## High school students to hear career talks

HT. together with the Chicago Sun-Times and the Chicago Technical Societies will once again sponsor the second annual career conferences for high school students on December 27-29 to be held on campus. Aimed at the goal of providing the future leaders in their respective vocations. The more well-known speakers will be Rogers Hornsby, Bob Elson, Pat Flanagan and Gene Kessler on sports; Irving Pflaum of the Sun-Times and Nelson Algren, author of "The Man with the Golden Arm," on writing and journalism; Senator Scott Lucas, Alderman Robert Merriam and Everett Dirksen on politics; Keith Andes of "Kiss Me Kate" and George Kuyper, manager of the Chicago Symphony, on music; Karl Nagler, vice-president of the Peoples Gas Light

phony, on music; Kari Nagiet, Vice-president of the Peoples Gas Light and Coke company, on gas technol-ogy; Dr. Gustav Egloff, president of the Western Society of Engi-neers, on chemistry; and several popular teachers on IIT's campus

Students attending the conferences will write essays about their chosen careers. The six best essays

will be selected and the winners will be given an all-expense-paid

trip to Washington, D. C., during

will add their services.

the spring vacation.

leaders of industry and society with leaders of industry and society with details of their chosen careers, the conferences will begin with an in-troductory and welcome by Presi-dent Henry T. Heald, who will in-troduce Mayor Martin H. Ken-

Over 2500 students will hear talks about 70 various fields by

### tech timetable

Items appearing in Tech Timetable ere those which have been scheduled with the Dean of Students' office.

FRIDAY, DECEMBER 16

RIDAY, DECEMBER 16
AIEE FOWLER group, 11 a.m., NU aud.
Eta Kappa Nu, 2 p.m., IHC room
Chess club, 4 p.m., SU lounge
Deans coffee cletch, 4 p.m., General
TVCF, 5 p.m., AH conf. room
Polish club, 7 p.m., 214C
Winter Whirl dance, 8 p.m., Sherman
Hotel

SATURDAY, DECEMBER 17 Weissman luncheon, 11 a.m., NU

Weissman luncheon, 11 a.m., NU
ATT of the property, 5 p.m., Exce. conf. noom
Alpha Sigma Phi party, 8 p.m., Frat.
house
ARF EE dept., 8 p.m., NU lounge
Triangle party, 6 p.m., Frat. house
Deta Lambda 4., 8 p.m., Brown Hall
THESDAY, JANUARY 3

TUBEDAY, JANUARY 3
Delta Zeta, 1 p.m., 202MC
IAS, 1 p.m., 202MC
IAS, 1 p.m., 208C
IVCF, 1 p.m., 105C
Model Airplane club, 1 p.m., 102C
Senior class placement, 1 p.m., 103MC
WEDNESDAY, JANUARY 4
Mechanics Colloquium, 8 a.m., 115CB
ARF chorus, 12 noon, NU aud,
SAM movies, 2-4, 4-6 p.m., 131 MC

THURSDAY, JANUARY 5

HURSDAY, JANUARY 5 Co-op club, 1 p.m., 108MC SAE, 1 p.m., 115CE SAM meeting, 1 p.m., 101MC WSE, 1 p.m., 131MC Fluid Mech., 4 p.m., 101MC SAM movies, 6-8, 8-10 p.m., 131MC

FRIDAY, JANUARY 6 Chess club, 4 p.m., SU lounge Deans coffee cletch, 5 p.m., AH confroom IVCF, 5 p.m., AH conf. room

Final Thesis Deadline: Jan. 13 Preliminary Deadline: Dec. 30

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## Seniors make change in dress for Farewell'

Three separate petitions presented to the January '50 senior class officers brought about a reconsideration of the type of dress for the Senior Farewell. These petitions requested a change from optional to semi-formal dress, and representatives presenting the peti-tions explained that the major reason was to eliminate embarassment to girls who might attend in street-length dresses.

In order to avoid misunderstanding, the following definition of semi-formal for this affair was set up by the senior class officers and class representatives: Women are to wear dinner dresses or formals; men are to be in business suits or tuxedos.

tuxedos.

The Senior Farewell will be a dinner dance on Thursday, January 26, in the Gold room of the Congress Hotel. The initial price of a bid is \$10, payable to class representatives at a booth to be opened in the NU lobby after the Christmas holidays. Any surplus in the class treasury shall be given out as rebates to those attending the Farewell.

