

INTRODUCTION

The 8th Spacecraft Charging Technology Conference was held in Huntsville, Alabama, October 20–24, 2003. Hosted by NASA's Space Environments and Effects (SEE) Program and co-sponsored by the Air Force Research Laboratory (AFRL) and the European Space Agency (ESA), the 2003 conference saw attendance from eleven countries with over 65 oral papers and 18 poster papers.

Presentation topics highlighted the latest in spacecraft charging mitigation techniques and on-orbit investigations, including:

- Plasma Propulsion and Tethers
- Ground Testing Techniques
- Interactions of Spacecraft and Systems With the Natural and Induced Plasma Environment
- Materials Characterizations
- Models and Computer Simulations
- Environment Specifications
- Current Collection and Plasma Probes in Space Plasmas
- On-Orbit Investigations.

A round-table discussion of international standards regarding electrostatic discharge (ESD) testing was also held with the promise of continued discussions in the off years and an official continuation at the next conference.

The Japanese Aerospace Exploration Agency (JAXA) offered to host the 9th Spacecraft Charging Technology Conference in Tsukuba, Japan, in the spring of 2005. (A separate presentation regarding the next conference is also included in these proceedings.) The Centre National d'Etudes Spatiales (CNES) will host the 10th Spacecraft Charging Technology Conference in Toulouse, France, in the fall of 2006.

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It is our hope that these proceedings will be of great benefit to you. In addition to the presentation papers, we have included a photographic history of the conference, comprised of a group photo, silhouette* of the attendees, and photos of the more casual, light-hearted moments.

We thank you for the opportunity to host this conference and look forward to seeing everyone again in Tsukuba in 2005.

Cordially,

The Staff of NASA's Space Environments and Effects (SEE) Program

* Special thanks to DPL Science, Inc., for their help in processing the photos and providing the silhouette.