



Highlights

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Newbriefs Spring 2013

<http://www.ceed.asee.org>.

Published at Michigan State University /Craig Gunn

Newsbriefs

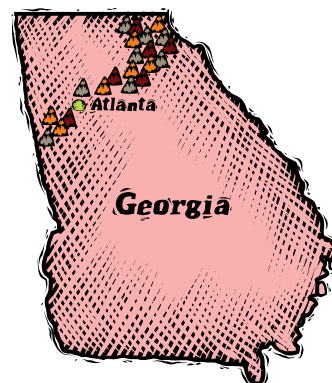
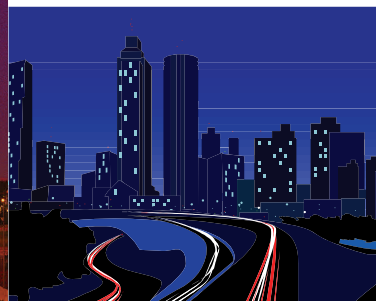
ASEE Annual - June 23-26

NEWS!

Join the members of CEED
for a number of many ses-
sions exploring CEED issues.
Atlanta awaits you!

News!

News!



Chair's Message

Dear CEED members:

Thanks for letting me have the opportunity to serve as Chair over the next year. My hope is that more and more of you will want to get involved further with our organization. As part of ASEE, we play a big role with more and more national emphasis on assessment and outcomes. For any of us who have completed any type of research on the impact of co-op and internships, well, we know the importance! I would urge you all to share your data and information through CEED.

For starters, our past Chair, Ilka Balk, put together a Directory of co-op programs. It is available for purchase at our website, which is <http://ceed.asee.org/>. This Directory will give you information on who has co-op programs, in which disciplines, how many participants, etc.

We will also be upgrading this directory as well as implementing an internship directory over the course of the next year or two. If you have suggestions, or wish to be a part of this endeavor, please let me know.

At our website you can also see our most recent award recipients. If you have a student, employer, or colleague deserving of an award, it is really not very difficult at all to nominate someone.

Thanks to Gayle Elliott, Louise Carrese, and Heather Oglethorpe for a really terrific conference in Phoenix earlier this year. We are looking forward to next year's conference in Savannah, Georgia! Joy Watson of University of Cincinnati will be our program chair, and she has already put out a call for papers.

Before our next CIEC, though, is our annual ASEE national meeting in Atlanta this June, 2013. If you have never been to a national meeting, I encourage you to come. There is something there for everyone, many interdisciplinary sessions, and of course a great CEED program chaired by Chris Plouff.

Be a part of CEED! Our board members are from so many different schools, industries, and geographic areas, but we all have one thing in common: Love of experiential education. I encourage you all to attend a conference, present a paper, or become part of a committee!

Maureen

Outgoing Chair's Message

Dear CEED members:

I would like to take a moment to thank you for allowing me to chair CEED this past year. It has been such a rewarding experience to lead this group of engaged and committed members. During the past year, we finished work on the Co-op directory. We were also able to share and enjoy wonderful presentations and papers at our annual ASEE conference in San Antonio and, most recently, at the Conference for Industry and Education Collaboration (CIEC) in the Phoenix area in February. Our division was the hosting division for the CIEC conference this year, and CEED clearly pulled out all the stops to make it a huge success – inside and outside of meeting rooms. The theme of “Engineering Education in an Era of Globalization” resonates with many of us, and many of our contributing presenters shared their experience in a globalized world with the attendees.

Thank you again for all of your support throughout the past year, and I am looking forward to being a past chair, and to support the division, as well as our current chair, Maureen Barcic.

Ilka

Come to ASEE—Atlanta

Looking for the latest on co-op and internship programs in engineering? Look no further than the ASEE Annual Conference taking place June 23-26 in Atlanta, Georgia! The Cooperative Education and Experiential Division (CEED) is providing an exciting program consisting of technical paper presentations on research in the areas of co-op and internships, and panels of experts sharing experiences and ‘how-to’s’ regarding international experiences and preparation for the workplace/graduate school. The conference is a great place to learn what others are doing and to network with colleagues and friends.

Atlanta will be the place to be this summer – you won’t want to miss it. Go to

<http://www.asee.org/conferences-and-events/conferences/annual-conference/2013> to learn more about the program and to register to attend. April 1 is the early bird deadline to take advantage of the lowest rates, so don’t delay! We look forward to seeing you in June,

Chris Plouff ASEE CEED Conference Chair plouffc@gvsu.edu 616.331.6017

**COOPERATIVE & EXPERIENTIAL EDUCATION
DIVISION/
ASEE EXECUTIVE BOARD ROSTER 2012 - 2013**

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And
YOU!

February 6-8, 2013
Phoenix, Arizona



February 2013 is
behind us...BUT...

The Memories linger forever!

CIEC 2013 went off without a Hitch and everyone was Spurred on to Lasso sessions, receptions, and free time to make the entire affair a fantastic event. From great speakers to deserving award winners to trips to the Ponderosa and an authentic ghost town, participants had a wonderful time experiencing the wild west and a few trips to the mall and Macy's. Lots of smiling faces!







