For Immediate Release
March 1, 2016

John W. Poston, Sr. is Fortieth L.S. Taylor Lecturer

Dr. John W. Poston, Sr. has been selected to give the 40th Lauriston S. Taylor Lecture at the 2016 Annual Meeting of the National Council on Radiation Protection and Measurements (NCRP). The lecture, entitled *Radiation Protection and Regulatory Science*, will be the featured presentation at the 52nd Annual Meeting to be held April 11–12, 2016. The Lecture will be given in the Crystal Ballroom of the Hyatt Regency Bethesda, One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, Maryland at 5:00 p.m. on April 11, 2016. The lecture series honors the late Dr. Lauriston S. Taylor, the NCRP founding President (1929 to 1977) and President Emeritus (1977 to 2004). A reception sponsored by Landauer, Inc. follows the presentation and all are invited to attend.

In 1971, Dr. Poston graduated from the Georgia Institute of Technology (GIT) in Atlanta with a Ph.D. in Nuclear Engineering after receiving an M.S. from GIT in 1969 and a B.S. in Mathematics from Lynchburg College in Virginia.

Dr. Poston is a Professor in the Department of Nuclear Engineering and Associate Director of the Nuclear Power Institute. He has been at Texas A&M University since 1985 and served for 10 y as the Department Head. Prior to Texas A&M, he was on the faculty at the Georgia Institute of Technology and, earlier, at the Oak Ridge National Laboratory and the Babcock & Wilcox Company in Lynchburg, Virginia.

Dr. Poston was elected as a Distinguished Emeritus Member of NCRP in 2002 after serving 12 y on the Council. He served as *the Scientific Vice President for* Program Area Committee 3, *Nuclear and Radiological Security and Safety* from 2007 to 2014. John Poston chaired Scientific Committee (SC) 2-1 on Preparing, Protecting, and Equipping Emergency Responders for Nuclear and Radiological Terrorism; SC 2-2 on Key Decision Points and Information Needed by Decision Makers in the Aftermath of a Nuclear or Radiological Terrorism Incident; and SC 46-14, Radiation Protection Issues Related to Terrorist Activities that Result in the Dispersal of Radioactive Material; and has served as a member on 10 additional committees during his tenure included two annual meeting program committees.

He is a Fellow of the American Association for the Advancement of Science, the American Nuclear Society, and the Health Physics Society. He has received several honors including the Robley D. Evans Commemorative Medal from the Health Physics Society in 2005; the Loevinger-Berman Award in 2003 from the Society of Nuclear Medicine; the Glenn Murphy Award in 1996 from the American Society for Engineering Education; and he presented the First Annual Warren K. Sinclair Keynote Address at the NCRP 2004 Annual Meeting.

The 2016 Annual Meeting celebrates 52 years since Congress chartered the NCRP as the voice for radiation protection in the United States. The theme is "*Meeting the Needs of the Nation for Radiation Protection*." Registration is free. The L.S. Taylor Lecture and other sessions of the 2016 Annual Meeting are open to everyone with an interest in radiation protection, measurements, health and science.

