



General Faculty Minutes

December 2, 2008

125 Civil Engineering Building, 4:00 P.M.

- I. Call-to-Order, Chancellor John Carney III called the meeting of the General Faculty to order at 4:00 P.M.
- II. Announcements – None
- III. Chancellor Carney recognized Professor Edward Hale for the presentation of the memorial resolution in honor of Robert H. McFarland, a brief story was shared by Chancellor Emeritus John Park; Professor Ashok Midha for the presentation of the memorial resolution in honor of Harry Sauer; and Professor Phillip Whitefield for the presentation of the memorial resolution in honor of Raymond Venable. It was moved that the memorial resolutions be incorporated in the minutes of the faculty meeting with copies forwarded to family members. The motion was approved. (see Attachments A, B and C).
- IV. Chancellor Carney called for the approval of the September 2, 2008 minutes. The minutes were approved as circulated.
- V. Unfinished Business – None
- VI. Reports of Standing or Special Committees – None
- VII. New Business
  - A. Approval of Candidates for Degrees. Motion was made that the names on the previously circulated list of candidates for degrees on December 20, 2008 be approved, subject to successful completion of any remaining degree requirements. The motion was approved.
  - B. Approval of Posthumous Degrees. Motion was made that a BA degree in History be awarded posthumously to Daniel Estel, a BS degree in Business and Management Systems be awarded posthumously to Joshua Roach, and a BS degree in Civil Engineering be awarded posthumously to Derek Medlock at the December 2008 commencement. The motion was approved.
  - C. Chancellor's Report  

Chancellor Carney invited everyone to attend his State of the University address, December 4, 2008, 12:00-1:00 in St. Pat's A & B of the Havener Center.
  - D. Faculty Senate President's Report  

No report.
- VIII. Adjournment – The meeting was adjourned at 4:32 P.M.

# Memorial Resolution

## Robert Harold McFarland Professor Emeritus of Physics

Robert Harold McFarland was born on January 10, 1918, near Severy, Kansas, four days after the family farm house was destroyed by fire. [Severy is a small town in rural Kansas which is about 60 miles east of Wichita and 60 miles south of Emporia.] In Emporia, he attended Kansas State Teacher's College (KSTC) and in 1940 was awarded both a B.A. in Physics and Mathematics and a B.A. in Education. While at KSTC, he played football, taught physics laboratories, was President of the junior class, and valedictorian. These early accomplishments were excellent indicators of the many accomplishments which were to follow in his later career both in science and at the academic and governmental administrative levels. In addition to his many notable accomplishments, his career is highlighted by his interest in many science and local projects, as well as the diversity in his career choices.

Shortly after graduating from college, Bob married Twilah Mae Seefeld, whom he met two years before in his college calculus class. This marriage lasted for 68 years.

Bob went to graduate school at the University of Wisconsin, Madison. He obtained his masters degree in Physics in 1943 and for a year he was a full-time instructor at the university. He then took a job in war time research for three years with Sylvania Electric Corporation where three patents resulted from his work relative to the erratic starting of fluorescent lamps. This work ultimately lead to development of rapid starting ballasts and lamps and their commercialization. In 1946 he returned to the University of Wisconsin and used his work at Sylvania to complete work on his Ph.D. in Physics one year later.

From 1947 till 1960 he rose through the ranks of faculty positions at Kansas State University (KSU) at Manhattan where he became Professor of Physics and Director of the Nuclear Laboratory, which he founded and ultimately involved forty-five people from various campus departments. While at KSU, he was supported by eight research grants awarded by several government agencies including the Atomic Energy Commission, Office of Army Research, and the National Science Foundation. These grants totaled more than one-half a million dollars. The first Ph.D. student in physics at KSU was his student.

In the spring of 1960, he was recruited by Edward Teller to an appointment at the Lawrence Radiation Laboratory, Livermore, California. He spent nine years at the Radiation Laboratory where he served as head of an atomic physics group working on atomic phenomena of importance to controlled fusion. He published several papers per year including a paper which explained a long standing problem on the puzzling aspects of polarization of electron-induced radiation from helium.

