Poster Session

Applications due May 20, 2013 – *Extended!! Due date now June 7th, 2013!* Final layouts due July 01, 2013

Conference Details

The 24th Thermal and Fluids Analysis Workshop, <u>TFAWS 2013</u>, sponsored by the NASA Engineering and Safety Center and hosted by the NASA Kennedy Space Center will be held July 29^{th} – August 2^{nd} , 2013 (dates are tentative) in central Florida.

This year's theme is:

Analysis Excellence from the Ground Up – and Beyond!

Information

TFAWS 2013 is proud to announce a Poster Session in addition to paper sessions and short courses. Poster sessions present the opportunity to display your research and technology achievements in a casual and conversational forum. Posters will be displayed at the Welcoming Reception on Monday, July 29th (tentative) and may remain on display around the venue common areas throughout the week of the conference. During the Welcoming Reception presenters should be available in the vicinity of their poster to explain their work and answer questions.

The poster session provides an excellent opportunity to display and exchange information, research, and programs in all areas of thermal and fluids. The following technical areas will be the primary focus of the conference:

Passive Thermal

- Passive thermal systems & control: design, analysis, build, and test for space and aeronautics
- Spacecraft thermal protection systems, ablative systems, plume impingement, ascent and entry aerothermal heating
- Radiative heat transfer, analytical and experimental approaches
- Studies related to MLI, coatings, thermophysical/optical properties, and surface finishes
- Ground test, manufacturing processes, and simulation
- Plume impingement effects on ground support elements
- Analytical model correlation to existing test or flight data

Active Thermal/Cryogenic Fluids

- Fluids systems and CFD: design, analysis, build, and test for space and aeronautics
- Active thermal systems and control: mechanical pumped fluid loops, heat pipes, methods for achieving variable conductance, thermal/fluid systems components, analysis, and testing
- Cryogenic fluids systems
- Water cooling thermal system at the launch pad
- Analytical model correlation to existing test or flight data

Aerothermal

- Aerothermodynamics: design, analysis, build, and test for space and aeronautics
- Aeroheating environments: ascent, on-orbit, re-entry
- Plume impingement, on-orbit contamination
- Free molecular heat transfer, analytical and experimental approaches
- Analytical model correlation to existing test or flight data

Interdisciplinary

- Multi-disciplinary problems: design, analysis, build, and test for space and aeronautics
- Integrated analyses of chemical reactions, electromagnetic interactions, micromechanics, structural motion
- Technology innovations, current and in-development
- Creating environments of inclusion to enable innovation
- Lessons learned
- Various fluid management and modeling techniques as applied to propulsion
- Vibration and acoustics in the launch environment
- Modeling or testing error approximation and verification/validation techniques

We are open to a broad range of topics related to thermal/fluid systems, so please contact us if you are unsure which category you fall under. Note that we prefer posters not be submitted for the purpose of advertising a software or hardware product or a company's features and capabilities. The intent is to present ongoing and accomplished work in support of a program or project.

Requirements

Submission of poster application: May 20, 2013 Notification of acceptance: May 29, 2013 Submission of final poster graphics layout: July 01, 2013

Application Submission Requirements

Poster applications must be a maximum of two pages in length (size 12 font minimum) and include:

- Author's name, phone number, email address, school/company affiliation (if any). Multiple authors are acceptable, but the primary contact for all communication should be clearly indicated
- Title
- Objective
- Description and results

Notification of Acceptance

Primary applicant will be contacted by email with further details on their acceptance to present a poster. Applicants must respond within 7 days to confirm their acceptance and ability to attend the poster session.

Final Poster Presentation Submission

Final posters should be submitted electronically in both the native file format as well as a PDF. The poster must contain the following at a minimum:

- Author's name, email address, school/company affiliation (if any)
- Title
- Objective
- Description and results

Display posters must be furnished by the presenter and be printed or affixed to a hard backing (foamcore, etc.) and be 30" by 40". Easels or wall mounts will be available to display posters.

Poster Presentation and Attendance

The TFAWS poster session will be held on the evening of July 29th, 2013 (tentative). Attendance to the entire conference is free and encouraged. The majority of the attendees will be from the aerospace industry including all of the NASA centers, industrial partners, and thermal/fluids software and hardware vendors. The poster presentation will provide a great opportunity to share your work and meet with aerospace industry personnel. Posters will be judged by a panel to award excellence.

Clearance/Copyright

Submitted work must be unclassified and approved for public release by the appropriate company, university and/or government agencies. Please allot time for this authorization process. Government employees are expected to complete Document Availability Authorization (DAA) paperwork. The submission must be original work from the author without any portion of the material infringing on any copyright.

Presenters will be required to fill out a "<u>Presentation Clearance & Permission to Publish</u>" form prior to their presentation. The form may be completed prior to TFAWS or upon arrival.

Contact and Submission Information

All submissions should go to the Poster Session Chair as well as any questions related to the poster session.

Poster Session Chair

Ryan Honour NASA Kennedy Space Center M/S VA-H3 Kennedy Space Center, FL 32899 321-867-4652

For a printable version of this call for posters announcement <u>click here</u>.