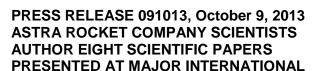


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CONFERENCE.

papers.

[Houston, TX For immediate release] – Five scientists from Ad Astra Rocket Company are in Washington DC. this week, at the 2013 International Electric Propulsion Conference representing the firm's Texas headquarters and its Costa Rican subsidiary on eight separate scientific papers relating to the VASIMR® technology. Each of these papers is either authored or co-authored by company personnel. The combined USA – Costa Rica team led by Ad Astra's Senior Vice President – Research, Dr. Jared P. Squire, includes Christopher Olsen, Matt Giambusso, Juan Del Valle and Jose Castro; all principal authors in five of the eight

The papers describe a wide range of applications currently being studied by the company for its 200 kW class VF-200 VASIMR® plasma rocket engine and present the latest results from its 200 kW experimental prototype, the VX-200. The company also provides the latest mass scaling estimates for a high-power flight engine, such as would be required for efficient large cargo transport in cislunar space; and a paper on near-Earth asteroid (NEA) capture and deflection explores the advantages of high power solar electric propulsion in enabling novel mission applications for asteroid capture and deflection. The eight papers are:

- 1. VASIMR® Spaceflight Engine System Mass Study and Scaling with Power. J. P. Squire, et al.
- 2. An Experimental Study of Plasma Detachment from a Magnetic Nozzle in the Plume of the VASIMR® Engine. C. Olsen, et al.

- 3. VASIMR[®] Solar Powered Missions for NEA Retrieval and NEA Deflection. A. V. Ilin, et al.
- A Plan to Study the Radiated Emissions from a VASIMR[®] Engine Exhaust Plume. M. Giambusso, et al.
- 5. The ISS Space Plasma Laboratory: A Proposed Electric Propulsion On-Orbit Workbench., E. A. Bering, et al.
- Measurement of the Dielectric Wall Erosion in Helicon Plasma Thrusters: an Application to the VASIMR[®] VX-CR Experiment. J. Del Valle, et al.
- 7. VASIMR® VX-CR Experiment: Status, Diagnostics and Plasma Plume Characterization. J. A. Castro, et al.
- 8. Plasma Adiabaticity in a Diverging Magnetic Nozzle. J. P. Sheehan, et al.

For downloadable pdf versions of the papers, please visit:

http://www.adastrarocket.com/aarc/Publications

ABOUT AD ASTRA

Established in 2005, Ad Astra Rocket Company is the developer of the Variable Specific Impulse Magnetoplasma Rocket (VASIMR®) engine, an advanced plasma space propulsion system aimed at the emerging in-space transportation market. Ad Astra also owns and operates Ad Astra Servicios Energéticos y Ambientales (AASEA) and Ad Astra Rocket Company, Costa Rica, respectively supporting research and development subsidiaries in the US and Guanacaste, Costa Rica. Through subsidiaries, the company also develops earthbound high technology applications in renewable energy, advanced manufacturing and applied physics. Ad Astra has its main laboratory and corporate headquarters at 141 W. Bay Area Boulevard in Webster, Texas, USA, about two miles from the NASA Johnson Space Center.

