

MISSOURI ALUMNUS

SEPTEMBER-OCTOBER 1971

engineering

Professors Write Construction Text

Two faculty members are joint authors of the textbook, "Construction and Professional Management," recently published by the University of Oklahoma Press.

They are Professor Emeritus Harry Rubey and Professor Walker W. Milner, civil engineering.

The new book is described as the only comprehensive introductory text and general reference that covers all construction activities from the management viewpoint.

Rubey and Milner are also the authors of the third edition of "The Engineer and Professional Management," just published by the Iowa State University Press.

Graduate Student Wins Fellowship

Denis E. Fessler, BS EE '71 received the \$2500 Tau Beta Pi-3M Fellowship. Under the auspices of Tau Beta Pi, 11 companies from around the country

sponsor a young engineer's graduate study.

Fessler will do advanced work in power systems. He has already been introduced to some practical aspects of industrial power systems and energy consumption in the last two summers, when he worked in the electrical engineering department of an Army ammunition plant. Upon completion of his master's degree, Fessler plans to become a registered professional engineer and work for a large power company.

Society Discusses Nuclear Methods

Scientists and engineers from Germany, France, Israel, Canada, Austria, and England were expected at American Nuclear Society's national topical meeting, "Nuclear Methods in Environmental Research," on the Columbia campus in August. General chairman is Thomas F. Parkinson, chairman of the nuclear engineering program, and vice-chairman is Stanley R. Bull, assistant professor of nuclear engineering.

Nuclear methods in air pollution, water pollution, bioenvironmental studies, and mercury pollution, were discussed.

Professor Robert E. Jervis, University of Toronto, presented, "A Glimpse of Science in Mainland China." At an evening banquet, James T. Ramey, commissioner, U. S. Atomic Energy Commission, spoke.

Beauchamp Becomes MSPE President

The Missouri Society of Professional Engineers (MSPE) installed James M. Beauchamp, as president in June.

Beauchamp is professor of industrial engineering and director of continuing engineering education.

He came to Columbia in 1960 to join the department of industrial engineering. He is a registered professional engineer in Missouri and Connecticut and holds membership in three honorary societies from Lehigh University, Bethlehem, Pa.

His professional memberships include the American Institute of Industrial Engineers and the American Society of Engineering Education. Beauchamp has served as past president-elect, secretary, and vice president of the Missouri Society of Professional Engineers.

The 35th annual meeting of the statewide organization of the Missouri engineers was attended by approximately 300 professional engineers.

Blonde Engineer Plans MD Career

Sandy-blonde, slender, and an electrical engineer from the College of Engineering, University of Missouri-Columbia, she will soon be hanging out her shingle as "Ursula Wollschlaeger, MD.," with a probable specialization in neuroradiology.

Miss Wollschlaeger, BS EE '71, will work on the MS in bioengineering while enrolled in the School of Medicine, which she entered this fall.

She explains, "In the College of Engineering I've concentrated in electronics,

WHAT DO YOU THINK ABOUT THIS NEWSLETTER?

1. Would you like more news, less news, or about the same amount of news about:

	More	Less	Same
Students	_____	_____	_____
Faculty, administration	_____	_____	_____
Research	_____	_____	_____
Placement	_____	_____	_____
Alumni activities	_____	_____	_____
Curriculum, teaching	_____	_____	_____
Continuing education, conferences, workshops	_____	_____	_____

2. Would you like the newsletter to contain (check one only)

More short, newsy items _____
or
More longer features _____

3. This newsletter contains news only about Engineering. Would you also like to know some of the news highlights from the other schools and colleges on campus?

Yes _____ No _____

4. Comments

PLEASE FILL OUT THIS QUESTIONNAIRE, TEAR IT OFF, AND MAIL IT. NO POSTAGE IS NECESSARY. THANK YOU.

fabricating circuits and using amplifiers; I will need these skills for patient monitoring. The past four years have been spent learning pure electrical engineering technology. In medical school I will gain a biological education, then put the two together and enter a specialized branch of medicine, probably neuroradiology."

