

Nov

MINUTES OF THE UNIVERSITY SENATE

The December 13, 1977 meeting of the University Senate was called to order by Chairman Dale Landon at 3:20 p.m. in Pratt Auditorium.

On a motion by Senator Bright, seconded by Senator Gray, the minutes of the November 15, 1977 meeting were approved, as published, with the following corrections: Senator Sledzik should have been listed as excused; in the By-laws of the Editorial Board of the Imprint Series of Indiana University of Pennsylvania Item III, C and D should read "elected members" rather than "appointed members".

The following Senators were excused from the meeting: Senators Dakak, Hudson, Palmer, Seacrist and Suhrie.

In addition, the following Senators were absent: Senators Anderson, Bowes, Crumm, Cunningham, DeFurio, DeGeorge, Dock, Fry, Gillis, Kistner, Klein, Lauda, McFeely, Moore, Murray, Murray, Nold, Penta, Rizzo, Russell, Stanley, Swauger, Thomas, Walz, Wiley, Wilson, Buckley, Oparah, Zinn, Bowers, Cegelis, DiCarlo, Fine, Griffie, Holman, Hoza, Kaminski, Lamm, Law, Mandell, Walton and Whited.

Senator Wilburn responded to the action of the Senate at the November meeting asking him to explain the reason for the dismissal of classes on Veterans' Day and why the Senate's recommendation that classes not be cancelled was ignored. Senator Wilburn reviewed some of the controversial background on this matter. In November of 1975 Senator Wilburn requested APSCUF to make a decision on this matter and their decision was that they preferred to have classes cancelled during the appropriate hours. Following this decision, and after much debate on the calendar issue, a five-year calendar was prepared and it was agreed between the administration and APSCUF that the calendar issue would not be reopened unless there was mutual agreement to do so until the end of this five-year period. This is the reason that classes were cancelled during the appropriate hours this year.

Committee A listed the dates of the Senate meetings for the second semester of the 1977-78 academic year: February 21, March 14, April 18 and May 9, 1978.

The Research Subcommittee of Committee E (Faculty Research, Library, and Educational Services) announced the research grants not exceeding \$500 which have been awarded, as attached to these minutes.

On the recommendation of the Research Subcommittee of Committee E, four (4) grants in excess of \$500.00 were approved by the Senate. These are attached to these minutes, including the name of the grantee, the amount of the award, and a synopsis of the project.

Committee F1 (Student Affairs), chaired by Senator Bisignani, announced that a Lost and Found Center has been established in the office of the campus police; all items found should be turned in to the campus police office in Sutton Hall.

On the recommendation of Committee F2 (Athletics), chaired by Senator Pesci, Track and Field for Women was approved as a varsity sport, in order to be in compliance with guidelines of Title IX.

On the recommendation of Committee B2 (Curriculum), chaired by Senator Chellman, the following new courses were approved:

MA 102 - Finite Mathematics - 3 cr.
MA 399 - Internship in Mathematics - 3-12 cr.
BA 488 - Auditing for Electronic Data Processing - 3 cr.
BA 457 - Federal Taxation of Corporations, Partnerships, Estates
and Trusts - 3 cr.
HI 312 - Biblical History and Palestinian Archaeology - 3 cr.
FN 455 - Advanced Nutrition in Disease - 3 cr.
FN 458 - Advanced Human Nutrition - 3 cr.
BA 499 - Internship in Business Systems Analysis - 9-12 cr.
RH 200 - Introduction to Rehabilitation - 3 cr.

The Graduate Committee announced that Department of Education approval has been received for the following programs:

Ed. D. in Counselor Education
M.A. in Chemistry
M.B.A.
M.A. in Labor Relations

As recommended by Committee D, dual-listing was approved for the following courses:

EC 571 - Economics of Labor Legislation - 3 s.h. (present EC 371)
EC 572 - Economics of Wages and Employment - 3 s.h. (present EC 372)
EC 573 - Economics of Human Resources - 3 s.h. (present EC 373)

The following new graduate courses were approved, as recommended by Committee D:

EC 574 - Economics of Education - 3 s.h.
LR 521 - Labor Relations in Public Sector - 3 s.h.
LR 599 - Independent Study - 1-3 s.h.
PH 581 - Special Topics - 1-3 s.h.
PH 599 - Independent Study - 1-3 s.h.

