



**Boulder, CO – July 23, 2010** – Tech-X Corporation invites you to visit us at our booth (Booth #508) at the [46th Joint Propulsion Conference and Exhibit](#), **July 25 - 28**, in **Nashville, TN**.

We are proud to present our electromagnetic plasma simulation software, [VORPAL](#). VORPAL can be used in the simulation of processes, devices, and physical systems related to plasma physics, thrusters, and dielectric barrier discharges, performed on computer systems ranging from desktops to Grand Challenge class high-performance computers.

Stop by the booth to see a demonstration of VORPAL. Our technical staff will be available at the booth and will be happy to discuss the details of how VORPAL might fit your modeling needs.

## **Personnel from Tech-X will be presenting:**

**Tuesday, 27 July @ 1330 hours**

**108-EP-15**

**Ion Thrusters III**

**AIAA-2010-6863**

### **Particle-in-Cell Model of the NEXT Ion Engine at Numerous Throttling Conditions**

M. Jonell, J. Menart, Wright State University, Dayton, OH; S. Mahalingam, Tech-X Corporation, Boulder, CO

**Tuesday, 27 July @ 1530 hours**

**133-EP-17**

**Hall Thrusters VI**

**AIAA-2010-6941**

### **Predicting Hall Thruster Operational Lifetime Using a Kinetic Plasma Model and a Molecular Dynamics Simulation**

Y. Choi, S. Mahalingam, J. Loverich, Tech-X, Boulder, CO

**Tuesday, 27 July @ 1530 hours**

**134-EP-18**

**Ion Thrusters IV**

**AIAA-2010-6944**

### **Dynamic Electric Field Calculations Using a Fully Kinetic Ion Thruster Discharge Chamber Model**

S. Mahalingam, Y. Choi, J. Loverich, P. Stoltz, Tech-X Corporation, Boulder, CO; M. Jonell, J. Menart, Wright State University, Dayton, OH