Check out the full program for CIEC 2013

<http://www.asee.org/conferences-and-events/conferences/ciec/2012/program-schedule/2013-CIEC-final-program.pdf>

February 6-8, 2013
Phoenix, Arizona

CIEC

Engineering
Education in an
Era of Globalization

The Conference for Industry
and Education Collaboration



CIEC Awards 2013

CONFERENCE for INDUSTRY and EDUCATION COLLABORATION



2013 CIEC Awards Luncheon Program

Program

Opening Remarks

Ilka Balk
Chair of the CIEC Executive Board

2012 CIEC Conference Awards

Ken Rennels
2012 CIEC Assistant General Conference Chair

Julayne Moser
2011 CIEC General Conference Chair

Cooperative and Experiential Education Division Awards

Louise Carrese
CEED Program Chair

2012 CIEC Orlando, FL Conference Award Recipients

Continuing Professional Development Division

BEST SESSION: CPD 543 Operational Excellence in Professional Education: Assessing the Present, Sharing Good Practices, and Charting the Future

Moderator: Ellen Elliott, Johns Hopkins University

Presenters: Kim Scalzo, SUNY Center for Professional Development
Ed Borbeley, University of Michigan
Nelson Baker, Georgia Institute of Technology

BEST PRESENTER: CPD 444 Optimizing Group Projects for Practicing Engineers in an Online Environment: Lessons Learned

Wayne Pferdehirt, University of Wisconsin-Madison,

BEST MODERATOR: CPD 443 Vietnam Higher Engineering Education Alliance Program (HEEAP)

Rita Burrell, Mississippi State University

Cooperative and Experiential Education Division

BEST SESSION: CEED 323 Creative Job Development Strategies in a Slow Economy

Moderator: Louise Carrese, Rochester Institute of Technology

Presenters: Lorraine Mountain, Northeastern University
Karen Kelly, Northeastern University

BEST PRESENTER: CEED 521 Integration of Professional Skills and Academic Content during Co-op Semesters via Distance Learning Modules: Review of Results from a Pilot Program

Chris Plouff, Grand Valley State University

BEST MODERATOR: CEED 425 Introducing Engineering Students to the "Junior Game"

Naomi Powell, University of Alabama

College-Industry Partnership Division

BEST SESSION: CIP 432 The Challenges of Addressing IP and ITAR Issues in a University Setting

Moderator: Cath Polito, University of Texas-Austin

Presenter: Ranji Vaidyanathan, Oklahoma State University

BEST PRESENTER: CIP 333 The Role of Corporate Partners in Student and Graduate Success

Presenters: Bob Schwartz, Missouri University of Science and Technology

Henry Wiebe, Missouri University of Science and Technology

Sarah Bock, Covidien

BEST MODERATOR: CIP 331 Innovative Senior Project Program Partnering University/Corporate Partners

Beth Bryant, Georgia Institute of Technology

Engineering Technology Division

BEST SESSION: ETD 452, The Future of Engineering Technology: Dean's Perspective

Moderator: Ken Burbank, Purdue University

Presenters: Gary Bertoline, Purdue University

Jeff Ray, Southern Polytechnic State University

H. Fred Walker, Rochester Institute of Technology

BEST PRESENTER: ETD 454 A Hands-On Project to Improve Mechanical Analysis Skills: A Comparative Study

Jon Fischer, California Maritime Academy

BEST MODERATOR: ETD 454, Methods to Improve Instruction & Job Success in Engineering Technology

Walt Buchanan, Texas A&M University

Angie Hill Price, Texas A&M University

Cooperative and Experiential Education Division Awards

2012 Co-op Student of the Year

***Benjamin Ko
Biomedical Engineering
University of Cincinnati***



Ben Ko is a senior Biomedical Engineering student at The University of Cincinnati, where he has been named Engineer of the Month and nominated for the Herman Schneider Co-op Excellence award. Ben was the president of UC's Biomedical Engineering Society for two years, and he is currently involved with the College of Engineering's Faculty Curriculum Committee as the student representative.

Ben completed his three six-month co-op rotations at a Cincinnati company, AtriCure, which designs and manufactures medical devices for cardiac surgery. While there, Ben, as a member of a product development team, was given the opportunity to travel across the USA and to Europe to train surgeons, nurses, and sales representatives on how to use the company's new devices. He attended upwards of 40 open heart surgeries in which he played an active role. When he was in the AtriCure home office, Ben contributed to the design team by conveying Voice-of-Customer needs, performing analysis on device characteristics, and leading post-market surveillance for the Capital Equipment division.

"Ben embraced the opportunity to be the resident expert on the equipment and assumed the responsibility of educating the engineering team and sales force," says Keith Martin, AtriCure's Engineering Director. Thankful of his time at AtriCure, Ben writes, "Through my extensive co-op experience, I have been given the rare opportunity to truly know what I want to pursue with my degree in BME."

**CEED is proud to honor Ben Ko with the 2012
Student of the Year Award**

2012 Intern of the Year

***Kirk Barber
Motorsports Engineering and
Mechanical Engineering
IUPUI***



Kirk Barber was born and raised in California before moving to the Midwest at age 16. In 2008, Kirk graduated from high school with Academic Honors and subsequently enrolled in the Motorsports Engineering and Mechanical Engineering dual degree program at Indiana University Purdue University – Indianapolis (IUPUI). Kirk has truly made the most of his college experience. He served as a School ambassador, was involved in Motorsports Club, IUPUI Formula SAE Club, and the Purdue Grand Prix, and completed three internships.

