

Abstract Submitted  
for the GEC11 Meeting of  
The American Physical Society

**ICEcat: An on-line database for ion-neutral potentials and the transport properties of ions in gases** LARRY VIEHLAND, Chatham University — In 2010, the database for gaseous ion transport coefficients that I had been maintaining for many years was developed into a web-based system by Sergey Pancheshnyi and other researchers at LAPLACE, the Laboratoire des Plasmas et Conversion d'Énergie, a laboratory operated jointly by CNRS, the University of Toulouse and the Institut Polytechnique de Toulouse. The new system can be freely accessed at <http://www.icecat.laplace.univ-tlse.fr/>. This talk will give a brief history of the database before 2010, but the focus will be on developments within the last 18 months. The use of this database will be illustrated, in order to demonstrate the large number of data files already included and how graphical and tabular results can be obtained. Some future directions for improving the database will be indicated, and suggestions for improvement and new directions will be solicited from the audience.

Larry Viehland  
Chatham University

Date submitted: 13 Jul 2011

Electronic form version 1.4