



Dr. David W. Riley

Dr. David W. Riley is Vice Chair of the Board of Directors and Past President of The American Institute of Chemists. Dr. Riley is also the founding President of Extrusion Engineers, specializing in plastic processing, polymer defect technology, and co-efficient friction in the feed section of the extruder. He has an illustrious career record starting at Goodyear Research as a research Chemist in the early nineteen forties. Then he moved on to the US Navy as Naval Officer, Deck, Watch and Small Boat Officer, Research Chemist at E. I. DuPont, Research Engineer at Union Carbide Silicones, Senior Development Engineer at Western Electric-Buffalo, Technology Manager at General Cable Research and Production, Friction Research Director at Scientific Process & Research, and Tenneco. Dr. Riley earned his doctorate in and Master's degree in Physical Organic Chemistry from The Ohio State University (1946-51), and Bachelor's degree in Chemistry from Tufts University (1943). He attended the Western Electric Graduate Engineering Training Center in Sun Times Building, Chicago. He is a Certified Chemist and Chemical Engineer by the National Certification Commission in Chemical and Chemical Engineering.



Dr. Riley's is an expert in the following areas - Expert Witness, Analytical Instrumentation Adaptation to Processing Equipment, Friction Analysis, Melt Rheology, Extrusion Equipment: Design & Analysis of Production, Telecommunication Cables and Insulation, Power Cables and Testing XLDPPE, all phases of PVC Compounding & Extrusion, Thermal Stability of Polymers, Surface Chemistry, Metals & Polymers, Polyethylene Analysis, and FTIR & Electrical. He has published in well-regarded journals on topics ranging from extrusion and Methods of Analysis, Friction Properties of Thermoplastic Solids, Rheology of PVC Blends for SPE ANTEC, Elongation Flow Behavior of PVC Melt to Shear Effects on the Molecular Structure of Polymers, PPS, and Problems with Extrusion.

Dr. Riley has invented/designed several noteworthy analytical methods as follows. He invented Analytical Engineering, a term devoted to a scientific analysis of production, primarily in the field of extrusion, and the Extrusion Rate Controller, which cut the product temperature variability by an order of magnitude on a 150 mm extruder, significantly improving the quality control in a \$40 million wire and cable facility. He designed an extruder screw that saved the wire and cable company \$360,000/year in production costs, invented the "Flow Vision", an instrument on-line for inspecting polymer melts for gels, voids, contamination and any other heterogeneity, and invented a rheological tool for measuring the degree of shear damage done to polymers during processing. This includes the level of fragmentation and the incipient crosslinking in processing as function of shear rate. He developed ASTM Methods for analyzing plastics, D 3364 Melt Flow Analyzer, D 3591 Analysis of Formulated PVC, D 5576 Structural Entities in Polyolefins by IR, D 5477 Polymer Layers or Inclusions by FTIR. (For details, visit <http://www.extrusionengineers.com/>)

Dr. Riley is an active member of several professional organizations. In addition to a leadership position at The American Institute of Chemists noted earlier, he is an Honorary & Life Fellow of the AIC, Fellow of the American Association for the Advancement of Science, Fellow of American Society for Testing and Materials (ASTM International), Emeritus Fellow of the Society of Plastics Engineers (SPE), Life Senior Member of the Institute of Electrical and Electronic Engineers, Emeritus Member of the American Chemical Society. Member, Society of Applied Spectroscopy, Member of the Society of Rheology, Distinguished Member, Past President and Past Councilor of the Palisades Section of SPE, Initiator & Past Councilor and Past Chairman and again Councilor of the Polymer Modifiers and Additives Division of SPE, Past Councilor for the Polymer Analysis Division of SPE, Section Chairman on Molecular Parameters & Spectroscopy for ASTM Committee D 20 on Plastics, Past Chairman, Subcommittee D 20.70 on Analytical Methods, Member for Forty Five Years ASTM Committee G02 on Wear and Erosion Terminology, Member of the American Institute of Chemical Engineers and Member of the American Society for Mechanical Engineers. He is a member of the Editorial Review Board of the refereed AIC journal *The Chemist*.

