

RICHARD M. RUBIN, Ph.D., P.E., Retired

Memphis, TN, USA

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PROFESSIONAL SUMMARY

Diversified professional (now retired) with experience in engineering, consulting, problem-solving, and teaching. Proven track record in radiation shielding, reactor physics, data analysis, mathematical concepts and computer programming. Considerable experience in changing environments and international exposure with working knowledge of German. Special strengths:

Strong communicator, written and oral Analytical problem solving
Recognized expertise in technical concepts "Can do" attitude

CONSULTING PROJECTS

Yankee Atomic Electric Company, Bolton, MA, Summer 1997, DORT RZ
Discrete Ordinates Calculations in support of the Connecticut Yankee Activation
Analysis Project.

Shonka Research Associates, Atlanta, GA, Spring 1996, QAD Point Kernel
Calculations.

ACCOMPLISHMENTS

- * Taught various courses in mathematics including algebra, calculus, differential equations, numerical analysis, statistics.
- * Conducted reactor physics analyses in support of Comanche Peak Steam Electric Station (CPSES). Various projects provided reactor physics data to LOCA and Transient Analysis Groups for reactor core reload safety analysis using NRC approved methodology.
- * Represented the TU Electric Reactor Physics Group on the CPSES Pressure Vessel Surveillance Capsule Analysis Project for CPSES Unit 1 and 2 first capsules. Responsible for review of the vendor's pressure vessel fluence calculations.
- * Represented the TU Electric Reactor Physics Group on the CPSES Spent Fuel Pool Reracking Project. Responsible for review of the vendor's spent fuel pool criticality analysis.
- * Developed and launched SIMULATE-3 based detector constant methodology for reactor power surveillance.
- * Performed benchmark analysis in support of the TU Electric Reactor Physics Topical Report and co-authored the report. Methodology was approved by the NRC.
- * Achieved performance award at TU Electric for developing methodology, recognized as resource expert.
- * Selected as member of TU Electric audit teams for internal audits as well as vendor audits.
- * Developed neutron and gamma-ray cross sections, performed discrete ordinates and Monte Carlo neutron and gamma-ray transport calculations for Department of Defense projects and for the Belgian BR3 reactor as part of the NRC's Pressure Vessel Dosimetry Improvement Program.
- * As external consultant, determined fission product inventories and dose rates from selected gamma-ray sources in support of post Three Mile Island shield design reviews for a West Coast electric utility company.

PROFESSIONAL HISTORY

RETIRED from Christian Brothers University, - Available to Consult!May 2002
CHRISTIAN BROTHERS UNIVERSITY, Memphis TN.....1996-2002
Assistant Professor
Mathematics Department
HILL COLLEGE, Hillsboro, TX..... Spring 1996
Instructor
Mathematics Department
TU ELECTRIC, Dallas, TX.....1985 - 1995
Senior Engineer
Reactor Physics, Nuclear Analysis and Fuel Management.
RADIATION RESEARCH ASSOCIATES, Ft. Worth, TX..... 1977 - 1985
Staff Engineer, Project Engineer
MISSISSIPPI STATE UNIVERSITY, Miss. State, MS.....1970 - 1977
Assistant Professor of Nuclear Engineering
TEXAS CHRISTIAN UNIVERSITY, Ft. Worth, TX..... 1978 - 1982
Adjunct Professor
Taught BASIC programming and Math.
UNIVERSITY OF TEXAS, Austin, TX..... 1987 - 1993
Lecturer "Techniques in Radiation Shield Analysis."

EDUCATION

B.S.E. Engineering, University of Michigan
M.N.E. Nuclear Engineering, University of Oklahoma
Ph.D. Nuclear Engineering, Kansas State University

COMPUTER SKILLS

COMPUTER CODES USED:

CASMO-3, PDQ, SIMULATE-3, QADMODG, GGG, ORIGEN, ANISN, DORT, DOTSOR, TIMEPATCH

PC SOFTWARE USED:

Microsoft Office (Word, EXCEL, PowerPoint), Maple, Paint Shop Pro Photo X2, Mozilla Firefox, Mozilla Thunderbird

INTERNET HOME PAGE: <http://www.rmrhome.net>

ADDITIONAL ACCOMPLISHMENTS

Registered Professional Engineer, Texas and Mississippi

American Nuclear Society:

Radiation Protection & Shielding Division, Past Treasurer, Past Member of the Executive Committee

General Chair of 8th International Conference on Radiation Shielding

Past Chair of North Texas and Mississippi sections.

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