



STANTON C. APPLE

- ACADEMIC RANK:** Instructor of Engineering, Full-time.
- DEGREE:** B.S. Mechanical Engineering, University of Arkansas, Fayetteville, AR.
- YEARS ON FACULTY:** Instructor of Mechanical Engineering, Department of Mechanical Engineering, Arkansas Tech University, July 1989 to Present.
- INDUSTRIAL EXPERIENCE:** 1981-1989: University of Arkansas, Fayetteville, AR.
Nuclear Research Associate. Project responsibilities included pressure vessel cavity neutron dosimetry at three PWR's, development of counting and analysis techniques for niobium used as an activation monitor in cavity dosimetry, disposal of low-level radioactive waste using high-calcium fly ash, calibration of neutron detection instruments used in health physics surveillance, and coordinate the scanning electron microscope laboratory.
- 1980: Brown & Root Inc., Independence Steam Electric Station, Newark, AR.
Engineer - I. Responsible for the execution of a bolt-torque inspection program. The program included procurement of equipment, site selection, testing, and evaluation. Other responsibilities included inspection and course of repair design for construction damaged components.
- SUBJECTS TAUGHT:**
- | | |
|-----------------------------------|-----------------------|
| Engineering Graphics | MCEG 1002 |
| Statics | MCEG 2013 |
| Mechanics of Materials | MCEG 3013 * |
| Machine Dynamics & Vibrations | MCEG 3403 |
| Fundamentals of Mechanical Design | MCEG 3413 * |
| Mechanical Lab I | MCEG 3442 * |
| Basic Nuclear Engineering | MCEG 3503 |
| Radiation Detection Laboratory | MCEG 3512 * |
| Radiation Health Physics | MCEG 3523 (PHYS 3033) |
| Power Plant Systems | MCEG 4323 |
| Machine Component Design | MCEG 4423 |
| Mechanical Lab II | MCEG 4442 |
| Hydraulics & Pneumatics | TIPM 1103 |
| Energy and the Environment | SEED 6883 (PHSC 6883) |
- (* - Indicates course assignment for the Spring 2007 semester)
- RESEARCH AND OTHER DUTIES:** Radiation Safety Officer for the Arkansas Tech campus
Completed the disposition of the TRIGA 250 kW research reactor
Completed the disposition of the 14.3 MeV Neutron Generator

**SCIENTIFIC AND
PROFESSIONAL
SOCIETIES:**

Member of the American Nuclear Society
Member of the American Society of Mechanical Engineers
Member of the Society of Automotive Engineers

**FACULTY
IMPROVEMENT
ACTIVITIES:**

Have served as the Arkansas ASME College Relations Chairman from
2004 - 2007
Served as the Chairman for the Arkansas Section of the American Society of
Mechanical Engineers for 2001 – 2002
Served as the Vice-Chairman for the Arkansas Section of the American Society
of Mechanical Engineers for 2000 - 2001

PUBLICATIONS:

J.L. Krohn, S.C. Apple, "Energy and the Environment: An Energy Education
Course for High School Teachers", ASEE Annual Conference, Nashville, TN,
June 2003.

(Awarded Best Paper Award: Energy Conversion & Conservation Division)

J.L. Krohn, S.C. Apple, "Energy and the Environment: An Energy Education
Course for High School Teachers", ASEE Midwest Section Meeting,
Manhattan, Kansas, April 2001.

S.C. Apple, L.M. Hodgson, R.R. Culp, C.O. Cogburn, J.N. Miller, "Pressure
Vessel Neutron Dosimetry at Arkansas Nuclear One: Past, Present, and Future",
7th ASTM-Euratom Symposium on Reactor Dosimetry, Strasburg, France,
1990.

(Awarded winner of the Poster Session Presentations).

L.M. Hodgson, S.C. Apple, R.R. Culp, C.O. Cogburn, J.N. Miller, "Niobium as
an Ex-Vessel Neutron Dosimeter for PWR's", 7th ASTM-Euratom Symposium
on Reactor Dosimetry, Strasburg, France, 1990.

H.S. Hajghassem, J.R. Yeargan, W.D. Brown, J.G. Williams, S.C. Apple, C.O.
Cogburn, " Effects of Neutron Radiation on Gummel-Poon Model Parameters
for Bi-polar NPN Transistors", 26th Annual IEEE Conference on Nuclear and
Space Radiation Effects, Marcos Island, FL, 1989.

J.G. Williams, C.O. Cogburn, L.M. Hodgson, S.C. Apple, E.D. McGarry, G.P.
Lamaze, P.J. Shima, J.W. Rogers, R.J. Gehrke, J.D. Gaker, P.J. Wheeler, "
Measurements of Fission Spectrum Averaged Cross Sections for the
 $^{93}\text{Nb}(n,n')^{93m}\text{Nb}$ Reaction", 6th ASTM-Euratom Symposium on Reactor
Dosimetry, Jackson Hole, WY, 1987.