The National Council on Radiation Protection and Measurements

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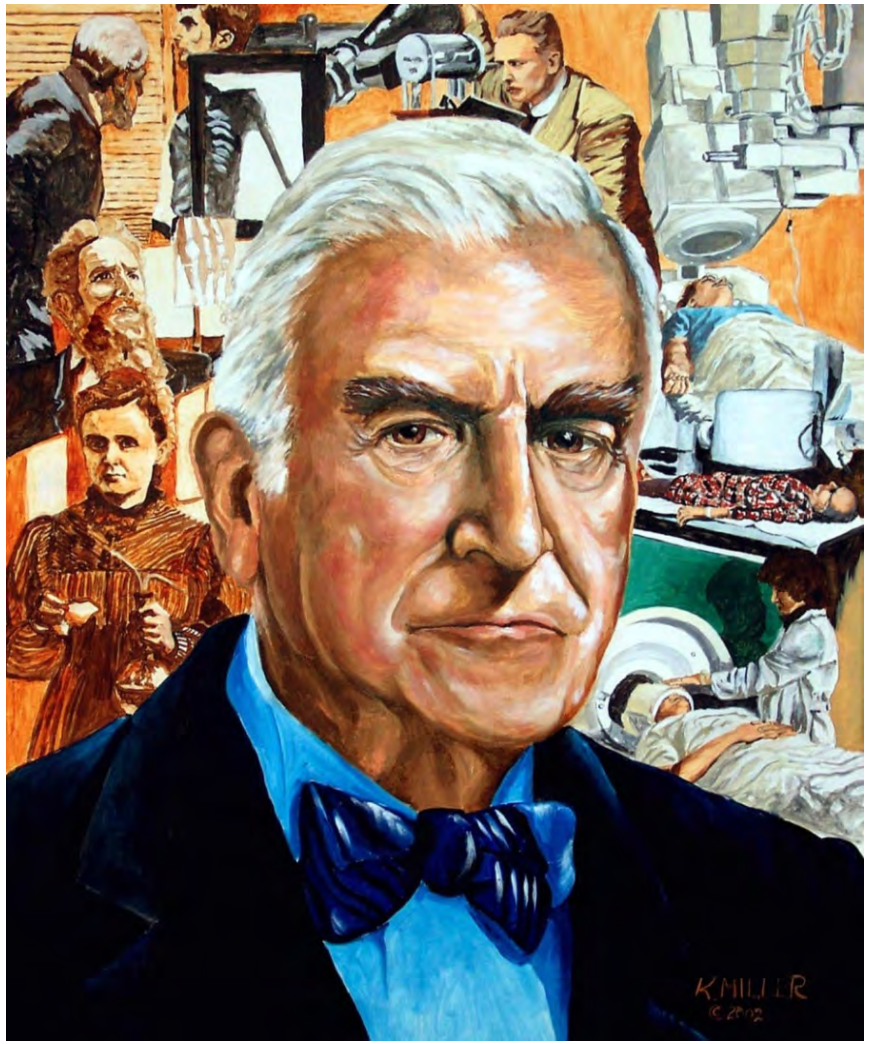
40th Lauriston S. Taylor Lecture

Lauriston Sale Taylor
1902 – 2004



Giants in the Field

Fred Mettler in his 2014 Taylor Lecture spoke about “the shoulders of giants.”

For the NCRP “the standouts were John Poston and Edith Quimby, who both had been on 12 committees!”

40th Lauriston S. Taylor Lecture

John W. Poston, Sr.

Radiation Protection and Regulatory Science

Introduced by
Mike Ryan

Radiation Protection and Regulatory Science

John W. Poston, Sr.

Professor

Department of Nuclear Engineering

Texas A&M University

41st Lauriston S. Taylor Memorial Lecture

April 11, 2016

NCRP Mission

- "……. to support radiation protection by providing **independent** scientific analysis, information, and recommendations that represent the consensus of leading scientists."

Emphasis added

Lord Ernest Rutherford

"That which is not measurable is not science.
That which is not physics is stamp collecting."

Professor Uchiyama

- “the science of optimizing scientific and technological developments according to objectives geared toward human health.”
- In essence, regulatory science is that science generated to answer political questions in terms of human health.

Dr. Alan Moghissi

- “Regulatory science is a scientific discipline consisting of the development and application of scientific methods, tools, approaches, and other relevant processes derived from various scientific disciples used in regulatory and policy decisions.”

Walter Claus

- “In short, it is just about all things to health physicists whose job is to provide protection against the potential hazards of radiation, while at the same time making it possible for the human race to enjoy all the benefits which may arise from the use of atomic energy.”

The Linear Nonthreshold

- “In conclusion, the weight of evidence, both experimental and theoretical, **suggests** that for many of the biological lesions which are precursors to cancer (such as mutations and chromosome aberrations) the possibility of a linear-nonthreshold dose-response relationship at low doses cannot be excluded.”

Emphasis added

Summary

- Let’s be mindful of the many impacts of making perhaps unnecessary changes to recommendations affecting the practice of radiation safety in the United States.
- Will there be a “net positive benefit?”

The Linear Nonthreshold

- “The existing epidemiological data on the effects of low-level irradiation are **inconclusive**, however, and, in some cases, **contradictory**.”