Most recently, he interned at Allison Transmission for two summers, where he excelled as a member of the Off Highway and Electric Drive team. In his free time, Kirk enjoys spending time with family, friends, and his fiancée and also working on cars. Kirk has been involved with auto racing since the age of seven. His most proud accomplishments include publishing an engineering technical article, being a Top 100 student at IUPUI, and currently being recognized for his internship achievements with Allison Transmission.

**CEED is proud to honor Kirk Barber with the 2012 Intern
of the Year Award**

2012 Borman Award Winner

Gayle Elliott
University of Cincinnati



Gayle Elliott earned BS and MS degrees from University of Cincinnati, and is currently Associate Professor in the Division of Professional Practice. She is responsible for the University's International Co-op Program, and for placing mechanical engineering students in co-op jobs in the US. Initially part of the College of Engineering, Gayle has worked with the International Engineering Co-op Program since 1993. In 1998 she created and began working with similar programs in the Colleges of Applied Sciences, Business and the College of Design, Architecture, Art and Planning. She has extensive experience developing international exchange programs and is an active member in several international engineering education organizations and projects.

Gayle is General Conference Chair for the 2013 CIEC. She served as Assistant Conference Chair for the 2012 CIEC and CEED Program Chair for the 2010 and 2011 conferences. She is also a member of the ASEE International Division and will serve as Program Chair for the International Division at the ASEE annual conference in 2014. She is also a founding member of the Organizing Committee for the International Engineering Education annual colloquium.

"Gayle has dedicated her efforts to co-operative education, and her approach to expand the co-op experience into a global environment is not only unique, but she was clearly a trailblazer when she started this work 20 years ago; she has changed the way many of us look at co-operative education. Gayle has contributed strong service and leadership to CEED and also to the co-operative education and international engineering education community as a whole. Her list of presentations and accomplishments is substantial and includes local, regional, national, and international in the fields of engineering education and work integrated learning."

CEED is proud to honor Gayle Elliott with the 2012 Borman Award

2012 Lou Takacs Award Winner
Gary Pennell
NUCOR



Gary Pennell is Chief Metallurgist at Nucor-Yamato Steel Company in Blytheville, AR. He is an alumnus of Missouri University of Science and Technology (Missouri S&T), receiving his B.S. in Metallurgical Engineering in 1997. Gary,

himself being the first student to ever co-op with Nucor in 1996, has helped organize Nucor's corporate recruiting task force to increase Nucor's presence on the university's campus. This resulted in Nucor becoming one of Missouri S&T's top recruiters regularly, and in the 2011-2012 academic year, Nucor was the number one cooperative education employer of Missouri S&T students. Gary has led recruiting efforts in a number of ways. He has attended every career fair as well as going the extra mile to reach out to additional students on campus. He was a lead orchestrator in the organization of "Nucor Week" on the campus in September, 2011.

Gary has also been influential in providing important gifts to the university both individually and through Nucor. Through his efforts and support, Nucor Steel provided a \$2 million gift in 2006 to Missouri S&T's Materials Science and Engineering department to endow the F. Kenneth Iverson Chair of Steelmaking Technologies. This was the largest corporate cash gift in the school's history.

"In our collective 40 years in academia, we have never witnessed an alumnus who has collectively achieved so much in all areas of what a meaningful relationship with industry represents."

CEED is proud to honor Gary Pennell with the 2012 Lou Takacs Award

CEED Awards History

CEED Student of the Year Award

The Cooperative and Experiential Education Division of the American Society of Engineering Education (ASEE / CEED) annually recognize co-op and/or intern students for their outstanding performance at work.

Lou Takacs Award

This award honors Lou Takacs, a long-time employee of E. I. du Pont de Nemours & Company? who was a co-op student at Northwestern University. At Dupont, Lou recruited and supervised co-op students for many years, overseeing the successes of many young people from various schools across the country.

Upon his retirement from Dupont Lou joined the staff of the co-op office at the University of Kentucky where he worked until his death in 2003. Lou was a strong supporter of CEED, having served in many capacities, including Chairman and was a recipient of the Alvah K. Borman and Clement J. Freund Awards. This award began as the Corporate Recognition Award in 2003 and officially was re-named the Lou Takacs Award by the CEED Board.

Alvah K. Borman Award

This award honors Alvah K. Borman, Dean of Graduate Placement Services at Northeastern University, for his numerous outstanding contributions to engineering cooperative education over many years, including the founding and editorship of the CED Newsbriefs from 1969 until his death ten years later. The Division allows for the presentation of up to two awards each year to Division members, past or present, who have made sustained, honorable, and meritorious contributions to the promotion of the philosophy and the practice of cooperative education in engineering and/or engineering technology. Nominations are made in the fall of each year, with the award being presented at the mid-winter meeting of the CIEC. The award consists of a \$500 honorarium, a plaque, and a certificate of achievement.

