

# Overview

## Welcome to the Academic High-Altitude Conference!

In 2014, the AHAC will be held in the [John D. Odegard School of Aerospace Sciences](#) at the [University of North Dakota](#), located in [Grand Forks, ND](#). Each year, the AHAC has sought to expand its relevance to those working on the academic side of high altitude ballooning.

This year's conference will present talks that focus on:

- Executing high altitude research projects
- Developing operational capabilities for high altitude balloon flights
- Creating educational opportunities incorporating high altitude balloon flights

In addition to faculty and students in science, technology, engineering and mathematics (STEM) fields, education faculty are strongly encouraged to attend this year's conference as well.

## History of the AHAC

Since 2008, Taylor University and StratoStar Systems have hosted High-Altitude Balloon Workshops for professors through funding provided by a National Science Foundation grant. During these workshops, professors learned how to start their own balloon program using the High-Altitude Research Platform (HARP) and incorporate the balloon into the classroom.

In 2010, Taylor University created the Academic High-Altitude Conference (AHAC) in response to the desire of many of those participants to collaborate with other institutions and advance their programs. The Academic High-Altitude Conference is dedicated to the use of high-altitude platforms to advance STEM education and research. It is committed to fostering the exchange of ideas, discussing best practices and advancing the use of near-space to inspire students.

## Call for Papers, 2014

The committee for the 5<sup>th</sup> Annual Academic High Altitude Conference is proud to announce a call for papers for this year's conference, June 25-27<sup>th</sup>. Paper submissions are requested from professionals, faculty, staff and students that are involved in high-altitude ballooning in their respective programs. This year the conference will focus on the topics provided below. Authors are encouraged to submit papers for projects at all stages of development. **All abstracts must be submitted on or before March 15, 2014.** Full papers must be submitted by May 30<sup>th</sup> in order to be presented at the conference. Students who submit abstracts can also apply for travel funding.

## 2014 Conference Topics

### Research in High-Altitude Ballooning

- Meteorology and atmospheric science
- Physics and space science
- Environmental science and remote sensing

- Chemistry and biology
- Collaborative and cross-disciplinary projects

### Educational Opportunities in High-Altitude Ballooning

- Balloon flights in K-12 STEM education
- Balloon flights in core undergraduate courses
- Balloon flights in advanced lab courses
- Collaborations between the university and the public through balloon flights

### Technical Development in High Altitude Ballooning

- Launch systems and prediction tools
- Data logging and communications systems
- Real-time and programmable control systems
- Flight stability and return systems
- Tracking and recovery
- Engineering special mission requirements

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## Details and Registration

Registration is coming soon!

### Preliminary Conference Schedule

	<b>Mon – 6/23</b>	<b>Tue - 6/24</b>	<b>Wed - 6/25</b>	<b>Thur - 6/26</b>	<b>Fri - 6/27</b>
<b>A.M.</b>	Technical Workshop	Technical Workshop	Balloon Launch	Conference	Conference
<b>P.M.</b>	Technical Workshop	Education Workshop	Conference and Poster Session	Conference and Banquet	

### Technical Workshop

More details coming soon! Please take the workshop survey [here](#).

Workshop led by Matthew Nelson and Ron Fevig. For more information please contact Matthew Nelson at (515) 294-2640 or via [e-mail](#).

*Fee - \$100*

## Educator's Workshop

Learn how to incorporate high-altitude ballooning into the classroom! It's not as hard as it looks. Design and build payloads to be launched the morning of Wednesday June 25.

Workshop led by Caitlin Nolby and Marissa Saad. For more information please contact Caitlin Nolby at (701) 777-4856 or via [e-mail](#).

*Fee - \$25*

## Conference: June 25-27

Conference registration also includes select meals, snacks and a banquet dinner on Thursday June 26. Registrations after March 15<sup>th</sup> will have an additional \$25 late fee so register early.

- Students - \$100
- Faculty - \$200
- Vendors - \$300

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## Lodging

### On-Campus Housing

Those interested in on-campus housing will be staying in [Swanson Hall](#) on UND campus. This hall is air-conditioned and is located right next to UND's [Memorial Union](#). This is a great option for conference and workshop attendees to get the true UND experience and to save some money on housing. Housing registration is coming soon. *Single Room: \$38 or Double Room: \$40*

### Off-Campus Lodging

A block of rooms has been set aside at the [Hilton Garden Inn](#), connected to the John D. Odegard School of Aerospace at UND, where the conference will be held. For amenities and services offered by the Hilton Garden Inn, click [here](#). There is a special conference rate of \$91 per night plus tax for a block of rooms on a first come basis through March 15, 2014. (Note, the Hilton Garden Inn reservation page says to reserve your rooms by May 26, 2014, but any additional rooms in the reserved block will be released on March 16, 2014.) When making your reservation, please specify that you would like a room in the "AHAC" or "Academic High-Altitude Block" or reserve online [here](#).