical engineering. | Registration and a film showing He will speak on a "Dual Chan- will take place from 8:30 to 9:30 A.M.

> More than forty scholars and government officials will participate in panel discussions emphasizing conditions in indivdual natons and groups of nations within

Keynote addresses on "What Tomorrow's presentation is All Americans Need to Know open to all I.E.E.E. members as About Latin America" will be well as the student body. Each delivered by Louis Alvarado, Dipaper will be delivered in 15 min- rector of the Liason Office for utes, during which slides pertain- Latin American Activities of the ing to the article will be shown, International Labor Organization, and Professor Preston E. James, When asked about opportuni- Studies at Syracuse University.

The conference is the eleventh annual symposium on international education sponsored by the New Education Fellowship. Previous conferences have focused on Africa and the Middle East. The Latin American theme was chosen for this year's discussion because of its "current interest and importance not only to educators, but to all United States citizens," said Professor Samuel Everett, president of the U.S. section of NEF and a member of the education department faculty at City College.

The conference is open to the general public. The registration fee is \$2, \$1 for students.

Last September The School of to say: "We are acquiring new Engineering and Architecture equipment all the time. Our new, broadened its horizons by admit- much publicized IBM Million Dolting the first students into its lar Computer will be arriving April 3. We also spend large sums At present there are 31 students of money on other equipment,

An example of the equipment with 23 applications pending for being obtained is an Analog to next semester, June, 1965 was Digital Converter. The TR201 computer which the college now The School of Engineering, Grad- owns is an analog computer. The new computer, the 7040, is of the

> The acquisition of a new Engineering Laboratory Building. Steinman Hall, was of major importance for the new Ph.D. program.

The research program covers a wide range of scientific endeavor. "The Chemical Engineering Department is doing research in the mathematical problems of optimal engineering and in mass transfer to a particle; the Electrical Engineering Department is working on application of lasers and also on analysis of speech characteristics; the Civil Engineering Department is working on magneto hydrodynamics," according to Dean Hyman.

Two changes in the existing curriculum have been that most graduate courses have been raised from two credits to three, and a new sequence of four graduate Engineering courses in mathematics has replaced the old math offering.

#### **WINNERS**

Two City College students received honorable mention in the twenty-fourth annual William Lowell Putnam Mathematical Competition held on December 7, 1963. This places them in the top thirty among 1260 contestants from 199 colleges and universities in the United States and Canada who took the exam. The students were Frank Kaplan and Thomas Zaslavsky. Professor Gerald Freilich (Mathematics) advised the College group. The competition is sponsored by the Mathematical Association of America.

## Fee History

(Continued from Page 1)

Campus Liberal Arts students. YES advocated the creation of two subcommittees under the Specialist in Latin American SAB, one supervising tech activities, and one supervising liberal larts activities.

> In the election, YES aligned itself with the "Reform Ticket" which had as its major platform "fair and equitable distribution of the two dollar student fee." It also called for the two SAB subcommittees and for "lounge and office space on the North Campus of comparable luxury to those on the South Campus."

> After the elections, the Reform, YES slates swept almost every major and minor SG post. In the terms that followed, tech leaders appeared to be satisfied with the distribution of fees, but it seems that now Tech Council and Larry Klaus are not.

> > That been a said of

#### BETA TAU

Plans to Sponsor an Art Exhibit during E-Day This Semester

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Only Work Done by Engineers Will Be Considered All Students and Faculty Members are Invited to Participate

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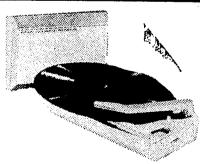
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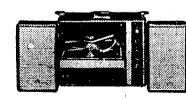


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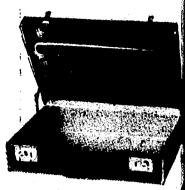
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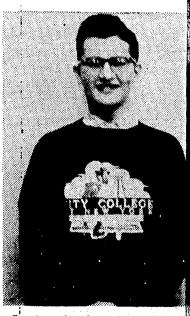
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