Notes from the Treasurer:

1-Jan-13				
Description	Revenues	Expenditures	Beginning Balance	Ending Balance
Divisional BASS Account B				
12/1/2012 Balance			\$8,480.40	
November dues	\$126.00			
December dues	\$117.00			
Field unit - other revenue	\$9.81			
January 1, 2013 Balance BASS Account B				\$8,733.21
ASEE/CEED Operating Account				
January 1, 2013 Balance Operating Acct				\$193.00
Wells Fargo Business Account				
December 1, 2012 balance			\$26,830.08	
Check # 1075 - Terrence Green - Website	\$50.00			
				\$26,780.08
Balance Wells Fargo Business Account				
Balance- all accounts 1/1/13				\$35,706.29
Pledges/Accounts Receivable				
Pledge CIEC awards U Detroit Mercy	\$500.00			
Pledge CIEC Awards Miss State	\$500.00			
Pledge CIEC Awards U Cinn	\$500.00			

Michael Hodgson Wins the Joe T.LaBoon Award

Michael Hodgson (AE) is the 2013 winner of the Joe T. LaBoon Award, given annually to the most outstanding co-op senior at Georgia Tech. In his four terms with Gulfstream Aerospace Corporation, Michael worked in the Advanced Composites Research Group, Flight Test Engineering, Integration Test - the Simulation and Software Group, and Acoustics/Vibration Test. During his co-op experience, he received two Bronze Pride Awards given by Gulfstream for distinguished service. Michael has served as an outstanding DoPP ambassador and as a lead coordinator for the President's Scholarship program. He was the former president of Sigma Gamma Tau (the aerospace honor society) and is an active member of the Briaerian Honor Society (co-op honor society). He has been involved with numerous extracurricular activities while at Georgia Tech. After graduation, Michael will work full-time with Gulfstream Aerospace, where he plans to promote cooperative education from the employer side. Michael is a previous recipient of the National Merit Scholarship and the President's Scholarship. Congratulations, Michael!



(Who was Joe T. LaBoon?)

Joseph Thaddeus LaBoon (1920-1988), a respected civic and business leader, rose from an obscure background to finally become the chairman of the board of Atlanta Gas Light. While pursuing his degree in mechanical engineering at Georgia Tech, Joe co-oped several terms with Atlanta Gas Light. Throughout his career, he consistently credited the co-op program as a reason for his success. In 1988, Georgia Tech created the LaBoon Award in his honor.)

Look what you missed! Be sure to join us next year in Savannah!

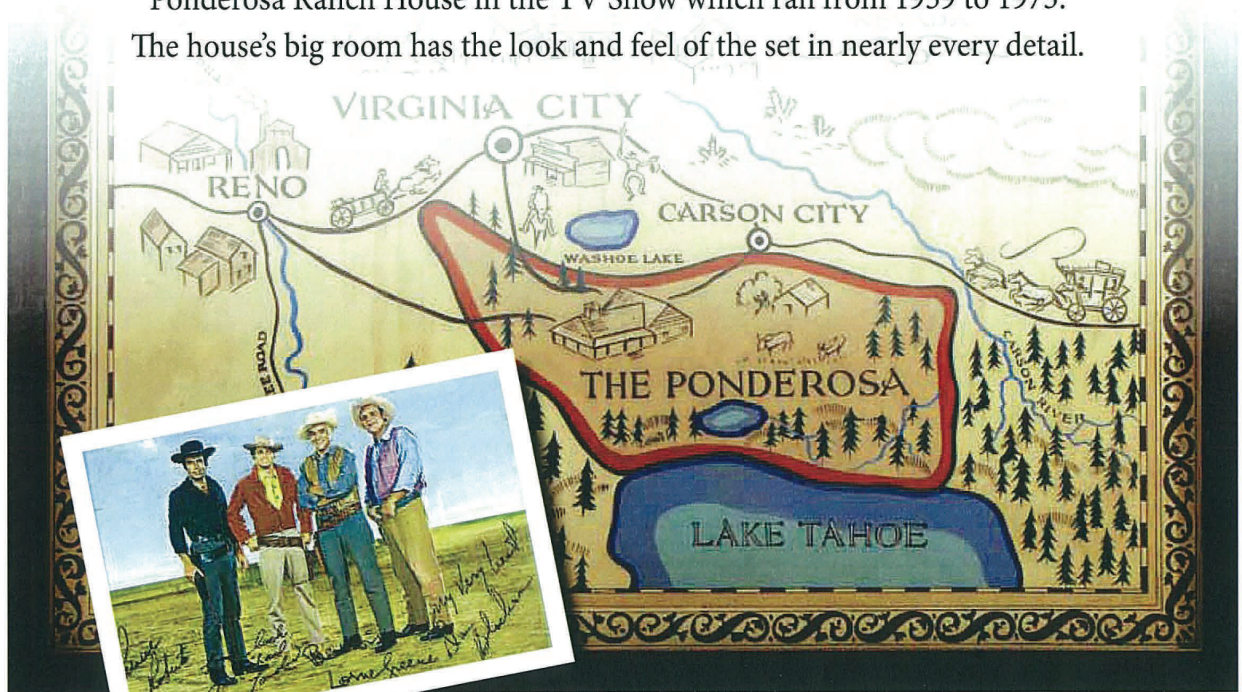
WE INVITE YOU TO JOIN US FOR THE

CIEC 2013 OPENING RECEPTION

AT THE PONDEROSA

Tuesday, February 5, 2013
6:30 pm – 8:00 pm

Enjoy a "Bonanza" experience like never before in the home built by Lorne Greene (played Ben Cartwright) in 1963 to look like the famous Ponderosa Ranch House in the TV Show which ran from 1959 to 1973. The house's big room has the look and feel of the set in nearly every detail.



