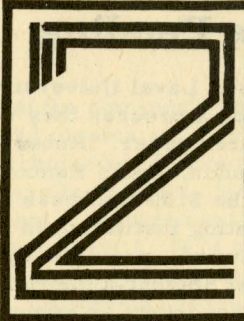


IEEE Student December 1973 Volume 2, No. 2 Newsletter



Employment Guidelines

"Guidelines to Professional Employment for Engineers and Scientists" were approved by the IEEE Board of Directors in early 1973. Developed as a result of the efforts of 17 engineering societies, including IEEE, they answer the need for scientists and engineers to play a larger role in the development of employment policies - a need that became particularly evident when the large scale layoffs and relocation of recent years revealed certain deficiencies on the part of some employers. Students, as future employees and employers, should be particularly interested in the aspects of recruiting, terms of employment, professional development, and termination and transfer which the guidelines cover.

The guidelines are by no means to be considered final and complete as they stand, but are in a state of dynamic change. The document is subject to periodic review by the participating societies for the sake of keeping it current, and a mechanism has been set up for incorporating revisions and amendments into future editions. However, in even the preliminary form the guidelines should help to provide a firm basis for the employment of professional engineers and scientists and are expected to have a significant impact in improving relations for employers of these professionals.

"Guidelines to Professional Employment for Engineers and Scientists" were published in the March and April 1973 issues of SPECTRUM. Copies are available from IEEE Headquarters.

Employment of Graduating Engineers

"How meaningful is your grade point average, particularly for your first job?" Curious, members at the University of California, Santa Barbara Student Branch recently probed six engineers for answers to questions ranging from the relevance of engineering curriculum to the virtues and drawbacks of large and small companies.

Organized as a panel discussion, the six engineers represented a true cross section of age and experience. One member was a student employed in industry while another was a semi-retired engineer whose career spanned 30 years with several companies. Several members had done recruiting. Branch Chairman, Frank Goodman, Jr., moderated the program and discussion moved along from pensions, resume writing, the trauma of a layoff, to how to avoid technical obsolescence. Enthusiastically received, the Santa Barbara Branch recommends "Employment of Graduating Engineers" as an informative program for undergraduate students at other Branches.

Canada - Patents Pending

Five Student members at Laval University in Quebec may receive a patent on a process they recently described in a jointly authored paper. Robert Boutet, Michel Dumaid, Pierre Hudon, Denis Rancourt, and Jocelyn Vallee received the \$150 Hackbush Award (highest for a degree-granting institution in Region 7) and the \$200 first place award, provided by the Life Member Fund, for the best Student-authored paper in the Region. Their paper describes an automatic digital curve following welding process which industry finds quite interesting. The students are investigating its patent potential.

This and several other papers were presented as part of the technical program at the International Electrical, Electronics Conference and Exposition held in Toronto October first through third. Terry Lewis, ("Cancellation of Induced Power-Line Harmonics on Telephone Lines"), from the University of Manitoba and Robert Newton from Northern College of Applied Arts and Technology tied for second place Student Paper Award. Bob Newton's paper, "Hybrid Microelectronics Automotive Alternator Regulator", also won the \$150 Palin Award for the best paper written by a Student in a diploma-granting institution.

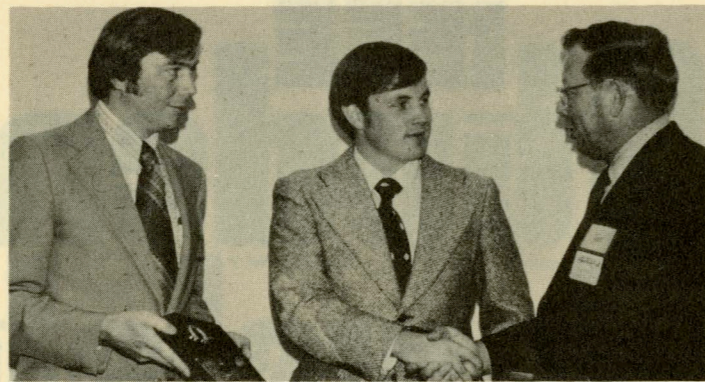
Entrants for the 1974 competition should be busy working on their papers now. In the Spring, the best papers from each Branch are submitted to the Regional Student Activities Committee for the final competition. Award determinations will be made by July 1, 1974. See your IEEE Counselor or Chairman for complete details.

