

September 21-22, 2022

ITEM 202-2005-R0922**Request for Authorization to Confer the Title of Professor Emeritus of Physics upon Dr. Rufus L. Cone; Montana State University**

THAT

Upon the occasion of the retirement of Dr. Rufus L. Cone from the College of Letters and Science at Montana State University, the Board of Regents wishes to express its appreciation for their service to the University, the Montana University System, and the people of the State of Montana.

EXPLANATION

Rufus' substantial and sustained contributions to his discipline and to MSU include major positive impacts on the education of MSU students, in several fields of physics and optics, on local economic development, and in bringing international recognition to his group and MSU. Rufus' 10 PhD graduates went on to careers in academia and industry, most as professors or researchers at major institutions. One of Rufus' PhD students, Dr. Randy Equall, is now a senior VP of FLIR and head of Bozeman's largest optics employer. Rufus' success in training of undergraduate and graduate students and post-Docs is due to his dedication, his strive for excellence, and the long hours he spent in the lab guiding his advisees.

Rufus' significant contributions and continued impact on science and technology are exemplified by his over 110 journal publications, with over 31 papers with more than 31 citations. Over 2/3 of his highest cited papers were published after 2000. The number of citations per year of Rufus' work has grown steadily over his career, with over 260 citations in 2020. Rufus' success comes from his ability to develop new scientific areas and contribute to multiple scientific fields from optical spectroscopy to optical and laser material development, applied microwave photonics, and, most recently, quantum information science and application. Rufus' group is recognized as the international leader in quantum memory material research, with multiple groups vying to collaborate with his group. Rufus' contribution to economic development in Montana has been substantial. Rufus' collaboration in the late 1980's with one of the first optics companies in Montana, Scientific Materials Corporation (now a division of FLIR), set the standard for strong academic-industry relationships. There are now over 40 optics companies in Bozeman, many founded or let by MSU grads, most with strong ties to MSU. Rufus was a major contributor to the start of both OpTeC and Spectrum Lab.

Rufus has been recognized for his academic and scholarly contributions locally and internationally. Rufus is a Distinguished Professor of Letters and Science and has been awarded the MSU's Meritorious Technology/Science Award and the Recognition of Research, Creativity, and Contributions to Economic Development award. He was the recipient of the 2017 George R. Stibitz Computer and Communications Pioneer Award (an international award presented by the American Computer and Robotics Museum) and is a Fellow of the American Physical Society. The MSU optics community has been enriched by the many international visitors Rufus has hosted in Bozeman, including several Nobel Laureates.

For these and other contributions, the Board of Regents of Higher Education is pleased to confer on Dr. Rufus L. Cone the rank of Professor Emeritus of Physics at Montana State University and wishes them well for many years in the future.

ATTACHMENTS

None