Dr. Riley is married to Barbara for twenty four years and previously married for thirty nine years. He has two sons, one daughter, three grandchildren and three great-grandchildren. He is an avid tennis player for over 88 years that includes playing No. 1 on the Tufts Team and No. 3 on the Swarthmore Team. He also enjoys golf. He enjoys spending time in Florida during winter and New Jersey during rest of the year. Overall, he is an outstanding chemist and a great mentor to junior colleagues.

Dr. E. G. Meyer

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There are a lot of stories (and jokes) about bikes and bikers. My favorite is: **You won't find a motorcycle parked in front of a psychiatrist's office.** And I believe that to be true. Life has many stresses, and one needs to be able to cope. For me riding in the mountains with a sack lunch to ward off hunger is perhaps the best way to cope, and I have employed this cure for many years.

At the start of my academic career, and well into my work career, there wasn't enough money to cover my needs and a motorcycle. But the day came in 1963 when I arrived in Laramie as Dean of the University of Wyoming College of Arts and Sciences. I was able to buy a 150cc kick-start Kawasaki.

Prior to that I had graduated (1940) from Carnegie Tech (now Carnegie Mellon University) and started graduate school. However, WWII caused a change of plans and I ended up in the US Navy. Actually this was a good experience (although it didn't seem so at the time), and provided lifetime benefits. The first was the GI Bill which helped immensely in my returning to graduate school and finishing my Ph.D. at the University of New Mexico in 1950. Having remained in



the active reserve (by necessity while in graduate school), I was not only able to add a few dollars to the bank account, but with 20 years of active and reserve duty I was “retired”, and hence became eligible for a pension and medical services. The latter was a great boon as the girl I met at Carnegie Tech and married acquired a lengthy and terminal illness in her later life.

Then there were the ten years at New Mexico Highlands University where I was much too busy (and too poor with a new family) for a bike. But those years were most valuable in that I learned not only how to initiate my own research program, but later how to administer a research institute and a graduate school. I also learned how to build campus buildings, and this proved to be the key to my being hired at the University of Wyoming.

At UW, I finally got the bike and it surely was important in coping. In 1963, UW was a very small state university (about 5000 enrollment) that, frankly, had to be near the bottom of state and land grant universities. The Arts and Sciences college in particular was overworked, had grossly inadequate facilities, and little character of its own. The campus filling station I called it, as its primary duty was to offer courses needed by the other colleges: agriculture, business, education, engineering, and health sciences. Despite generating about 65% of the student credit hours, the faculty numbered about 100. It took 15 years and many headaches (and lots of bike rides) to build the Science Center, the Fine Arts Building, and obtain and remodel buildings for the Humanities, the Social Sciences, and the new department of Computer Science. More headaches and more bike rides were needed to increase the faculty to 300 with quality people. Still more headaches and bike rides were needed to develop solid bachelor, master, and doctoral programs.

At the end of this time I was promoted (actually demoted, as there is no better a job in a multi-purpose university than Dean of Arts and Sciences) to Vice President for Research, a position that did not exist. To establish the University Research Office involved more headaches and more bike rides, but, as with building Arts and Sciences, it was most rewarding.

Then, of course, 1990 arrived and it was time to retire. But fortunately retirement meant moving on to other things. It meant a campus office with fund raising, committee service, and “advisory” duties. It meant more time for important organizations such as the American Institute of Chemists (50 years) and the American Chemical Society (75 years). It meant time to participate in civic activities, such as serving on the City Council and the Airport Board, and being involved with the Chamber of Commerce, the City Museum, the State Territorial Park, etc. And, of course, I had meant more time to ride the bike...to visit Sturgis, to attend the Harley Davidson 100th anniversary in Milwaukee, to ride through Alaska, and to enjoy nature. But that too came to an end two years ago (sold the bike) with the realization that nothing, regardless of how bad or good, lasts forever. It has been a wonderful ride.