Recognized Authors

Authors of our Region 6 Student papers recently received considerable recognition for their work. Each paper was presented as part of the WESCON (Western Electronics Show and Conference) technical program and was included in the Conference Record. WESCON, attended by over 25,000 engineers, provided a prestigious forum for the Student authors.

Robert J. Grow, a University of Utah August graduate, won first place with his paper, "Losses From Misaligned Joints in Single-Mode Optical Fibers". The paper described Grow's 1972 summer research experience while employed by Bell Labs in Crawford Hill. The first place awards of \$200, provided by IEEE's Life Members, and an HP45 calculator were presented by Regional Director Einar Ingebretsen.

The other winners were second place: Robert A. Greyell, University of Washington; third place: Grant Connell, California State University at San Francisco; fourth place: Taylor Gahr, California Polytechnic State University at Pomona.



Mark Damborg, Region 6 Student Activities Committee Chairman and Einar Ingebretsen, Region 6 Director, present Bob Grow with the first place Student Paper Contest award at WESCON.

Percentage Frontrunner

A Graduate Fellowship in Electrical Engineering was established in 1939 by the Westinghouse Electric Corporation as a memorial to Charles LeGeyt Fortescue. The \$4000 Fellowship provides for one year of full time graduate work in Electrical Engineering at an engineering school of recognized standing located in the United States or Canada. Applications are available at many colleges, or can be obtained from the Secretary of the Awards Board at Headquarters.

Applications, with faculty recommendations must be received by the Awards Board by January 15. Announcement of the Award will be made not later than March 1.

Fortescue Fellowship

The University of Arkansas Student Branch stood among the top twenty largest Branches for the past three years. Records show, in fact, that at the end of 1972, Arkansas was actually "number one" among the top twenty with the highest percentage (47 percent) of IEEE Student members to EE Students enrolled at the University. Although the University of Arkansas EE Department is relatively small, the actual Student Branch consistently attracts a large percentage of IEEE Student members. Counselor Fred Crossett and the Arkansas Student officers must be given considerable credit for their outstanding promotion efforts.

Hickernell Award: \$1000

Student papers related to, or associated with electric power engineering qualify for the \$1000 1974 Hickernell Scholarship Award. Winners also receive an expense-paid trip to the 1975 Winter Power Meeting held at the Statler Hilton in New York. This year the Award is limited to Students enrolled in a Bachelor's program leading to a degree in Electrical Engineering. Papers will be accepted for the 1974 Award until June 15.

Complete details are available from your IEEE Counselor, the Hickernell Award Committee of the Power Engineering Society at IEEE Headquarters, or from Professor William F. Kersting, University of New Mexico, Las Cruces, New Mexico

SWIEEEO Planning - Ideas Wanted

A goal of the Student Policy and Planning Committee is to provide more meaningful programs at Regional Conferences for Student members. Plans are now getting underway for the Student program at the Southwestern IEEE Show and Conference (SWIEEEO) for Region 5 scheduled for April 30 to May 2, 1974 in Dallas. Employment Workshops, Paper Contests, design competitions, special seminars, project displays, or tours to local industry are all possibilities. Last year there was a fascinating tour of the American Airlines Flight Training Center in Fort Worth, in addition to the Student Paper Contest, product exposition, and technical seminars. A Regional Conference can present many tangible benefits to interested Student members and Branches.

The Student program is being organized by Bob O'Hagen, a Student at Southern Methodist University. He's looking for program ideas from Region 5 Student members and Branches (see map). Offer your ideas now and plan to attend SWIEEEO: write or call Bob O'Hagen, SMU Box 581, Dallas, Texas 75275. Tel: (214) 369-4093.

NPSS Student Awards

Each year the Nuclear and Plasma Sciences Society of the IEEE provides awards to our undergraduate students and one non-U.S. scholar studying in the United States in recognition of their outstanding achievements in, and contributions to the field of nuclear and plasma science and technology. Awards are \$200 for each U.S. Student and \$500 for a non-U.S. scholar along with recognition by the NPSS.

Letters of nomination are solicited from Engineering Deans. A letter of nomination should contain a concise narrative as basis for the award, including a

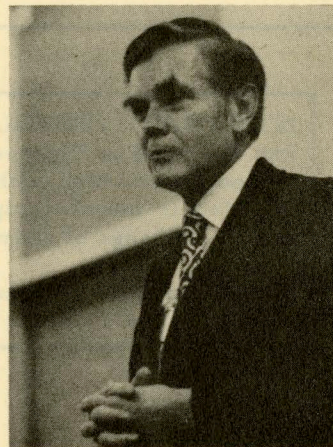
description of the nominee's contributions to the field of nuclear and plasma science and technology, an indication of scholastic achievements, and evidence for future promise in the field. Membership in the IEEE or NPSS is not a requirement. Nominations should be sent before April 1, 1974 to: A. J. Stripeika, Lawrence Livermore Laboratory, P.O. Box 808, Livermore, California 94550.

