

Mechanical Engineering Associate Professor J. Steven Brown Honored for Best Paper

A team of researchers from NIST and CUA (Associate Professor J. Steven Brown) have received the Best Paper Award for 2013/2014 from the *International Journal of Refrigeration*, the official journal of the International Institute of Refrigeration, for the paper:

McLinden, Mark O.; Andrei F. Kazakov; J. Steven Brown; Piotr A. Domanski. A thermodynamic analysis of refrigerants: Possibilities and tradeoffs for low-GWP refrigerants. *Int. J. Refrigeration* **2014**, *38*, 80-92.

The award, donated by Elsevier Ltd., publisher of the journal, consists of a cash prize of \$1500 and a certificate, which will be presented to the authors during the International Congress of Refrigeration in Yokohama, Japan in 2015.

The work reports the results of an exhaustive search for possible replacements for the current generation of hydrofluorocarbon (HFC) refrigerants, which are almost universally used in air-conditioning, refrigeration, and heat-pumping equipment, but which have high global warming potentials (GWP). As a result, a phase-down of the HFCs is almost certain, and the search for replacement fluids is one of the most urgent problems facing the refrigeration industry.