"Hop Sing will be servin' his famous barbeque and fixin's. We hope you can make it . . . it'll be fun mixin'."

The Cartwrights

Western/cowboy attire and costumes are encouraged. Even come dressed as your favorite "Bonanza" character if you want, or just as someone in the show. Watch an episode of "Bonanza" (www.youtube.com) to get costume ideas.

Join us for a **BONANZA** good time at the

2013 CIEC OPENING RECEPTION

Ponderosa Ranch House

Tuesday, February 5, 2013

6:30 pm - 8:00 pm

Card & Rope Tricks performed by "Hop-Along Cedercreutz"

Hear the history of Lorne Greene's Ponderosa Ranch House

Enjoy the memorabilia from the Bonanza TV Show

Have your picture taken with the Cartwrights (bring your camera)

Bonanza Trivia Game

Deck of Cards and Poker Chips at each table

You are encouraged to wear western/cowboy attire and costumes.

*Hop Sing will be servin' his famous food and fixin's.
We hope you can join us... it'll be fun mixin'.*

*The Cartwrights -
Ben, Little Joe, Adam, & Hoss*

Watch the Mail for the June *Prism*!

Prism is going to include the history of cooperative education in the June issue. Take a look and make copies and pass it on to all your friends and acquaintances. 120 years of *Prism* and over 100 years of cooperative education.

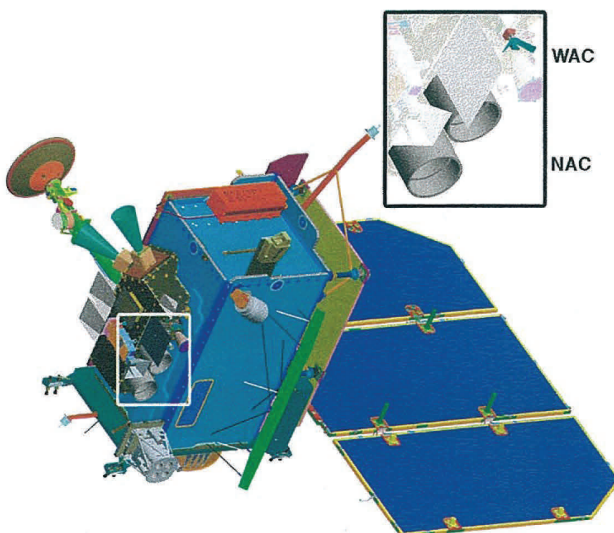




Project Overview

The **Lunar Reconnaissance Orbiter Camera (LROC)** is designed to address two of the prime LRO measurement requirements: 1) Assess meter scale features to facilitate selection of future landing sites on the Moon. 2) Acquire images of the poles every orbit to characterize the polar illumination environment (100 meter scale), identifying regions of permanent shadow and permanent or near-permanent illumination over a full lunar year. In addition to these two main objectives, the LROC team plans to conduct meter-scale mapping of polar regions, 3-dimensional observations to enable derivation of meter-scale surface features, global multi-spectral imaging, and produce a global landform map. LROC images will also be used to map and determine current impact hazards by re-photographing Apollo images.

LROC consists of two narrow-angle cameras (NACs) to provide 0.5 meter-scale panchromatic images over a 5 km swath, a wide-angle camera (WAC) to provide images at a scale of 100 meter in seven color bands over a 60 km swath, and a Sequence and Compressor System (SCS) supporting data acquisition for both cameras. LROC is a modified version of the Mars Reconnaissance Orbiter's ConTeXt Camera (CTX) and MARs Color Imager (MARCI) provided by Malin Space Science Systems (MSSS) in San Diego, CA.



Internet Resources

LROC Website	http://lroc.sese.asu.edu
LRO Website	http://lro.gsfc.nasa.gov
MSSS	http://www.msss.com

Measurement Objectives

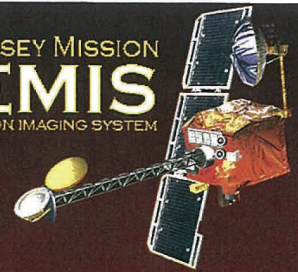
- 1. Landing site identification and certification—** The NACs provide 0.5 meter per pixel angular resolution BW imaging to locate safe landing sites for future robotic and human missions and provide mission planners with the data needed to determine optimal sampling and logistical strategies for each proposed landing site.
- 2. Mapping of permanent shadow and sunlit regions—** Permanently shadowed regions may harbor volatile deposits, and regions of permanent, or near-permanent, illumination are prime locations for future lunar bases. To delimit such regions the WAC acquires 100 meter per pixel images of the polar regions during nearly every orbit.
- 3. Meter-scale mapping of polar regions—** During respective summers, the NACs acquire contiguous meter-scale images of each polar region when the shadows are minimal. Then, in respective winters, areas that remain illuminated are imaged repeatedly to sharpen mission planners' ability to select optimal landing sites.
- 4. Overlapping observations to enable derivation of meter-scale topography—** The NACs collect repeat images with appropriate illumination and viewing geometries to provide geometric and photometric stereo sets for production of 1 to 5 meter scale topographic maps.
- 5. Global multi-spectral imaging—** Seven band WAC images permit discrimination of mineralogic and compositional variations on the surface.
- 6. Global morphology base map—** The WAC provides BW imaging at 100 meters per pixel with illumination optimal for morphological mapping (incidence angles of 55°-75°, incidence angles are higher at the poles).
- 7. Characterize regolith properties—** NAC images enable estimation of regolith thickness and other key parameters around potential lunar landing sites.
- 8. Determine current impact hazards—** The NACs reimage regions photographed by Apollo 15-17 to provide the means to estimate impact rates over the past 40 years.