The following program modification of the M.S. in Labor Relations was presented to the Senate for consideration:

That the M.S. in Labor Relations program restriction of 18 elective credits to specifically-named graduate courses be modified to permit the student, with advisor approval, to elect courses approved by Labor Relations faculty not to exceed 18 hours from graduate courses offered by the following departments: Labor Relations, Political Science, Business, Economics, Elementary Education, Foundations of Education, Philosophy, English, Safety Sciences, History, Psychology and Sociology.

Chairman Landon read a statement from Senator Stonebraker (who was present at the meeting but had laryngitis and was unable to speak), in which he opposed the above modification for the following reasons:

- a. exemption of 30% of the course work
- b. only one of the Labor Relations faculty members has any experience in the field
- c. feels there is bias in favor of the practical rather than

- the academic in this department
- d. feels that such recommendations should be made by an especially-constituted advisory board and should be limited to an exemption of six credit hours

A motion was made by Senator Smith, seconded by Senator Garvin, to return this matter to Committee D for reconsideration.

A motion by Senator Hennemann, seconded by Senator Brown, suspended the rules of the Senate and permitted Mr. Martin Morand of the Labor Relations Department to speak on this matter. Mr. Morand detailed some of the reasons for requesting this modification and cited specific cases involving this matter.

A motion by Senator Bright to table this matter until the February meeting, at which time Senator Stonebraker could respond, died for lack of a second.

The motion to recommit this matter to Committee D was defeated.

A motion by Senator Shirey, seconded by Senator Woodard, and passed by the Senate, closed debate on this recommendation, which was then passed by the Senate.

The following modification to the Labor Relations program was also approved by the Senate:


That the Labor Relations Department have authority to recommend to the Graduate Dean the exemption of up to 12 credits of the program's 42 credits for certain qualified program candidates, after written evaluation of said candidates' academic background and demonstrated competencies. Such recommendations must be the product of formal action by members of the Labor Relations Department faculty when the course work under consideration is labor relations course work and, in non-labor relations course instances, by the chairperson of the appropriate academic department after the latter's consultation with the faculty member(s) of the department who typically teaches the course.

The recommendation that a maximum of six (6) graduate credits of Independent Study work be applicable to an Indiana graduate degree unless written approval for additional Independent Study credit is obtained from the student's advisor or coordinator of graduate studies and the Dean of The Graduate School was approved.

The resignation of Cindy Yiengst, Vice Chairperson of the Senate, was accepted with regret, as she will be graduating at the end of the semester. Committee A will conduct elections for her replacement.

The meeting was adjourned at 4:45 p.m. as all business had been conducted.

Respectfully submitted,


Elizabeth Troxell
Secretary

REPORT OF GRANTS BY THE RESEARCH SUBCOMMITTEE OF COMMITTEE E OF 1977-78 UNIVERSITY FUNDS ACCORDING TO THE CURRENT GUIDELINES OF THE UNIVERSITY SENATE FOR FUNDING RESEARCH AND SCHOLARLY ACTIVITY AND PROCEDURES AND STIPULATIONS: RESEARCH AND SCHOLARLY ACTIVITY GRANTS WITH STATE FUNDS ALLOCATED BY THE UNIVERSITY

The Research Subcommittee of Committee E has made the following grants not in excess of \$500.00 with the understanding that the funds must be spent or encumbered by June 30, 1978. Total of awards is \$4,473.00.

1. Robert K. Alico, Detection of Staphylococcus aureus as an Indicator of Potential Health Hazards in Swimming Pools, \$425.

This past spring and summer I investigated the use of selective culture medium for recovery of the pathogen (disease-causing bacterium) Staphylococcus aureus from the swimming area at Yellow Creek State Park. We were quite successful in this study which was partially funded by Senate Grant #74200-01. (Summary report sent separately outlines the results).

This fall and winter I am using a modification of the medium from the Yellow Creek study to recover Staphs that are stressed by chlorine from the two indoor pools at Zink and Memorial Field House. To date the results of preliminary studies look positive and I expect to present a paper on this study at our National American Society for Microbiology meetings that are held in May, 1978.