In March, 1969, Bob became the Dean of the Graduate School at UMR. He held this position for ten years. He made great efforts to improve the academic quality of beginning graduate students at the university, as well as the quality of graduate student dissertations. These efforts clearly increased the stature of a graduate degree from UMR. While serving as Dean, he was also an active member of the Council of Graduate Schools and in 1972 was appointed by the council for four years to the Graduate Record Examination Board. During this time frame he also served as a consultant to a number of universities regarding their graduate programs. These activities helped give UMR some needed national exposure. During the 1974-75 year he served in Columbia, Missouri, as Interim Vice-President for Academic Affairs for the four campus university of Missouri system. From 1979 to 1983 he was Director of Institutional Analysis and Planning at UMR.

During the 1980-81 year, "Mac" was a Visiting Professor at the Lawrence Berkeley National Laboratory where at the request of the Office of Fusion Energy he worked initially overseeing six graduate students on an atomic physics fusion project involving negative ion beams. His research efforts also involved resonant electron transfer and excitation. From 1982 to 1984, he took leave from UMR and was appointed Program Manager for Atomic Physics Research at the Office of Fusion Energy, Department of Energy, Germantown, Maryland, where he reviewed proposals for high energy physics research grants. Shortly after his return to UMR, he retired on January 1, 1985.

The McFarlands lived in Rolla for many years after retirement, but they moved to Neosho, Missouri, to be with their son and his family about five years ago. Dr. Robert McFarland died there on September 14, 2008, at the age of 90.

During his forty-seven year career in science, Dr. McFarland published more than 110 publications and was awarded six patents. He was affiliated with various professional societies including being a Fellow of both the American Association for the Advancement of Science and the American Physical Society. He also belonged to many academic honorary fraternities. In his resume in *Who's Who in America* was found the following:

"Continuation of the last hundred years of major progress in the quality of life for the human race will not only require the best of our educational systems and technological talents, but a sincere interest in all of us to contribute positively toward our collective well-being."

Bob contributed greatly to the local community. He was a long time member of Kiwanis and served in many roles including many club and division offices. He received Kiwanis Inter-national's greatest award — the Tablet of Honor. He was a loyal member of the Rolla Kiwanis Club, recruited many members to the Club, and was primarily responsible for the formation of the Rolla Kiwanis Breakfast Club. He actively supported the Boy Scouts and both his sons were Eagle Scouts. After his retirement, he and his wife, Twilah, started the University of Missouri-Rolla Retirees Association (now known as The Miner Retirees Association). He was President of this group for two years and served on the U-Wide retirees council. He restarted Rolla's AARP group. He was a board member of the United Way and the ABLE Commission.

Bob and Twilah have been blessed with two sons, Alan and Rodney, four granddaughters, and a grandson. Alan McFarland lives with wife Birgitt in Spokane, Washington, and Dr. Rodney McFarland and wife Kathy live in Neosho, Missouri.

It is requested that this Memorial Resolution be incorporated into the official minutes of the MST General Faculty Meeting of 2 December 2008, and that copies be sent to Robert's widow, Twilah, and to his sons Alan and Rodney and their families.

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Edward B. Hale

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John T. Park

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Joseph H. Senne

Memorial Resolution  
**Dr. Harry J. Sauer, Jr.**  
 (1935-2008)

Dr. Harry (Hank) Sauer, Jr., Professor in the Department of Mechanical and Aerospace Engineering, was born in St. Joseph, Missouri, on January 27, 1935, to Harry and Marie (Witt) Sauer. Hank was married to Patricia Ann (Zbierski) Sauer for 52 years. They were blessed with nine children, all graduating from the University of Missouri system. Six earned degrees from the University of Missouri-Rolla (now Missouri University of Science and Technology), four in mechanical engineering, one in metallurgical engineering and one in philosophy. Three graduated from the University of Missouri-Columbia with degrees in mechanical engineering, sociology and education. Hank & Pat have 26 grandchildren. He enjoyed gardening (daylilies), photography, sports, and was an avid reader.

Hank earned his Bachelor of Science and Master of Science degrees in Mechanical Engineering from Missouri School of Mines and Metallurgy (MSM) in 1956 and 1958, respectively, and his Ph.D. degree in Mechanical Engineering from Kansas State University in 1963. He is reputed to have had the longest association (nearly 52 years) with the institution known by its various names: Missouri School of Mines and Metallurgy, University of Missouri-Rolla, and now Missouri University of Science and Technology. He held various positions in Mechanical Engineering: Graduate Assistant (1956-1957), Instructor (1957-1959), Assistant Professor (1959-1960), Associate Professor (1962-1966), and Professor (1966-2008). He also served as a Research Associate at the SSRC Graduate Center for Cloud Physics Research (1970-1971), Associate Chair for Mechanical Engineering (1980-1984), and Dean of Graduate Study (1984-1992). Between 1963 and 1970, he served as a Senior Engineer and Consultant for the Midwest Research Institute in Kansas City, Missouri.