## FRESHMEN SOPHOMORES TECHNOLOGY NEWS

AN ALL AMERICAN NEWSPAPER, WISHES TO ENLARGE AND DEVELOP ITS BUSI-NESS STAFF.

UNDERCLASSMEN WHO REALIZE THE VALUE OF EXPERIENCE IN ADVERTISING, CIRCULATION, BUDGETING, AND THE OTHER IMPORTANT BUSINESS OPERA-TIONS ON A PUBLICATION ARE ENCOUR-AGED TO JOIN THE STAFF.

THIS IS AN EXCELLENT CHANCE TO PARTAKE IN AN OUTSTANDING ACTIVITY WITH MANY REWARDS.

POSITIONS WITH ADVANCE RESPONSIBILITY FOR UPPERCLASSMEN WITH ABILITY 

# THE DU PONT DIGEST FOR STUDENTS OF SCIENCE AND ENGINEERING

### CARBON MONOXIDE ... FRIEND OF MAN

Thanks to high-pressure synthesis, it now leads a useful life

To the man on the street, carbon monoxide is just a poisonous gas that sometimes causes tragic deaths when it escapes from the exhaust of an automobile or from a poorly tended

Outside of the chemical field, few people are aware that, properly used, it is a very real friend of man. In the last 25 years, during which catalytic



A. H. Emery, Jr., M.S. Ch. E., M.I. T. '49 and M. J. Roedel, Ph.D. Org., Michigan '40 inspecting a high-pressure batch reactor taken from the shaker tube assembly after a run to make 3,5,5-trimethylhexanol.

and high-pressure chemical techniques have been highly developed, carbon monoxide has become a keystone of industrial synthesis.

Scientists have found that under the proper conditions of high pressure and temperature, carbon monoxide, in combination with other substances, can be converted to a variety of useful products. These or their derivatives range from an acid used in tanning hides to the sparkling plastics in milady's boudoir,

You'd hardly associate carbon monoxide with anti-freeze. But at temperatures from 300 to 450°C, and under pressures of 1500 to 15,000 pounds per square inch, carbon monoxide and hydrogen unite to form methanol-a colorless liquid from which is made "Zerone" anti-rust anti-freeze for automobiles. From methanol and carbon monoxide as raw materials, ethylene glycol for "Zerex" anti-freeze is produced.

### Plastics and Anti-Freeze

Methanol is used also to make a large number of compounds such as formaldehyde and methyl methacrylate. The former goes into ureaand phenol-formaldehyde plastics for light fixtures, radio cabinets, hardware, utensils, and electrical equipment. The latter is the basic material for "Lucite" acrylic resin with

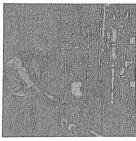


R. L. Steerns, B.S. Ch.E., Yale '49 and H. Peterson, B.S. Ch.E., Northeastern Univ. '42 checking a multi-stage carbon monoxide compressor used in semi-works operations.

The reaction of methanol with carbon monoxide leads to acetic acid. which is a well-known industrial chemical. By the same synthesis but substituting ethanol for methanol, propionic acid is obtained. From it come the "Mycoban" sodium and calcium propionates that retard mold and rope in bakery products.

#### Synthesis in the Future

Today Du Pont manufactures some 120 different items that are partly or wholly dependent upon elevated



A. J. Hill, Jr., Ph.D. Org., Yale '44 and F. F. Holub, Ph.D. Org., Duke '49 carrying out an experiment on a new method for purifying carbon monoxide. The large furnace in this apparatus operates at 1200°C.

pressures. However, the possibilities have by no means been exhausted. Just recently, for example, chemists have been learning how to use carbon monoxide in "up-grading" cer-tain petroleum hydrocarbons to give interesting alcohols. One of these, 3,5,5-trimethylhexanol, is prepared from diisobutylene by reaction with carbon monoxide and hydrogen.

College-trained men and women interested in working in this field at Du Pont may share in discoveries as outstanding as any yet achieved.

Because of the wide scope of Du Pont's activities, young graduates in many different fields have opportunities to select the careers that prove to suit them best as their abilities and interests develop.



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