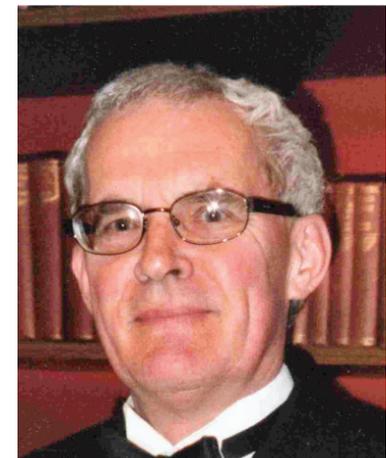


| Planned and Inadvertent Weather Modification Research at the Cloud and Aerosol Research Group at the University of Washington: 1963-2005 |

Personal Info

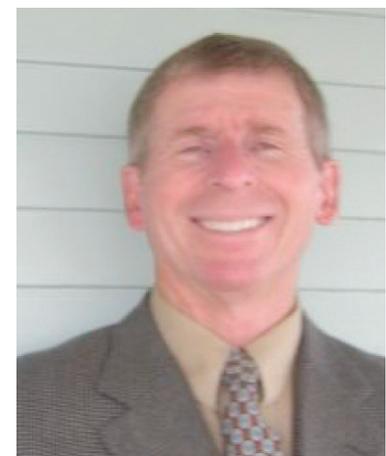
Peter V. Hobbs was born in UK (1936). He got B.Sc. and Ph.D. degrees in Physics from the Imperial College (London, 1960 and 1963, respectively). He was Director of the Cloud and Aerosol Research Group at the University of Washington since 1964 and full Professor at Department for Atmospheric Sciences since 1970. His principal research interests included: cloud and precipitation physics, cloud seeding, mesoscale meteorology, atmospheric chemistry and air pollution in which fields he has authored more than 300 research papers. *Hobbs* was member of numerous national and international scientific committees, e.g. United States Weather Research Program, the International Global Atmospheric Chemistry (IGAC) Project and served in the editorial Boards of scientific journals like *Journal of Applied Meteorology*, *Journal of the Atmospheric Sciences*. *Hobbs* has received numerous awards from American Meteorological Society, American Association for Advancement of Science and others. He was Vice President and member of the Executive Committee of the International Association of Meteorology and Atmospheric Science – IAMAS and was elected Honorary Member of the International Commission on Clouds and Precipitation of IAMAS. He passed away on 25 July 2005 already informed that is one of the winners of the UAE Prize.



Peter V. Hobbs
UK / USA

Hobbs frequent co-author Arthur **L. Rangno** was born in USA (1942). He has been with the Cloud and Aerosol Research Group (CARG) at University of Washington since 1976 and has filled the position of flight meteorologist or flight director on more than 700 research flights. He has co-authored several publications concerning cloud microstructure, and in particular, on the origins and concentrations of ice particles in clouds. He has looked closely “behind the scenes” of cloud seeding experiments published in the peer-reviewed literature and contributed to establishment of better seeding and assessments practices.

Peter Hobbs and Arthur Rangno’s research on weather modification set some much needed higher standards in the science of weather modification that persist today. Their research in cloud physics and cloud dynamics were the pioneering works that many other have adopted in their research work attempting to assess impacts of cloud seeding on precipitation reaching the ground.



L. Rangno
United States of America

Evaluators committee Citation

Prof. Peter Hobbs with **Arthur Rangno** (the Cloud and Aerosol Research Group at the University of Washington, Seattle, USA) **receive the UAE Prize in recognition of their conscientious application of physical principles to weather modification**

They brought to attention three major cloud processes which also influence the results of cloud seeding: the role of dust from remote regions of the world, the role of condensation nuclei released by paper mills and similar sources, and the modification of aerosol by cloud cycling. The Cascades Project was a leading experiment in its day for combining in situ observations, remote sensing and cloud modeling for assessing the precipitation enhancement potential in orographically induced clouds. Their re-analyses of other projects, even if still controversial, brought into focus the need and benefits of independent evaluation.

As one of the supporting letters said: " Peter Hobbs and Arthur Rangno's research on weather modification set some much needed higher standards in the science of weather modification that persist today. Their research in cloud physics and cloud dynamics were the pioneering works that many of us adopted in our research work in attempting to assess impacts of cloud seeding on precipitation reaching the ground."

The proposal to conduct further evaluations of advertent and inadvertent weather modification processes and findings can be expected to provide yet unexpected stimuli to the quest for understanding and improving of cloud seeding experiments.