IIT: Investment In Tomorrow
School Announces $25,000,000 Fund Raising Drive

A $25,000,000 fund campaign was announced today at a student-faculty convocation which took place at 2 p.m. in the HUB auditorium. The plans for the drive were revealed in detail by Dr. John T. Retzihana.

The funds sought through this campaign are to be used for the most urgent requirements of IIT's long-term development program. These requirements are: to increase the school's faculty through faculty additions; salary increases; permanent and visiting professorships; and professional development of the faculty; extension of the equipment and resources for educational purposes; and an addition of six new educational and residential buildings to the IIT campus.

Handling the drive for the school is Maynard P. Venema, who was appointed to the position by Lester Armour, chairman of the IIT Board of Trustees. Venema is a 1932 alumnus of IIT, vice chairman of development of the IIT Board of Trustees, and a director of the IIT alumni association. He is chairman of the board of Universal Oil Products Company.

According to Venema, the fund campaign will be conducted through personal solicitations on a national basis as well as through the newly established Trustee Nucleus Fund which consists of personal commitments to the campaign by IIT Trustees. Gifts to this fund alone currently total $5,315,000.

The first $15,000,000 raised through this campaign will be matched by the Ford Foundation on a basis of one Ford Foundation dollar for every three dollars raised by IIT from other private sources. This challenge grant was awarded to IIT last September to "add to the number of the nation's first-rate centers of science and technology" and was announced in a special issue of Technology News on October 5, 1964.

One of the stress points for which the funds are to be used is to increase the teaching capabilities of IIT. In the 1964-65 academic year, IIT had a faculty of 248, of which only four were Distinguished Professorships. Their total salary was $3,457,000, averaging $11,200 per faculty member. Of the permanent faculty, 82% hold PhD degrees. However, an increase in faculty and salaries is needed to meet the Development Program. The extended plans for the academic year of 1967 are for an increase in the faculty to 324, 13 of which will be Distinguished Professorships, and 3 will be visiting professors. The average faculty salary will be increased to $13,620, for a total of $5,830,000.

According to Dr. Retizilhana, the appointment of established scholars to Distinguished Professorships not only strengthens academic leadership in their departments, but also serves to attract other able faculty, as well as outstanding students and research grants to the school. The opening of positions for visiting professors also offers an infusion of outside vitality into the IIT intellectual life. The total needs for this program are $5,000,000.

The second major aim of the fund campaign is to increase student opportunity on campus through various scholarship and fellowship programs. Currently, IIT's day school enrollment is 1,997 undergraduate and 572 graduate students; the evening school enrollment is 4,100 undergraduate and 1,154 graduate students. The total undergraduate scholarship program totals $825,000 and the graduate fellowships and stipends is $985,000. There are no postdoctoral fellowships.

Planned for the 1967 academic year is an increase of about 500 undergraduates and 300 graduates in the day school. No great increase in the evening school is projected. Undergraduate scholarships will be increased to one million dollars and the graduate funds to $2,200,000.

Also included in this part of the plan is a marked increase in the Intercollegiate Center and a professionally staffed Counseling Center which will collaborate with the IIT Institute of Psychological Services and the department of psychology and education.

The total needs for this phase of the development program is two million dollars.

The second largest part of the IIT academic development program is an increase in educational programs and equipment.

In the field of general education, the program will be oriented to life in a technological world regardless of the student's chosen profession. This will be accomplished through the development of new curricula and a new tutorial program for independent study (honors program).

Specifically, in engineering there are six major programs that the institute is now developing. They include a core undergraduate program, a senior design program closely related to industrial environment and dealing with actual design problems, a summer engineering internship program in industry for sophomores and juniors, a professional master's degree program for industry oriented graduates, an international exchange program to broaden the professional and cultural education of selected engineering students, and a faculty-industry committee to assist in evaluating the professional components of the engineering education program.

In physical sciences, the foundations of the basic sciences will be strengthened with special interest on interdisciplinary fields, including chemical physics, molecular biophysics, solid state science, nuclear physics, and astrophysics.

There will also be an increase in the sciences available at IIT. These will include the earth sciences, atmospheric sciences, space sciences, bio-physics, and animal physiology.

In liberal arts, there is a program of expansion and strengthening. For the biology department there are plans for the strengthening of teaching and research in microbiology, biochemistry, physiology, genetics, physical biology, ecology. The psychology and education programs are to be expanded in psychology and industrial psychology, in clinical and social psychology, and counseling. The LLP department will continue its unique development of a program of advanced language in culture and mathematical linguistics, communication theory, and the relationship between man and machines.