10 Students Win NSF Grants

Ten top students at the College of Engineering were awarded a share of \$3,998,860 in research grants given nationwide by the National Science Foundation, Washington, D. C.

Each student received \$600 support during his 10-week summer research project.

This year, 460 institutions submitted student research proposals to the National Science Foundation. Of this number, 251 U.S. colleges, universities, and nonprofit institutions received awards that enabled their undergraduate students to conduct essentially independent research programs. Many of the student projects concentrated in such areas as stream pollution, solid waste disposal, and air and water pollution.

Last Bade Brother Enters Engineering

Lynn R. Bade, 19, Warrenton, has enrolled for the fall semester as a freshman engineering student at the University of Missouri-Columbia. He is the fourth

Bade brother to seek a degree in civil engineering on the Columbia Campus.

Gary C. Bade, BS CE '67, is employed by the Mississippi River Transmission Corp., a gas pipeline concern in St. Louis.

Larry P. Bade, BS CE '70, is now in the army at Fort Hood, Tex.

Darrell D. Bade is a junior in civil engineering this fall.

"All of the Bade brothers have been excellent students," said Dr. Jack Morgan, assistant dean of the College of Engineering. "In addition, they worked summers for the same county surveyor to help pay their way through school."

Block Receives Nuclear Award

William L. Block, BS EE '71, received one of only four \$200 awards given annually to outstanding U.S. student scholars by the Nuclear Science Group of the IEEE (Institute of Electrical and Electronics Engineers).

They are presented in recognition of outstanding achievements in, and contribution to, the field of nuclear science and technology.

The research project on which Block's award was based is a feasibility study of a unique spectrometer, an instrument that uses a quartz piezoelectric crystal to monochromate and modulate a beam of neutrons. It could help design engineers identify the way neutrons interact with the specific materials used in the construction of reactors.

Alumnus Maps Communications Policy, Handles Tricky Issues, Projects Needs

From the Columbia Missourian

One of President Nixon's top advisers on communications matters is Dr. George F. Mansur, Jr.

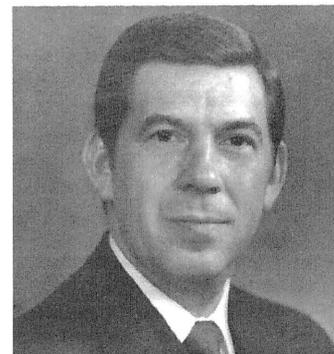
Mansur, BS EE '49, AM EE '56, is deputy director of the newly formed Office of Telecommunications Policy (OTP). Mansur will be trying to map out the government's policy toward such tricky issues as CATV development, frequency spectrum allocation and computer processing links.

Mansur's experience before joining OTP ranges from testing and developing radar fire control systems in the Army to managing the Apollo manned-flight communications system while at the Collins Radio Co. He also worked on the Polaris missile guidance system and was director of the microwave and space systems division at Collins.

Mansur says the OTP is starting to amass data so it can project this country's communications needs as much as 20 years in advance and plan now to meet those needs.

He believes CATV, for example, will become much more than a method of piping out-of-town stations into homes. It may eventually transmit newspapers and books by facsimile into the nation's living rooms, permit housewives to do their shopping and banking while remaining at home and even bring back the old New England town meeting.

One other problem which probably will engage OTP for



GEORGE F. MANSUR, JR.

many years is the tremendous traffic jam in the radio frequency spectrum.

Right now a battle is shaping up between the users of two-way radios, who want a share of the frequencies allotted UHF television stations, and the nation's broadcasters, wary of any encroachment on their domain. Two-way radio users advocate sending TV programs into homes by cable, thus freeing more of the spectrum for mobile two-way communications.

One area, which Mansur believes will have a tremendous impact on U.S. society, is the marriage of computers and data transmission systems.

Mansur says OTP would like to see an orderly development of both the common and specialized carriers.

Mansur says the OTP is investigating both the need and desirability of interconnections between common carrier communications existing now and those that may be provided by specialized carriers.

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