At the height of his career, Hank had developed two state-of-the-art laboratories: the *Heat Transfer Laboratory*, with Dr. John Sheffield, to study heat exchanger performance and two-phase phenomena (boiling, condensation, and phase-change thermal storage materials); and the *Thermophysical Properties Laboratory*, to study, measure and enhance thermophysical properties, thermal contact conductance/resistance, as in electronic packages, and soils, measured in-situ. Hank routinely taught all of the undergraduate required thermal courses, ME 219 (Thermodynamics), ME 221 (Applied Thermodynamics), ME 225 (Heat Transfer), and the elective ME 325 (Intermediate Heat Transfer). He frequently taught the popular electives ME 375 (Mechanical Systems for Environmental Control), an elective for Architectural Engineering students as well; ME 371 (Environmental Control), also a requirement for Architectural Engineering students; and occasionally ME 475 (Advanced Environmental Control).

Hank's research contributions in the fields of heat transfer; thermophysical properties; two-phase phenomena; energy conversion and conservation; heating, ventilating and air-conditioning (HVAC) systems; and indoor air quality (IAQ) are momentous, and have been recognized nationally and internationally, resulting in being selected as Fellow of American Society of Heating, Refrigerating and Air-Conditioning Engineers (1980), American Society of Mechanical Engineers (1990), and International Thermal Conductivity Conferences (1993). During his career, he received numerous regional and national ASHRAE technical and service awards, e.g. Award for "Best Research Technical Paper for 1974," Hermann F. Spoehrer Memorial Award (1979), Distinguished Service Award (1981), Presidential Award of Excellence (1990), Louise and Bill Holladay Distinguished Fellow Award (1999), Exceptional Service Award (2001) and Best Symposium Paper Award (2002). He received several UMR Faculty Excellence Awards (1992-93, 1993-94 and 1994-95), and in 2003, he was honored by the Missouri Academy of Science "Most Distinguished Scientist" Award.

Hank published more than 10 textbooks on subjects such as Environmental Control Principles, Engineering Thermodynamics, Heat Pump Systems, and several editions of Heating Ventilating and Air Conditioning, as well as numerous technical and research publications. His many professional affiliations included the Accreditation Board for Engineering and Technology (ABET), serving as a program evaluator for many years, National Society of Professional Engineers (NSPE), Missouri Society of Professional Engineers (MSPE), American Society of Mechanical Engineers (ASME), American Society of Engineering Education (ASEE), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Missouri Academy of Science (MAS), Sigma Xi, and more.

Hank's colleagues held him in very high regard. Dr. Ronald Howell, Professor of Mechanical Engineering at the University of Missouri-Rolla and his colleague and friend of 40 years, who later served and retired as Professor and Chair of the Department of Mechanical Engineering at the University of South Florida, said this of him: "Hank was completely dedicated to MSM and UMR and was always concerned about the reflection of his activities on the reputation of the institution. He and I coauthored a textbook on heating and air-conditioning which is now in its seventh edition. We also authored a text on heat pump systems. He was a thorough and meticulous researcher and author, never 'cutting any corners.' He always did things the 'right way.' Hank was also very active in

ASHRAE and was a dedicated member of national committees as well as local committees in St. Louis. He served unselfishly in many leadership positions in the society. Hank was a prolific author and dedicated teacher on campus as well as in delivering nearly fifty short courses around the country. He is greatly missed as a friend and colleague.”

At his funeral service on June 21, 2008, Hank’s son John presented a very moving eulogy. We take the liberty to present a few excerpts below:

“He was organized, an ‘everything in its place, everything labeled’ kind of guy. He built a house on the top of a hill, designed it himself, and poured extra thick basement walls. He was a solid foundation kind of guy.”

“But the essence of Hank Sauer was he was a teacher and he was a man with values. Those values defined him. His values were consistent, in fact they were rigid. When given choices, when reaching a fork in the road, he predictably responded consistently.”

