Two Dorrins, New Union Dedicated

A record 135 degrees were awarded at the 89th Centennial commencement exercises this year.

Bachelor's degrees were awarded to 130, including four who completed requirements for their degrees in March and five who completed degree requirements last December. Master's degrees were conferred.

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E.E.'s Lead

Most of the bachelor's degrees this year were in electrical engineering, 31; next came chemical engineering, 31; civil engineering, 32; mathematics and chemical engineering, 14 each; physics, 7; chemistry, 6; and un-designated, 2.

That is a change from last year when mechanical engineering led, electrical engineering was second and civil engineering was fifth, behind chemical engineering and mathematics.

This is the first year an un-designated Bachelor of Science degree was awarded. The program for it permits students to major in a field where no designated degree is offered, such as biochemistry, which, to sample a few, more than electives allow, students may choose, and also includes one of the designated engineering disciplines, or to take majors courses in the humanities, and social sciences for instance, as preparation for graduate study in law or economics.

Master's degrees this year were in electrical engineering, 2; mathematics, 2; and mechanical engineering, 1. Master's degrees are offered in all the same areas as bachelor's degrees.

Heminyway Medalist

Women of the coveted Heminyway gold medal for outstanding scholarship was Wilfred Otago, Huntington, W. Va. His cumulative average for four years at Rose was 3.98. As a freshman, he won the Heminyway bronze medal for making straight A's in all his first year classes.

The Commencement speaker was Dr. C. A. VanderWerf, president of Hope College, Holland, Mich., and a recognized and respected research chemist.

Other speakers were Dewitt P. Cromwell, '19, vice president of the Alumni Association, and Rose President John A. Logan. Honorary degrees were awarded to Dr. John Bartholomew, University of Illinois Nobel prize-winning physicist, who discovered the transistor; and Dr. VanderWerf.

Commencement Highlights—Unveiling the bronze plaque dedicating one of the new residence halls to Dr. Carl Leo Mees, fourth president of Rose, were (top) Fred Crapo, '19 (left), and Robert T. Mees, '07, (right), great-nephew of Dr. Mees. Another dorm was named Schapsenberg Hall (left) for Charles Schapsenberg, '07, and his wife. The campus center-dining hall was dedicated to Grace and Anton Halman Sr. (right), long friends and benefactors of the school. Addressing the graduates in the absence of Alumni Association President John B. Stineman, '31, was Vice President Dewitt P. Cromwell, '19 (center).

How good is this year's graduate of Rose Polytechnic Institute? One way to tell is to compare his starting salary with the national average. The average starting salary for a Rose graduate this year is $678; the national average for engineering and science graduates is about $650.

Companies recruiting Rose graduates this year continued to outnumber graduates; 177 companies vied for the 130 graduates. But only 64 companies were successful in wooing a Rose man. Some of these were highly successful, like General Electric, which hired nine Rose graduates; General Motors, which hired four; and Boeing, Philadelphia Plate Glass and Collins Radio, which hired three each.

Hired More Than One

Others hiring more than one man include B. F. Goodrich, Caterpillar Tractor, IBM, Inland Steel, International Harvester, McDonnell Aircraft, Monsanto, NASA, Project and Gimbals. More than 25 percent of this year's graduating class will go on to full-time graduate study at 36 universities, including Indiana University, where seven will be enrolling: Purdue, which attracted four seniors: Stanford, Cal.

Tech, Northwestern, Notre Dame and Rensselaer Polytechnic Institute. Three will be staying at Rose for their advanced study, nationally, about the same percentage go on for more schooling.

Starting Salaries

Pulling down the top starting salaries this year at Rose were chemical engineers with an average monthly wage of $697 (national average: $681). Next in line were mechanical engineers at $684 (N.A.: $681); electrical engineers, $684 (N.A.: $681); physicists and civil engineers, $675 each; mathematicians, $677; and chemists, $658. Average starting salary nationally for chemistry and physics majors was about $675; mathematicians, $690.

Wen Commissions

While lieutenant's commissions in the Army are won by all graduates this year, only one will be entering the service immediately; the others will report within the year.

Last year the average monthly starting salary for Rose men was $640. In 1963 it was $615.
"If we are not to march blindly ahead into a chaotic world of uncontrolled application of scientific discovery...we must encourage the growth of the systems analysts—able to evaluate possibilities and to help guide technology in shaping the world of tomorrow."

