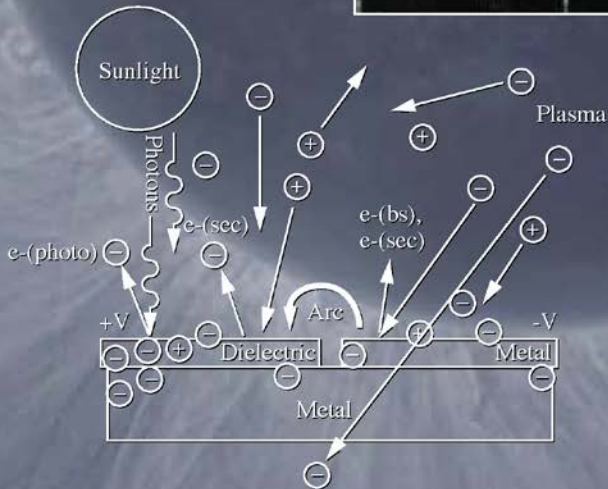


# SCTC 2014

## 13th Spacecraft Charging Technology Conference



**June 23-27, 2014 Pasadena, Ca**  
<http://sctc.jpl.nasa.gov>



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## **Introduction**

This is the 13th conference in the long series of SCTCs since the first one in 1976 in Colorado Springs. Over the years the sponsorship has varied from the military: US Air Force Geophysics Lab, Naval Postgraduate school, Air Force Research Laboratory (AFRL); to other governments sponsors: European Space Agency (ESA), US National Aeronautics and Space Administration (NASA), the Japan Aerospace Exploration Agency (JAXA), the French Aerospace Lab (ONERA), Centre National D'Etudes Spatiales (CNES ), and Laboratory of Spacecraft Environment Interactions Engineering at Kyushu Institute of Technology (La SEINE).

This background is interesting because most continuing conferences seem to have a major organization sponsor (IEEE, AIAA, etc.) while this conference has been maintained by separate organizations all bound by the common goal of advancing the technology of understanding spacecraft charging, cause and effects, and mitigating the adverse effects. We at JPL/NASA are pleased to be continuing the tradition established by our friends at other agencies and hope that the conference compares favorably with the tradition established by the prior sponsors.

This conference, while presented in the same format as the prior ones, has one change—due to requests by persons new to the field (mostly student attendees), a one-hour "Introduction to Spacecraft Charging" was put together by one of those who felt like she was drinking from a fire hose at her first SCTC –Dr. M. de Soria-Santacruz Pich.

Finally, we have been delighted with the overwhelming number of papers presented. This was truly a working conference!

With this introduction, we are pleased to present herein in electronic format the results of the 2014 SCTC.

Henry B. Garrett and Albert Whittlesey, co-chair persons.

Day	Pre-talks	AM 1st	break	AM 2nd	Lunch	PM 1st	break	PM 2nd	Evening/Notes
<b>M-F 8A-6P</b>	Regist. and Help Desk	Regist. and Help Desk	R & H	Regist. and Help Desk	R & H	Regist. and Help Desk	R & H	Regist. and Help Desk	EOD daily tag-up of Steering Committee
<b>Mon 23-Jun</b>	7:30 AM Reg., coffee	8:00-10:20 Intro to SC +5 Country Summaries	10:20- 10:40 20 min	10:40-12:00 I-2 Standards Env & Sim	12:00-1:30	1:30-3:25 I-3 Standards Des & Test	3:25-3:40 15 min	3:40-5:40 I-4 HV SA Plasma Interaction I	6:00-7:30 PM posters open
<b>Tues 24-Jun</b>	7:30 AM Reg., coffee	8:00-10:00 II-1 On-Orbit Investigation (A)	10:00- 10:20 20 min	10:20-12:00 II-2 Internal Charge Testing	12:00-1:30	1:30-2:50 II-3 Tethers-I	2:50 - 3:10 20 min	3:10-5:30 II-4 Misc Plasma Concerns	6:00-7:30 PM posters open
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<b>Thur 26-Jun</b>	7:30 AM Reg., coffee	8:00-10:00 IV-1 SC Charge Mitigation	10:00- 10:20 20 min	10:20-12:00 IV-2 Space Weather & Charging	12:00-1:30	1:30-3:10 IV-3 Charge Modeling (A)	3:10-3:30 20 min	3:30-5:30 IV-4 Charge Modeling (B)	6:00-7:30 PM posters open
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