“Last Saturday, after meeting with his doctors, Dad, Grandpa held court. He had a lesson plan. He was not bitter, he was not quiet, rather he did what he did best. He taught. Energy is neither created nor destroyed. The first law of Thermodynamics. How do I know that? Because on that afternoon, with his wife, Pat, of 52 years, in-between stories, questions to grandkids, and an afternoon of wonderful family camaraderie, we learned about the Zero Law, as well as the First, Second and Third laws of thermodynamics. Dad finished his chapter, and he finished his course.”

The above thoughts describe Hank Sauer, the man, very well. He was a very forthright and honorable man who brought a superior sense of integrity, productivity, loyalty and duty to all his endeavors, personal and professional. As he had desired, Hank passed away “in his boots,” while still in active service to Missouri S&T, on Tuesday, June 17, 2008, at the age of 73. At its annual induction banquet during the Homecoming weekend, the Academy of Mechanical and Aerospace Engineers (AMAE) posthumously accorded Hank high honors by inducting him as an honorary member. He will be missed.

We request that this memorial resolution be incorporated into the official minutes of the Missouri University of Science and Technology General Faculty Meeting of December 2, 2008, and that copies be sent to Professor Hank Sauer’s wife and children.

Ashok Midha, Professor and Chair

Department of Mechanical & Aerospace Engineering

John W. Sheffield, Professor  
Department of Mechanical & Aerospace Engineering

Bassem F. Armaly, Curators’ Professor  
Department of Mechanical & Aerospace Engineering

Ronald H. Howell, Retired Professor and Chair  
Department of Mechanical Engineering  
University of South Florida

Harry John Sauer III, Partner  
Edward Jones

Memorial Resolution  
**Raymond L. Venable**  
Associate Professor Emeritus, Chemistry

Raymond Leslie Venable, 72, passed away at his home in Rolla on May 24, 2008. Raymond was born on August 27, 1935 to Lester Purcell and Nancy Elnora Hope Venable near Carthage, Arkansas. Raymond married his wife, Veda Glendene Zumwalt, on December 21, 1953 at Magnolia, Arkansas. Their marriage was blessed with five daughters.

Raymond received a B.S. in chemistry in 1955 from Southern State College (now Southern Arkansas University) in Magnolia, AR. He received his M.S. (1958) and Ph.D. (1963) in chemistry from Louisiana State University in Baton Rouge, LA. In the 1950's, he was a research chemist for Texaco in Bellaire, TX. After a post-doctoral fellowship at the University of Texas in Austin, he joined the chemistry faculty at UMR (now Missouri S&T) in 1964. He taught freshman and physical chemistry. His research was in the area of surface chemistry. He was a fifty year member of the American Chemical Society. He was an active member of Sigma Xi, the scientific research society, and served a term as president of the local chapter.

Raymond accepted Christ as his Savior as a youth. He taught Sunday School for many years at Parkview Missionary Baptist Church in Rolla. He was an active member of the Rolla Gideon Camp until his health kept him from participating.

Survivors include his wife of 54 years, Glendene; five daughters, Fran and husband, Kelvin Erickson, of Rolla; Brenda and husband, Richard Williams, of Clarkson Valley, MO; Ramona Venable and husband, Richard Kaczmarek, of Fishkill, NY; Lisa and husband, Ty Teuscher, of Eureka, MO; and Theresa and husband, Dave Counts, of St. Louis, MO. He is survived by 11 grandchildren, Esther Erickson of Wettingen, Switzerland; Nathanael Williams of St. Louis; David Erickson and wife, Amanda, of Ft. Worth, TX; Nicole and husband, Victor Pacheco, of St. Louis; Jonathan, Andrew, Abigail and Matthew Teuscher of Eureka; Hayley, Morgan, and Kayla Counts of St. Louis. Also surviving is one sister, Grace Thompson, of Orange, TX and many other relatives.

Raymond is now in heaven with his parents, his brother, Bernard Venable, and a host of extended family members.

We request that this memorial resolution be incorporated into the official minutes of the Missouri S&T General Faculty Meeting of December 2, 2008 and that copies be sent to Dr. Venable's wife and daughters.

Respectfully submitted,

Gary L. Bertrand, Professor Emeritus, Chemistry  
Philip D. Whitefield, Chair, Chemistry