

SPOTLIGHT ON "HIDDEN PHYSICISTS"

DR. RICHARD HIGGINS, QUANTUM TECHNOLOGIES, INC., FT. WALTON BEACH, FL

Dr. Richard Higgins, EurPhys, CPhys, PE, CRE, is the Director of Engineering at Quantum Technologies, Inc., which provides advanced R&D and testing services for NASA, Jet Propulsion Laboratory (JPL), Applied Physics Laboratory (APL), and other science/engineering laboratories and major aerospace companies around the country. Previously, he was a Staff Engineer/Scientist at NASA/JPL and a Research Engineer/Scientist at APL. Dr. Higgins has published over 70 scientific articles in solid state/semiconductor physics and has given presentations at numerous conferences. He holds several national and international professional licenses and certifications and has been awarded a Fellow ranking at the Institute of Physics in the European Community. He was nominated into Sigma Xi, National Honor Society for Science Research. Dr. Higgins holds dual undergraduate degrees in physics and mathematics (Summa Cum Laude) with a minor in chemistry followed by a MSc in physics with a concentration in solid state physics. He continued his studies and went on to complete his PhD in physics with emphasis in theoretical and applied research in solid state/semiconductor physics at MIT.

STEPHEN E. INGRAHAM, GEOPHYSICIST, ENCANA OIL & GAS (USA), INC.

BS in physics, 1967, University of Arizona; ΣΠΣ, 1967 to the present. Continuing 36-year career using active seismic source data for subsurface imaging of earth properties. The oil and gas industry calls me an "exploration geophysicist." I especially enjoy "Elegant Connections" in *Radiations*!

JOHN J. MENNEL, RETIRED, TUCSON, AZ

"I have not been so much a 'hidden' physicist, merely a 'camouflaged' one. Although I am now retired, I have worked as a civilian for the

Navy for nearly 30 years and for Hughes/Raytheon for another seven. I have had such formal titles as Physicist, Research Physicist, Supervisory Research Physicist, Electronics Engineer, General Engineer, Supervisory General Engineer.... Most of my work has been in exploratory or advanced development of avionics (aviation electronics), in particular radar and missile guidance, with a liberal dose of process improvement activities.

Even when working as an 'engineer,' I've felt that I have the heart and soul of a physicist. My education and background in physics has enabled me to work across classical disciplines such as aerodynamics, electronics, electromagnetics, mathematics, navigation, guidance and control, systems engineering, and data analysis/interpretation. It has also allowed me to converse cogently with experts in many areas and to integrate the information into practical applications. One of the most interesting tasks I've had was to apply fractal geometry concepts to discriminate between radar clutter resulting from rain and that resulting from chaff."

DONALD L. RITGERS, COMPRESSORS R US, INC., WOODSTOCK, GA

"I am not sure if I am a 'Hidden Physicist' but I can honestly say that I owe whatever successes I have gained in my professional career to the general teaching(s) of physics. Dr. Sallie Watkins and the University of Southern Colorado formed much of my value systems and passion for solving problems.

As the president of Compressors R Us, Inc., a refrigeration compressor re-manufacturer, I take great pride in the ability of our organization to pursue and solve business and technical problems. We are an ISO 9001:2000 registered firm, and we are passionate about satisfying our customers. Physics enters our business processes in a seamless fashion, and the basic elements of science are forever present in continuous improvement." (See Dr. Watkins' article, "Shall We Eschew the Right-Hand Screw?" *Radiations*, Fall 2002 — Editor) ♦

"Hidden Physicists"

One of Sigma Pi Sigma's greatest assets is its diversity. Stemming from a common interest in and aptitude for physics, our members have gone on to pursue a multitude of interesting and unusual career paths. Now, more than ever, we seek to draw on the wisdom and experience of our alumni.

With help from the American Institute of Physics, Sigma Pi Sigma is attempting to locate the names and whereabouts of people with BS, MS, or PhD degrees in physics whose careers have taken them away from the "traditional" physics community. We ask for your help in finding the universe of people

who are trained in physics—what they do and where they are. As the physics community faces new challenges and opportunities, we would like to engage these "hidden physicists" in the fellowship of physicists. Therefore, if you work outside the traditional physics community, please provide us with the following information. Also, if you know of others in similar situations, please encourage them to contact us. Several responses will be selected for publication in each issue of *Radiations*.

Material for publication must be received by February 15 for the spring issue, and by August 15 for the fall issue. ♦

Name _____ Position _____
Company _____
Address _____
Telephone _____ Fax _____ E-mail _____
Comments _____

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