The main questions I am asking are:

1. Can Staphylococcus aureus be selectively recovered from chlorinated swimming pool water?
 2. Epidemiologically, what numbers of these pathogens that are present in pools present a health hazard to swimmers?
2. Neil Asting, Depolarized Light-Scattering Study of Some 4 and 5 Coordinate Organoaluminum and Organotin complexes, \$500.

Several 4 and 5 coordinate, chelated, organoaluminum and organotin complexes will be synthesized and then subjected to a Rayleigh depolarization study. A comparison of depolarized scattered light intensities for complexes and corresponding bidentate ligands will indicate how optical anisotropies are changed when enolic hydrogen atoms are replaced by a metal center. This basic information will be invaluable to future studies which employ the Rayleigh depolarization method as a means of determining molecular geometry in solution.

3. William R. Forbes, The Development of a Reliable Method of Breeding the Mexican Axolotl (Ambystoma mexicanum), \$500.

The ultimate intent of the attached proposal is to investigate the effects of hormones, temperature, and light on the breeding of the mexican axolotl (Ambystoma-mexicanum) in order to develop a reliable method of producing large numbers of fertile eggs. The axolotl is a favorite animal of the developmental biologist because it is of use in the study of embryonic development, aging, genetics, regeneration and cancer. Its value is limited only by the fact that it is difficult to breed. The aim of the work proposed is to alleviate this problem.

The purpose of this particular application is to seek money so that a colony of axolotls can be established in our laboratory. This is necessary in order to have a readily available supply of animals for the breeding research noted above.

4. Gestrich, Jamison, Johnston; Thermal and Electrical Properties of Bone, \$410.

The measurements of thermal conductivity and specific heat by heat pulse methods and the measurements of surface and volume resistivities by direct current methods are to be used in the study of the properties of bone. The investigation will yield the previously unknown value for the specific heat and a more accurate value for the resistivity of bone, insight to the proposed semiconductor nature of bone, and information on the structure of bone.

5. Richard A. Hartline, Investigation of the Mechanism of Fatty Acid Transport by *Pseudomonas putida*, \$480.

Presently there are two known ways that fatty acids are carried across bacterial membranes to be metabolized and serve as nutrients for survival of the cell. One is movement through the membrane without metabolic alteration and with deposition of the fatty acid, unchanged, inside the cell. The other is a movement through the membrane with a simultaneous enzymatic conversion to the first intermediate of fatty acid metabolism. Studies with the bacterium *Pseudomonas oleovorans* provided data that can be interpreted to be consistent with either of these two routes of transport. Possible methods of discovering whether transport occurs with or without a simultaneous metabolic conversion are: (1) obtain a mutant cell that lacks the enzymes for the first step in fatty acid breakdown but that still transports the fatty acid; (2) examine the transport event in membrane vesicles where the only enzymes present are those in the membrane. Because each of these approaches has already been initiated (spring semester, 1977) the research proposed is in two parts with each part directed towards answering a different question about the mechanism of fatty acids transport by *P. oleovorans*.

6. Michael H. Kesner, Participation in the annual meeting of the American Society of Zoologists, \$118.08.

I wish to obtain transportation funds that would allow me to participate in the annual meeting of the American Society of Zoologists and the Society of Systematic Zoology in Toronto, Canada, on December 27-30, 1977. I will be presenting a paper during the meetings. Partial support for the meeting expense has been received from the state. However, the \$100 maximum allowance does not allow for transportation costs which are as follows:

738 miles (round trip--Indiana to Toronto) @ .16/mile = \$118.08.

I respectfully request that monies from the Faculty Research Grants fund be awarded to cover the transportation costs.

7. Thomas J. Knapp, Effect of Visuo-Motor Behavior Rehearsal on Collegiate Batting Averages, \$397.

Richard Suinn of Colorado State University has developed a technique of mental imagery practice called visuo-motor behavior rehearsal (VMBR). This technique has been used successfully in case studies in therapy and to increase athletic performance. As of yet there has been no controlled studies evaluating the procedure. This study would address that need. Members of the I.U.P. baseball team would be divided into four groups. Besides the control and VMBR groups, there would be a mental imagery placebo group to control placebo effects and a physical task group to control demand characteristics of being in a special training group. Training sessions would meet for three half-hour periods for a total of eight weeks. The dependent measure will be the computed batting average of each group at three intervals during the 1978 spring baseball season.