In architecture and planning, the stress will be in continuing the traditions of Ludwig Mies van der Rohe and Ludwig Hilberstein. Expansions of the department include an intensification of the study of interior environment and the development of a program of teaching fellows in architecture and planning.

In the Institute of Design there are three areas that are to be developed. They are cinematography, with an emphasis on educational films, interdisciplinary programs relating to sensory perception and visual and verbal communication stressing the combination of visual design and photography with linguistics, semantics, and cybernetics as well as the combination of industrial design with programming techniques to improve marketing plans.

(Continued on page 4.)
President's Writings Show School Philosophy

The following is a collection of excerpts from recent statements made by Dr. John T. Retallick, president of the University of Science and Technology from 1975 to 1985. They have been selected as indicative of the direction and philosophy of the institution.

The Role of a University of Science and Technology from the IIT Campaign - Investment in Tomorrow

The capability that modern technology and technology place in men's hands is awesome. Yet it is an instrumentality of human beings, not something removed from human beings. Our hopes for the future depend not only upon further knowledge, but also upon the wisdom to use it effectively toward human advancement. At Illinois Institute of Technology, there exists a unique opportunity, as well as the desire and the ability to provide leadership truly addressed to the problems and possibilities of our time.

The development of outstanding universities of science and technology has become essential for four reasons:

1. The needs of industry and government for scientists and engineers will continue to exceed the supply for many years to come.
2. A university centered around science and technology can provide the ideal climate for scholars in the humanities and the social sciences who share a vital interest in the impact of the technological age upon the individual and society and upon our culture and our economy. Out of their work can emerge a pattern of liberal education that is truly relevant to our age.
3. An institution oriented toward professional education has an inescapable obligation to relate to the realities of our times. One of those realities is that the graduate must be both competent in his field as it exists today and capable of growing through continuing self-education, to serve its changing requirements tomorrow.
4. A second reality is the fact that the new professional man, whether he is a scientist or an engineer, or an economist or a business administrator, will increasingly be called upon to serve outside his specialty, to participate in shaping policies and making decisions that draw upon his specialized knowledge and his breadth of understanding.

Finally, the university of science and technology is an indispensable resource for the discovery and application of knowledge essential for survival in the world we and our children have inherited. In serving as such a resource, it recognises that this technological age is not just a matter of new "wonders." Science cannot be separated from human welfare, from our social, economic, and cultural life. To do so is to risk losing our place in the 20th century and our hopes for the 21st.

From Education as our Foremost Resource, IIT Position Paper number 1.

In this age of change, education is an ever more important resource. It is not enough merely to provide "more" education. The challenge of our times calls for a new educational focus upon technology training. Such a focus implies a revitalization of the traditional university concept. To be worthy of the name, a university must be more than just a collection of schools-of-design and departments-of-art. The university concept suggests a wholesomeness and relatedness of knowledge rather than fragmentary learning or the separation between humanities and sciences described by C. P. Snow as "The Two Cultures." From The Education of an Engineer, IIT Position Paper number 2.

We have taken the following positions as guidelines in the development of programs of education for tomorrow's engineers:

1. We plan to continue with a four-year program leading to the first professional degree.
2. Recognizing that the essence of professional education is to link theory with practice, we propose to develop a program of professional internship as a regular component of undergraduate engineering education.
3. We recognize the need for two different but intellectually comparable programs for the Master's degree: one with emphasis on design for students entering professional practice, and one directed toward research-oriented objectives.
4. We shall establish a joint faculty-industry committee to assist in evaluating and developing the professional education of our students in the undergraduate programs.

5. While continuing to experiment with new ways and means, we believe that the most important element in engineering education lies in personal contact between the technologist and the successful engineer or scientist who is at the same time an inspiring teacher.

From The Liberal Arts in Our Day, IIT Position Paper number 3.

Science and technology can be expected to transform the world within the lifetime of our present college student. The core of general, liberal education offered to all students at IIT, regardless of their prospective professions, will be oriented toward a meaningful life in a period of this kind. We shall not feel we have succeeded in preparing the student to be a citizen in the world of tomorrow unless we have enabled him to share in responsibility for social, political, and economic life and to bring his professional knowledge and method of approach to the solution of such problems. Nor shall we consider our educational process satisfactory if the College of Liberal Arts properly qualified for his role in life unless he is scientifically and technologically literate.