Science Operations Center

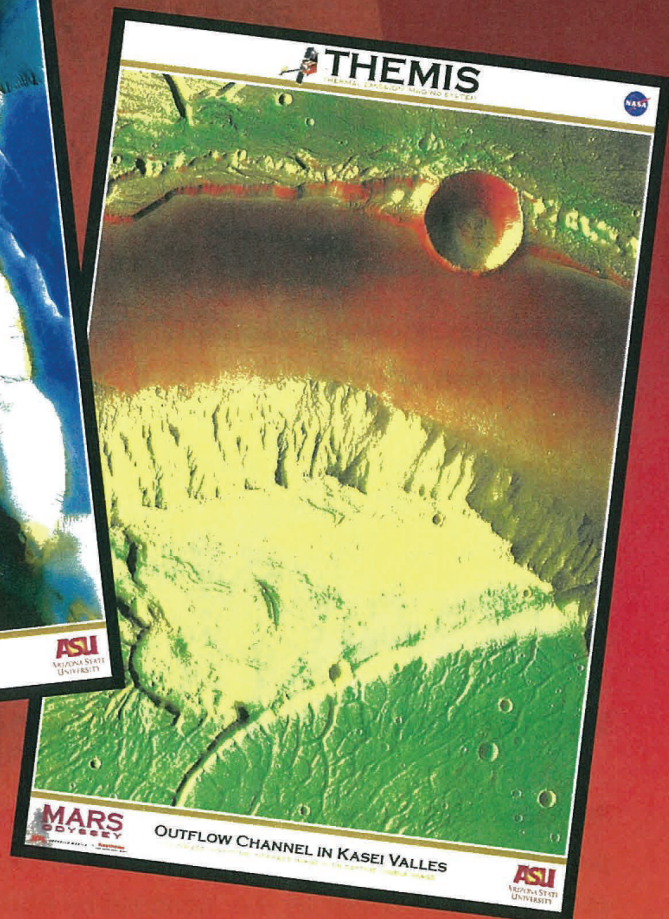
LROC planning, targeting, and data processing activities take place at the Science Operations Center (SOC) located at Arizona State University. The SOC receives between 300 and 450 Gbits of raw image data per day (about 350 NAC images and pole-to-pole WAC images). Production of calibrated images and mosaics will result in over 65 TBytes for archive with NASA's Planetary Data System (PDS). LROC image data will be disseminated to the public via a web interface: <http://lroc.sese.asu.edu>

Explore Mars

MARS ODYSSEY MISSION
THEMIS
THERMAL EMISSION IMAGING SYSTEM



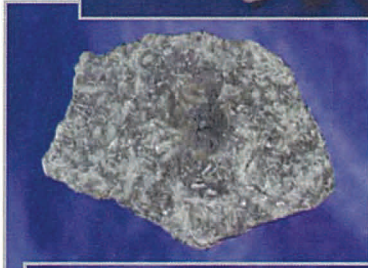
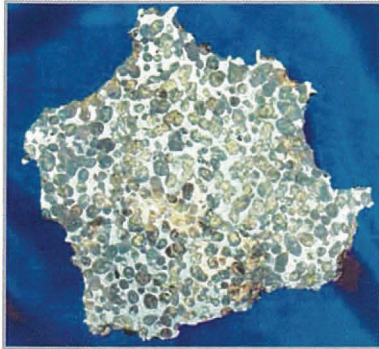
- IMAGE GALLERIES
- IMAGE DOWNLOADS
- FEATURE OF THE WEEK
- IMAGE OF THE DAY
- DISCOVERIES



On the web at: <http://themis.asu.edu>



THE ARIZONA STATE UNIVERSITY CENTER FOR METEORITE STUDIES



The ASU Center for Meteorite Studies continually pursues new knowledge about the origin of our planetary system through the study of meteorites, in part, so that we may understand the pathway to forming habitable worlds. At the center of these studies are meteorites, rocks from outer space that bore witness to the formation of our Solar System. The ASU Center for Meteorite Studies houses the world's largest university-based meteorite collection.

Most meteorites are pieces of asteroids -- left over building blocks of the planets. Thus, these rare and unique rocks preserve within them critical clues to the nature of the materials that originally made up the solar system, and the processes by which this material was transformed 4.5 billion years ago from a massive cloud of gas and dust to the star and planets we see today. In addition, the fall of large meteorites has fundamentally affected the history of life on Earth -- humans owe their existence to meteorite impacts!

