

Tech-X Corporation invites you to visit our booth (Booth #510) at the 47<sup>th</sup> AIAA Joint Propulsion Conference and Exhibit (<http://aiaa.org/content.cfm?pageid=230&lumeetingid=2424>), July 31 – August 3, at the San Diego Convention Center.

We are proud to present the latest release of our electromagnetic plasma simulation software, VORPAL (<http://vorpal.txcorp.com>). VORPAL 4.2.2 includes improved documentation, simplified installation on all platforms, additional collision models, import of user-defined secondary electron yield data, a new photoemission model, delta-F particles for modeling tokamak geometries, and new field updaters.

Personnel from Tech-X and/or their collaborators will be participating in the following activities:

**Session 61-EP-8: Ion Thrusters I**  
**Monday, August 1 16:30-18:30, Ballroom 29B**

**17:30 Off Design Simulation Results of Several Operating Conditions of the NEXT Discharge Chamber**, J. Menart, B. Bias, M. Jonell, Wright State University, Dayton, OH; S. Mahalingam, Tech-X Corporation, Boulder, CO

**Session 200-EP-22: Ion Thrusters III**  
**Wednesday, August 3 14:30-17:00, Ballroom 24B**

**15:00 Fully Coupled Electric Field/PIC-MCC Simulation Results of the Plasma in the Discharge Chamber of an Ion Engine**, S. Mahalingam, Y. Choi, J. Loverich, P. Stoltz, Tech-X Corporation, Boulder, CO; M. Jonell, J. Menart, Wright State University, Dayton, OH

**Session 202-EP-24: Hall Thrusters VI**  
**Wednesday, August 3 14:30-17:00, Ballroom 29B**

**16:00 Modeling of Hall Thruster Lifetime with an Axisymmetric PIC Model**, Y. Choi, S. Mahalingam, Tech-X Corporation, Boulder, CO