From The Teacher and the Student, IIT Position Paper number 4.

Like so many values in democratic life, the proper balance between teaching and research is an ideal which can productively be sought even though imperfectly realized. But it is the commitment to the ideal that is necessary. Where a university gives recognition to teaching as one of its prime functions, reasonable guidelines for other commitments can and will be found. Rather than being mercilessly competing elements of institutional resources, teaching and research are inextricably linked. They cannot be separated in a university that means what it says about the pursuit of truth and the demand of knowledge upon society. They are a logical consequence of being an educational institution in the broadest sense.

From the University and the City, IIT Position Paper number 5.

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From the University and the City, IIT Position Paper number 6.

IIT is embarking on another first: a fund raising campaign. This is something new for the school; something of a magnitude never before attempted. The goal for the campaign is $25,000,000.

The school has hired a consulting firm to aid in the planning. They have behind them as they start their drive a $5,000,000 Ford Foundation grant and $5,315,000 pledged by the board of trustees. The latter is a giant step toward the final goal. For our future has a unique significance beyond the money involved.

IIT has grown in the last 10 years from a small regional engineering school to a major University.

Before the Ford Foundation offers a grant to an educational institution - a very significant step - it examines the past and future potential of the school. In this case, that fact of the grant, therefore, is a strong positive statement on the future of IIT and its graduates.

Last October, when the Ford grant was announced, Dr. Retallick stated, "An intensive effort faces us all, and this effort will be announced within the near future." This fund raising campaign is the effort to which he referred.

The drive is significant for yet another reason: it will bring to reality several long-term dreams of the student body. More important, it, and the goals toward which the money will go, are a sign of the interest, too often doubted, which the administration has in the well-being and future of the student body.

Our administration has expressed that its major desire is education. This is evidenced in many statements made in the president's "Position Papers," and in the planning committee report which was described in detail in Technology News last semester.

Now, with the concrete facts to match the words of the past, we, the student body, must realize that these words were not empty.

The grant made seven months ago was given partly on the basis of the achievements and potential achievements of the student body. Our continued success is the only thing which will keep IIT strong. The student body is the best spokesman of any university. This fact is well realized by the administration.

By the time we return to school in the fall, definite progress toward construction of a new gym and swimming pool will have been made. This long-sought at dream will be a completed reality more than half of you who read this statement are still undergraduates.

This dream will be completed sooner than any of us would have guessed, but will many other steps designed to make IIT a greater university developing the leaders and builders of the future.
New dormitory scheduled for completion on June 15 will house 168. The Intercultural Center will have offices in the air-conditioned building's basement. New dining hall and food services facilities and dorm will cost a total of $25,000.

Life Science's building. Formal ground breaking was held on Parent's Day. Actual construction will begin on July 1.

Long planned Gym and Swimming pool will replace current structure. Construction will begin on Aug. 1, at 30th and Walnut.
The larger of the two scheduled engineering buildings, this $3.5 million dollar structure will house the departments of Mechanical and Aerospace engineering, Industrial engineering, Mechanics, and Mathematics.

The smaller of the two engineering buildings scheduled, this will house Civil Engineering and Fire Protection and Safety Engineering. It will have 63,000 square feet of floor space.

New Physics-Chemistry building will provide needed space for expansion for the physical sciences. Located symmetrically to Perlstein Hall, across 33rd street, the building will have about 163,000 square feet of floor space and cost $2.8 million.
Current Construction Forms Excellent Springboard toward Campaign Plans

The annual development program is a natural extension of IIT's present building program and is in fulfillment of last year's Planning Committee Report.

The recent building program began with the completion, in April of 1963, of the building housing the IT-Iimes, S. Kemper and the John Crerar Libraries. Since then, the Institute of Gas Technology has added a larger building and a power plant to their facilities. ITTRI has built a 28-story Administration Building, and the University has refurbished laboratories and added to its heating plant. IIT has built a new dorm, and undertaken several utility projects.

The new ITTRI Administration Building is now in the very final stages of construction, as can be seen by the fact that the scaffolding is finally being removed. The building is already occupied and the Acorne building is now being demolished.

All the above projects, completed within the past four years, involved a total cost of approximately $14,000,000.

The Institute of Gas Technology expanded into its new four-story building and now also satisfies its own power requirements, relying on the gas-powered plant located in the interconnecting structure.