Some meteorites are pieces of Mars that were blasted off in impact events and have made their way to Earth. As our only samples of martian materials here on Earth, these martian meteorites are crucial to understanding in detail the geologic and possible biologic processes occurring on Mars.

In addition to performing cutting edge scientific analysis and research on meteorites, the ASU Center for Meteorite Studies is responsible for curation of our valuable meteorite collection, and distribution of samples to the best scientists worldwide. Moreover, the Center seeks to use the unique resource of the meteorite collection as an education and training tool, with students from kindergarten through graduate school, teachers, and members of the public having the opportunity to experience hands on space science.

For more information contact:

ASU Center for Meteorite Studies

<http://meteorites.asu.edu>

meteorites@asu.edu

Register now for the Southeastern Regional Cooperative Education Conference

Best practices and sessions for employers with co-op and internship programs will be well represented at this year's Southeastern Regional Cooperative Education Conference (SERCEC), which will be held May 21-23, 2013, at the Georgia Tech Hotel and Conference Center. Hear presenters from NASA Johnson Space Center, Coca-Cola, Kimberly-Clark, Newell Rubbermaid, Delta Air Lines, Gulfstream Aerospace, Nead Werz, Shaw, Southern Company, and more! In addition to an employer panel, sessions that may be of particular interest to employers include *Strategies for Creating a Diverse Workforce*, *Strategically Planning for Your Incoming Co-ops and Interns*, *The Ambassador Advantage for Employers*, and *How to Raise Your Profile on Campus*.

Programming especially geared toward university personnel includes *Effectively Using Social Media: Practical and Legal Implications*, *Dealing with a Problem Co-op or Intern*, *The Ambassador Advantage (university perspective)*, and *the Challenges of Simultaneously Managing an Experiential Learning Program and a Career Center*.

We hope you will take advantage of this opportunity to network with others in the field. For complete information and to register, please visit www.sercec.org.





Today is the
15th, but if you
have a good
idea, send it
quickly!



Initial Call for Papers/Sessions/Workshops

If you have an idea for a session, paper or workshop that relates to the conference theme **Educating for a Sustainable Future** and/or the collaboration of industry, government, and education, please submit your proposal *to one of the four* Division Program Chairs listed below by March 15, 2013.

PARTICIPATING DIVISIONS

Cooperative & Experiential Education Division (CEED) College-Industry Partnership Division (CIPD)
Continuing Professional Development Division (CPDD) Engineering Technology Division (ETD)

DIVISION PROGRAM CHAIR

CIPD

Terri Schulz

Project Lead the Way
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Initial Call for Papers/Sessions/Workshops

CIEC 2014

Proposal Guidelines:

Proposals are due to one of the Division Program Chairs by March 15, 2013.

All information must be in a Word document for e-mailed submissions.

Proposals are read by the Program Chairs and selected based on relevance to conference theme by each individual division. Applicants will be notified of their proposal's status in April 2013 by the division to which the proposal was submitted.

If your proposal is accepted, you will be expected to submit an abstract of your presentation for inclusion in the proceedings of the meeting. These proceedings will be posted online to the website.

IMPORTANT: *All presenters must register for the conference and pay the appropriate registration fee.*

Interactive sessions are strongly encouraged.

Presenter/Moderator Information: (Note: Please provide information for EACH presenter)

Name _____ Title _____

Organization _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

E-mail _____

Presentation Title _____

To which Division are you submitting your request? ___ CIP ___ CPD ___ CEED ___ ETD

This is a

Workshop ___ Session ___ Poster Session ___ Plenary ___

Audiovisual needs _____

VERY IMPORTANT: Please attach your presentation abstract in narrative form as you wish it to appear in the program. *Please limit your description to 100 words or less.*

Which other division(s) (besides the one marked above) do you believe would benefit from hearing your presentation? ___ CIP ___ CPD ___ CEED ___ ETD



3rd Annual ASQ Advancing the STEM Agenda Conference “Collaboration with Industry on STEM Education”

Sponsored by the ASQ Education Division and
Grand Valley State University Padnos College of Engineering and Computing



Learn - Participate - Engage - Connect

Where: Grand Valley State University, Everhard Conference Center,
Grand Rapids Campus

When: June 3-4, 2013

Website and registration: <http://asq.org/conferences/stem-agenda/>

REGISTER NOW

Join us in networking on improving engineering and STEM education on the Grand Valley State University campus! Bring your expertise on collaboration with industry to develop the next generation of engineering and STEM innovators!

The conference theme is “Collaboration with Industry on STEM Education.” Our Industry and University Panels of recognized leaders in their field will inform attendees on best practices for collaboration including co-ops and capstones.

Learn from our four keynotes, participate in our breakout sessions, engage in our workshops, and connect with others on STEM and engineering education. Take back to your institutions, communities and corporations the latest innovation/ideas/best practices on engineering and STEM education initiatives and successful collaboration among stakeholders.