8. Park, Frederick; Eddy, Jerry; A Search for Superheavy Elements, \$470.

We propose to examine various rock samples for radioactive material which is evidenced by what are referred to as Haloes. In particular, we will look for larger than normal haloes called Giant Haloes. These materials will be analyzed in an attempt to verify recent reports of discovery of new elements much heavier than previously known to man.

9. Robert J. Vislosky, Present paper to National Seminar to National Art Education Association, \$228.00.

I am requesting consideration of funding under Item No. 4. I am to lead a national seminar on Arts--The Catalyst for Change, as well as to participate as a panel member for the seminar, Art Therapy in Public Schools.

Both of these presentations are to be made between March 18 and March 24, 1978, to the National Art Education Association in Houston, Texas. The departmental allowance of \$100.00 is not sufficient for me to consider such a trip.

10. Donald A. Walker, An article entitled "The Evolution of Marshall's Theory of Consumer Demand", \$40.
11. Dennis W. Whitson, Investigation of the Properties of Ion Implanted Silicon Using Electron Spin Resonance, \$425.

Practically everyone in the technologically advanced parts of the world has felt the impact of the microminiaturization of electronics. Two highly visible products have been the hand calculator and the digital watch. Perhaps the most profound effects, however, are due to the development of the modern computers.

In order for the Integrated Circuits to work correctly a precise amount of impurities must be introduced into the highly purified Silicon substrate. There are essentially two ways to place these impurities in the Si lattice: (1) through diffusion at high temperatures (1000 degrees Centigrade) or (2) through ion implantation at room temperatures. We will measure the effects of the ion implantation of ions in Si. The results of experiments of this sort are of interest both for their technological applications and for the insight gained into basic physical processes.

Most of the equipment necessary for this measurement is already operational. However, one more piece is vitally needed: a liquid nitrogen dewar. The measurements will be made at liquid nitrogen temperature (77 degree K) because of the increase in signal strength that occurs at that temperature over the signal observed at room temperature. Many times signals not discernable at room temperatures are quite easily measured at liquid nitrogen temperatures.

The dewar and other items are discussed further in Section IV of the proposal.

12. John T. Wood, Coupling of Unactivated Benzoic Acid Substrated via Copper Induced Decarboxylation, \$480.

The Senate approved the following grants in excess of \$500, as recommended by Committee E, with the understanding that the funds are to be spent or encumbered by June 30, 1978. Total of awards is \$2,743.

1. Frank Baker and Lee Barley, An Epidemiological Study of the Staphylococci and Streptococci, \$700.

In recent years increasing attention is being given to the public health aspects of modern medical care. In the area of microbiology the pathogenic staphylococci and streptococci remain in the forefront of microbiological investigation. These groups of organisms have been recognized for many years as the causative agents of a variety of human and animal diseases.

This study proposes to examine several community health parameters regarding staphylococcal and streptococcal carriage. The source of these bacterial organisms will be the IUP student population. The University Health Center has agreed to participate in the study by obtaining throat cultures of students complaining of sore throat and from students exhibiting no upper respiratory ailments. These cultures will then be examined and the data analyzed for carriage, physiological characteristics, and comparative recoveries achieved on different bacteriological media.

2. Frank Ballas, Atomic Absorption Analysis of the Bi-Gas Pilot Plant Water Effluent, \$540.

We have recently (1977) begun metal analysis of the water effluent of the Bi-Gas Pilot Plant, Homer City, Pennsylvania, with the following objectives:

- a. to analyze for various metals present and to identify their sources
- b. Knowing the metals present and their concentrations will enable the final water processor (Indiana Sewage Treatment Plant) to better handle this material
- c. Such projects provide valuable industrially-oriented training for our advanced chemistry students.

Funding at this time would allow expansion for analysis of metals that we presently do not have instrument capability.

3. Ernest B. Fricke, The McCreary Tire and Rubber Company, 1930-1945, \$750.

A history of the McCreary Tire and Rubber Company in depression and in war, 1930-1945.

4. Ronald L. Marks, Hydroboration of Aromatic Heterocycles, \$753.