The University is putting great emphasis on the work of refurbishing its laboratory facilities, most prominent of which is the work now being done on one of the chemistry labs.

The new Computation Center was a major addition of the University and required the remodeling of the basement of the Computation Building.

The school added extra capacity to its heating plant and is now equipped for providing steam tunnels to enable the east portion of the campus to be heated, existing as planned to be supplied as needed. The tunnel construction is to be completed by June 1.

The end of the tunnel construction will make it possible for the City to proceed with the proposed widening of St Clair Street which will make possible the lining of Walnut Avenue. This work is tentatively scheduled for this summer.

The dormitory complex is being presently expanded by the building of the final portion of the dorm "H" structure and by the addition of increased food-service areas. The past year has also seen the induction of the Intramural Center among the new additions on campus.

The cost of arms designed by Joseph C. Wolf, an expert in heraldry and herald and genealogist of the Newberry Library. Following the rules of heraldry, the ancestral coat of arms of Philip Armour was combined with that of the Lewis family in the same manner in which a marriage is depicted in heraldry. Since Armour was the older of the two combined institutions, (1852 as opposed to 1893) the Armour shield was placed on the left, the position of the husband, and the Armour crest was used at the top of the coat of arms.

In heraldic terms, IIT's coat of arms is described as follows:

Arms argent, on a chevron or between three arrows proper, a chevron or between three arrows proper.
Construction Takes Largest Part of Fund

... (continued from page 1) ... and transportation and communication networks. Special facilities being included to serve the university are an exhibition gallery, a broadcasting station, a university press, and a workshop theater. A School of Management will be developed from the present department of business and economics, beginning with the junior year and working into graduate studies through the PhD.

Interdepartmental centers are to be strengthened and developed. The first three, the center for computer science and systems analysis, metropolitan studies center, and the health research center are now in existence. There are, in addition, a center for the study of communications, a center for the study of complex institutions, and a center for research in careers which are to be developed. Also planned is an increase in the interdepartmental centers such as the Physical Instrumentation Laboratory in chemistry, and the spectroscopy laboratory in physics.

Total cost of the fund for this part of the IIT Development Plan is $7,000,000. The fourth and largest segment of the fund will be towards the building of new campus facilities for residence and education. In the process of being built is the new residence hall addition to the residence at 310 and 314 S. Wabash Avenue. This structure will be finished on June 15 and will house students next semester. It is air conditioned. Cost is $855,000.

In conjunction with the completion of the residence, an addition to the food services facilities will become operational. This food services addition will also serve in the future IIT development plan for four more new dormitory wings, two of which are already under construction near the fraternity quadrangle.

Ground has been broken for the new Life Sciences Building on the corner of 31st and State. The actual construction of this building will begin on July 1st and the date of completion is the start of the academic year of 1967. This building will house the departments of: language, literature, and philosophy, the biology and psychology departments, and math department. In addition, there will be the house of the liberal arts until another liberal arts building is constructed near the fraternity quadrangle.

The chemistry department alone has tripled its graduate work in the last five years and has increased its research grants from $174,000 to $369,000. The building will provide approximately 50,000 square feet of floor space. Its construction date has not yet been determined. Estimated cost will be $2,800,000.

The site of the six buildings will be $11,325,000. This brings the total cost of the four major parts of the IIT Development Plan to $32,000,000.

The development plan for IIT is pictured on page 1. This model will replace the current buildings and includes a number of structures. The plan is to expand the current buildings and add new structures to meet the needs of the growing student population. The model includes a new library, a new science building, and a new engineering building. The new library will provide additional space for the current library and will also include a new computer science laboratory. The new science building will provide additional space for the current science departments and will also include research laboratories. The new engineering building will provide additional space for the current engineering departments and will also include a new computer science laboratory.

The student and faculty objectives are as follows:

**Student and Faculty Objectives**

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<th>FACULTY</th>
<th>1964-65</th>
<th>1967-68</th>
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<tr>
<td>Number</td>
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<td>Average 9 month salary</td>
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<td>$13,200</td>
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<tr>
<td>Number</td>
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<td>324</td>
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<tr>
<td>Distinguished Professors</td>
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<tr>
<td>Total Instructional Salaries</td>
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**STUDENT**

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<td>Evening—Undergraduate</td>
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<td>Postdoctoral Fellowships</td>
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ITI's growth. From the seven acres existing at the time of the Armour-Lewis merger in 1940, the campus has grown to 120 acres, and is still expanding.