

## **Third Annual AIAA Greater Huntsville Section (GHS) Next-Gen Technical Symposium**

*By Nishanth Goli*

The Third Annual American Institute of Aeronautics and Astronautics (AIAA) Greater Huntsville Section (GHS) Next-Gen Technical Symposium was successfully held on October 24-26, 2018 at the Springhill Suites, Huntsville, AL. The symposium successfully brought together innovators, researchers, and engineers from all across the Southeastern United States, and shone a light on the technical challenges we all work to surmount each day. The symposium provided an opportunity for professionals and academia (post-graduate and above) to deliver a technical presentation to a group of peers and promoted opportunities for interaction (technical and non-technical) with senior professionals in attendance. As travel to national and international conferences tends to be difficult for Young Professionals (YPs), this was a unique opportunity for YPs in academia, industry, and government to present their work and identify opportunities for alignment and collaboration in a more local setting.



Next-Gen Symposium Attendees at the Opening Reception with Robert Lightfoot, LSINC President and former NASA acting Administrator

The symposium saw 96 participants that included 58 young professionals, 30 judges and mentors and 8 speakers. Prior to the symposium, five fundraiser/publicity events were held from June through September that saw a combined attendance of around 200 members. About 30 authors presented their research work on Space Exploration and Environments; Guidance,

Navigation and Control; Propulsion Systems and Architectures; Aerodynamics and Aeroacoustics; and Systems Engineering.

Similar to last year, the AIAA GHS worked together with the American Astronomical Society and NASA Marshall Space Flight Center. This collaboration led to the symposium attendees getting invited to a joint reception with the attendees of the Wernher von Braun Memorial Symposium (VBS) on the evening of October 24<sup>th</sup> at the Huntsville Museum of Art. Just prior to the joint reception, the symposium had an opening keynote address by Robert Lightfoot, LSINC President and former NASA acting Administrator, where Mr. Lightfoot shared with the audiences his lessons from leading NASA.

On day one, October 25<sup>th</sup>, of the symposium, a lunch keynote address was given by Julie Schumacher, KODA Technologies CEO/President and former Deputy to the Commanding



Julie Schumacher giving her keynote speech during Lunch on Day one of the Symposium

General USASMDC/ARSTRAT, on Leadership and Career Translation. A Next-Gen Manufacturing Panel was also organized with William West, Economic Development Project Director at Huntsville /Madison County Chamber, as the panel coordinator and Mike Clark, General Manager Manufacturing, Engineering, Maintenance at Toyota North America; Stephen Crow, Director of Mechanical Engineering at United Launch Alliance (ULA); and Judith Schneider, Professor at University of Alabama in Huntsville; as the panel speakers. The panel

discussed about the next generation of manufacturing that is changing how the industry operates and encouraged the young professionals in the audience to look forward to the future opportunities.

Day two of the symposium began with a morning Keynote address by Daniel L. Dumbacher, Executive Director, American Institute of Aeronautics and Astronautics, on 'Fail to Succeed'. Later that morning, Dr. Ryan Weber, Associate Professor and Director of Business and Technical Writing at UAH, conducted a workshop on 'Writing a Conference/Journal Paper'. The workshop discussed differences between a conference and journal paper, enlightened the audience about common writing mistakes, and understanding the reviewers mind. Participants also completed interactive exercises to sharpen their writing skills. The lunch keynote address was given by Col.(Ret) Bill Marks, II, Geocent, LLC - Vice President, Huntsville Operations & former Garrison Commander of Redstone Arsenal, on Values based Professionalism. The symposium was concluded by the Speed Mentoring Event where attendees could visit any of the eight tables for half hour each. Each table had leaders from various organizations who provided mentorship on

Innovation, Professional Societies, Advanced Concepts, Technical Leadership, Early Product Development, Professional Development, Commercial Space and Defense. After the symposium, the attendees later met at Inner Space Brewery for a closing social reception.



Next-Gen Manufacturing Panel Discussion by William West, as the panel coordinator and Mike Clark, Stephen Crow, and Judith Schneider (L-R)

The symposium provided a single venue that offered members an opportunity to participate in mentorship events, skill-development workshops, technical panel discussions, social receptions and listen to prominent leaders in addition to presenting technical presentations to their peers. The symposium combines these six different opportunities into one event which makes it truly an outstanding event. This hugely successful event was possible only due to the dedication of over 20 volunteers and their fundraising efforts and sponsorships from local companies. The symposium committee and the section council thank Jacobs,

Teledyne Brown Engineering, RadioBro Corporation and The University of Alabama in Huntsville for the kind sponsorships.