Awards will be made the end of May 1974.

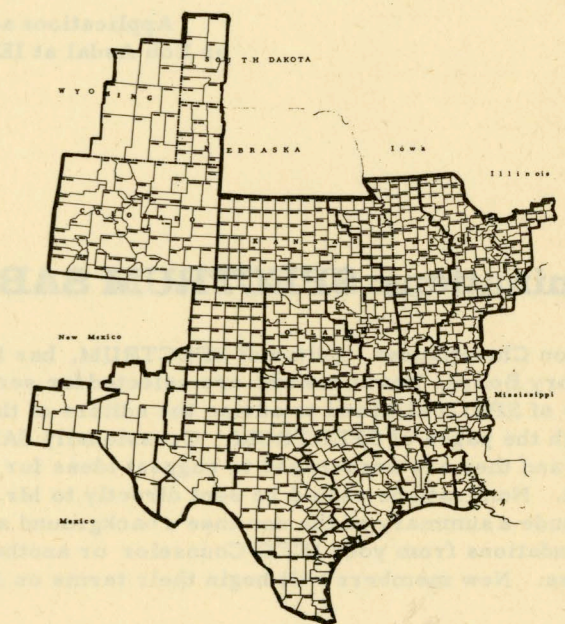
Urbana Kickoff

Over 125 Students attended the first meeting of the year at the University of Illinois Student Branch (Urbana Campus) to hear Dr. W. Farris discuss the function and structure of IEEE. Dr. Farris is currently Associate Dean of Engineering at the University of Michigan, a University of Illinois alumni and formerly a member of IEEE's Board of Directors. Placing emphasis on IEEE's expanding role, Dr. Farris stressed that the Institute's future leadership rests with its current Student members.

Outspoken on professionalism in engineering, Dr. Farris has authored an interesting career-related article, Engineers or 'ingenors'?, which appeared in the March 1973 issue of SPECTRUM.



IEEE REGION 5





THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

345 EAST 47TH STREET, NEW YORK, N.Y. 10017

"POSTMASTER: IF UNDELIVERABLE, DO NOT RETURN."

Non-Profit Org.
U. S. POSTAGE

PAID

New York, N. Y.
Permit No. 8021

RECEIVED
DEC 10 1973
AWARDS

IEEE STUDENT NEWSLETTER is published quarterly during the academic year by the Institute of Electrical and Electronics Engineers, 345 East 47th Street, New York, New York 10017. Material may be reproduced without permission, although credit to the source is appreciated. Annual subscription: IEEE Student Members, included in membership dues; other IEEE members \$3.00 (single copy \$1.00); all others \$6.00 (single copy \$2.00). Change of address requires thirty day notice to IEEE.

The Editor welcomes contributions from Student Branches, Student Members, IEEE Organizational units, and other sources. Editor: Robert K. Asdal.

New Members: Everybody's Business

New members are the life blood of any organization. It's a very simple go or no go situation. There is a constant influx of new members and the organization grows and prospers. New members fall off, the organization ceases to grow.



It's just that simple.

You are IEEE's best recruiter. New members result from one-on-one relationships. Discuss the benefits of membership with a friend and encourage him or her to become a Student member of IEEE.

Applications are available from your local Branch or Bob Asdal at IEEE Headquarters.

Nominations: SPECTRUM SAB

Don Christiansen, Editor of SPECTRUM, has issued a call for nominations to the SPECTRUM Student Advisory Board. Nominees who are selected for service on the Board should be prepared to carefully review issues of SPECTRUM and to advise the editors of the magazine on current Student needs which might be met through the pages of SPECTRUM. Occasionally SAB members will be asked to participate in Student surveys, and they are encouraged to suggest ideas for surveys or other projects for consideration by SPECTRUM. Nominations should be sent directly to Mr. Christiansen at IEEE Headquarters. It is advisable to include a summary of the nominee's background activities and accomplishments as well as a letter of recommendations from your IEEE Counselor or another IEEE faculty member in order to help in the selection process. New members will begin their terms on January 1, 1974.