So said President John A. Logan, at the recent National Conference on Solid Wastes Management at the University of California, where he was a featured speaker on management science.

There is, according to Dr. Logan, "a race to control them. The outcome of the race may well be the survival of man as we know him. The systems analyst, as a discipline, is able to grow into the problems of the future which we can see will be ever more complex and difficult."

A Definition

"Systems analysis, in its general sense, can be considered as a broad analytical approach to decision-making...in its more limited context it is a procedure by which components, united by some form of interaction and interdependence, can be examined as a system as an entity. It is both the art and the science by which groups of components making up a system can be compared from the point of view of its economy, efficiency or overall effectiveness.

The development and acceptance of the systems philosophy is an affirmative answer to the question of whether engineers and scientists are willing to accept professional responsibility for the kind of world which they are creating.

Step Back, See Forest

"There is considerable value inherent in the breadth of this approach: the willingness to move back from the details of our specific or local situation to the overall recognition to examine the overall forest rather than just trees..."

In recent years many engineers have considered themselves subject to the bridge, to water treatment plants, highways or railroads—to be the ultimate form of science and engineering. While each of these may be considered as a system, or more correctly, as a subsystem, their examination as an integral part of the broader community system may provide surprising benefits.

There is a logical argument that engineering education is now teaching students to solve problems, a familiarity he will need on the job as computer programmers, chemists, physicians. While each of them may be considered a system, or more correctly, a subsystem, their examination as an integral part of the broader community system may provide surprising benefits.

A 3-Way Race For V.P. & Rep.

From Page 1

Cough...!

The last time a member of the student bodies was elected as the president of the Alumni Fund was in 1906.

1906-07 from alumni contributed to the University's Alumni Development Fund to maintain continuous programs usually supported by the annual Alumni Fund. The purpose of the Alumni Development Fund will help make possible the new and improved laboratories, research equipment, library and recreation facilities, and scholarships.

"I hope all those 1,400 alumni who have not yet pledged themselves to Rose's future will soon realize that they are not alone. Some of these same have already pledged some form of support to the Rose of Oregon's dreams. All contributions will be acknowledged in the year's program to those who might want to continue to invest in Rose's future by increasing their pledges.

President of Glenmore (Seagram) Distilleries, Louisville, and a member of its board. Other boards he has served on include General Plywood and Citizens National Bank of Detroit. He is a mechanical engineering graduate.

Active in the Chicago tech clubs, Thompson has served a vice president of the National Association for the Advancement of Colored People, and as a member of the National Association for the Advancement of Colored People, and as a member of the National Urban League.

Active in community affairs, he is the Roy Thomson, president of the United Fund and the March of Dimes.

ROSE TECH CLUBS ANNOUNCE NEW OFFICERS

Recently elected officers of their Northern Ohio Tech clubs were:

Rutgers, 51, is his son.

Failing, a chemical engineering graduate from the University of California at Berkeley, Thompson is also a member of the National Association for the Advancement of Colored People, and as a member of the National Urban League.

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Classified News
Can The Small School Do Basic Research? Dr. Ralph Llewellyn, '55, Gets Grant To Try

The National Science Foundation, principal Federal agency supporting fundamental scientific research, is going to try an experiment at Rose Polytechnic Institute: Can successful fundamental research be done in a small school by the not-so-well-known investigator? If the answer is yes, the future of the small school may be changed.

Another new feature of Homecoming this year will be the Collett Lecture. The decision to set up a Collett Lecture was made by the not-so-well-known investigator. If the answer is yes, the future of the small school may be changed. The lecture will be given by Dr. Ralph Llewellyn, '55, associate professor of physics and director of research at Rose, a $34,000 two-year grant for research in unexplored Rayleigh scattering using the recently discovered Mossbauer effect.

Rayleigh scattering is the scattering of light by a gas in the atomic nucleus. The Mossbauer effect is the recoil-free absorption of radiation by the nucleus. The grant will be made to another idea: research cooperation between a small school and a giant university. In this case, the University of Illinois. Dr. Llewellyn will do the experimental work and Illinois will provide the special equipment and consultants like Dr. Hans Frauenfelder, one of the world's foremost authorities on nuclear physics and the Mossbauer effect. The cooperative idea was largely Dr. Llewellyn's after he spent some time in 1964 at Rose as a visiting scientist.

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