The International Commission on Radiological Protection

- "The Commission wishes to reiterate that its policy is to consider the fundamental principles upon which appropriate radiation protection measures can be based. **Because of the differing conditions that apply in various countries, detailed guidance on the application of its recommendations, either in regulations or in codes of practice, should be elaborated by the various international and national bodies that are familiar with their needs.**"

Emphasis added

The International Commission on Radiological Protection

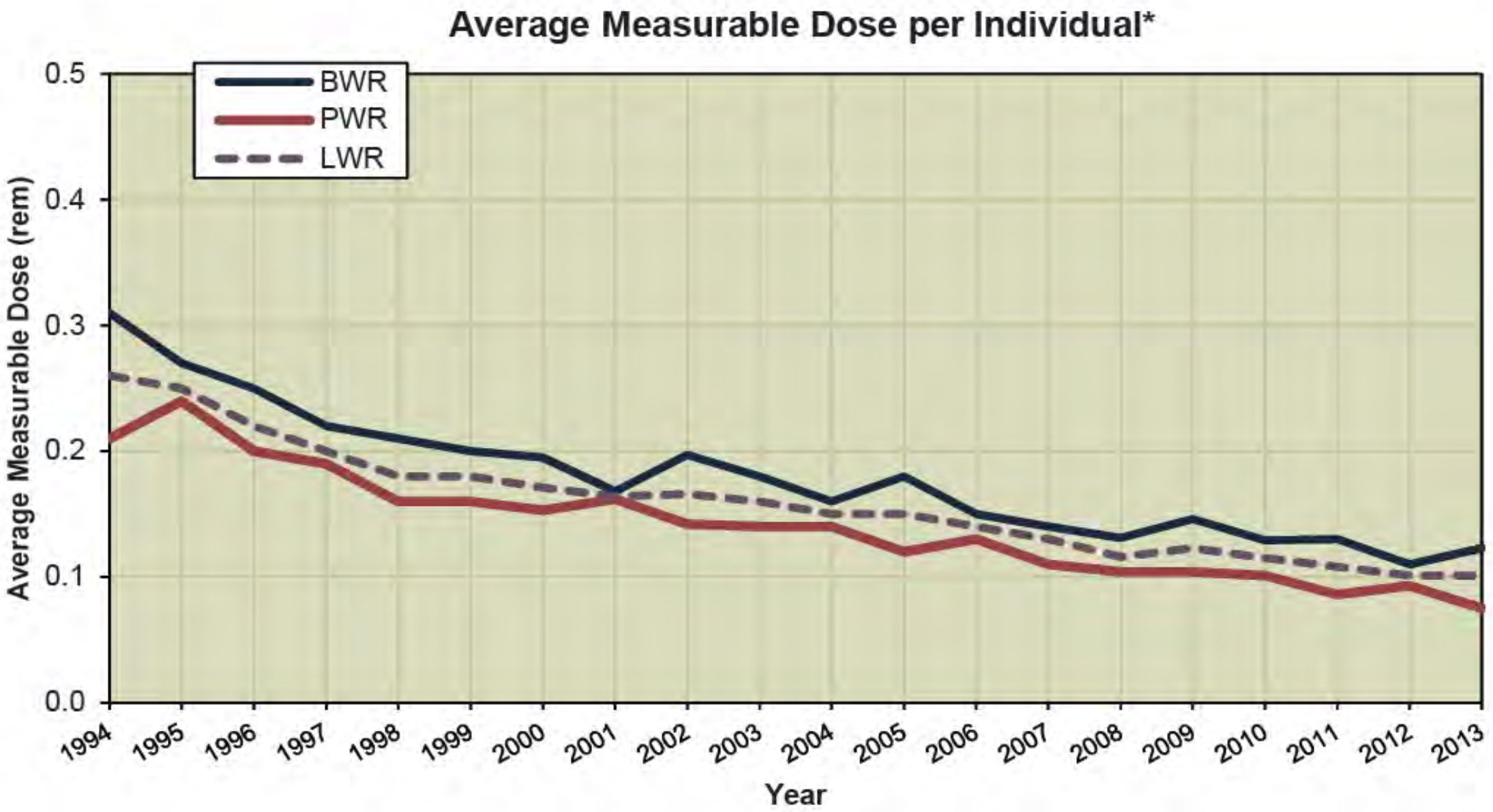
- “The Commission recognizes that the individual experts responsible for putting radiation protection into practice need guidance that is sufficiently flexible to allow for national, regional or other variation. For this reason, the Commission’s recommendations are intended to provide an appropriate degree of flexibility. **Because of this, the form in which the recommendations are worded will not necessarily be suitable, and may often be inappropriate, for direct assimilation into regulations or codes of practice.**”

The Nuclear Safety Culture

- "….. the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment."

The Nuclear Safety Culture

- There is a collective responsibility from top to bottom and no one is exempt from the obligation to ensure safety first. The watchword is, “a nuclear accident anywhere is a nuclear accident everywhere.”



* NUREG-0713, Volume 35