Questions? Email conference@asqedu.org

3rd Annual ASQ Advancing the STEM Agenda Conference

“Collaboration with Industry on STEM Education”

Grand Valley State University

June 3-4, 2013

Keynote Speakers

Dean Paul Plotkowski, Grand Valley State University, Seymour and Esther Padnos
College of Engineering and Computing
Reginald McGregor, Manager, Rolls-Royce Corporation
Carrie Houtman, Manager, Dow Chemical Corporation
Glenn Walters, Deputy Cabinet Secretary, New Mexico Higher Education Department

Industry Panel

Scot Lindemann, Vice-President, JR Automation
Wendy Ljungren, Avionics Chief Consulting Engineer, GE Aviation Systems
Natalia Powers, Events Manager, The Right Place, Inc.

University Panel

Dr. Gayle Elliott, Program Director, International Co-op Program, University of Cincinnati
Dr. Chris Plouff, James R. Sebastian Chair of Cooperative Education, Grand Valley State University
Dr. Joy Watson, Asst. Professor and Co-op Advisor, University of Cincinnati

Workshops

Improving Graduation Rates at a Comprehensive University: A Case Study of Institutional Alignment and Process Improvement in Higher Education with Paul Plotkowski, Nancy Giardina, and Shaily Menon, Grand Valley State University
How to Make Your Entrepreneurial Dreams a Reality with Thomas Zurbuchen, University of Michigan, Kevin McCurren, Grand Valley State University, and Richard Sheridan, Menlo Innovations
Developing Highly Effective Industry Partnerships: Co-op to Capstone Courses with Chris Plouff, Grand Valley State University
Implementing and Assessing STEM Learning Communities with **Kitrina Carlson, University of Wisconsin-Stout, Ryan Sweeder, Michigan State University and Laurie Witucki, Grand Valley State University**

The conference will have breakout sessions. All conference papers will be peer-reviewed and the papers will be available in an online conference proceedings. Contact conference co-chair Cindy Veenstra at conference@asqedu.org if you have questions.



Yes, you saw this in the last issues. The request is the same and hopefully all members will send a little news our way.
Thanks.

As we embark on a new period in the life of the CEED Newsbriefs, let us, each of us, make an effort to pass on those nuggets of information that will help others fulfill their positions more easily and more productively. Let's provide colleagues across the country and now the world with the names and faces of people in the profession so that they can see others who are doing like minded work. Let us discuss issues that may be vital to at least a few of our members.

With that:

- Will you send the news of your operation so that we can provide it to every one?
- Will you tell us the neat things that you are doing that help the students you serve to be better citizens and workers?
- Will you write a small piece of text that reflects on an issue that may just cause others to think and comment?

The CEED Newsbriefs would like to be a font of information that not only presents the results of a good conference but takes a hand in getting the world of Cooperative Education, Internships, and Experiential Education in all its forms out into the light of day. This can only be done with you the members.

Now is the time to send what you can and think about what you will send in the future.

Craig Gunn

gunn@egr.msu.edu

In order to help you with the new publication, here are some pertinent pieces of information:

1. Publication Schedule

March 15th (Material in to editor March 1st)

June 15th (Material in to editor June 1st)

September 15th (Material in to editor September 1st)

November 15th (Material in to editor November 1st)

2. The March issue focuses on the CIEC of that year

3. The June issue focuses on what has happened in that school year and Promotion of Abstracts for the following year's ASEE Annual Conference

4. The September issue focuses on that year's ASEE Annual Conference, Award Promotion for CEED, and the upcoming CIEC

5. The November issue focuses on the beginning of the school year and reminders to attend CIEC and ASEE Annual Conference

With that, here is your assignment:

Fill in the following blanks.

We have added the following staff to our operation _____ (and bios)

We have done some neat things this year at our institution. They include _____

I would like to voice my opinion on _____

I would like to include a paper I wrote, entitled _____

I would like to get a conversation going on the topic of _____ (details)

I have interesting information on _____ (here it is)

Copy the above and email it to gunn@egr.msu.edu

CEED Award History

CEED Student of the Year Award

The Cooperative and Experiential Education Division of the American Society of Engineering Education (ASEE / CEED) annually recognize co-op and/or intern students for their outstanding performance at work.

CEED Lou Takacs Award

This award honors Lou Takacs, a long-time employee of E. I. du Pont de Nemours & Company, who was a co-op student at Northwestern University. At Dupont, Lou recruited and supervised co-op students for many years, overseeing the successes of many young people from various schools across the country.

Upon his retirement from Dupont, Lou joined the staff of the co-op office at the University of Kentucky where he worked until his death in 2003. Lou was a strong supporter of CEED, having served in many capacities, including Chairman and was a recipient of **Alvah K. Borman** and **Clement J. Freund Awards**. This award began as the **Corporate Recognition Award** in 2003 and officially was re-named the **Lou Takacs Award** by the CEED Board.

The Alvah K. Borman Award

This award honors Alvah K. Borman, Dean of Graduate Placement Services at Northeastern University, for his numerous outstanding contributions to engineering cooperative education over many years, including the founding and editorship of ***CED Newsbriefs*** from 1969 until his death ten years later.

The Division allows for the presentation of up to two awards each year to Division members, past or present, who have made sustained, honorable, and meritorious contributions to the promotion of the philosophy and the practice of cooperative education in engineering and/or engineering technology. Nominations are made in the fall of each year, with the award being presented at the mid-winter meeting of the CIEC. The award consists of a \$500 honorarium, a plaque, and a certificate of achievement.

1926 - Wow!

194 ASSOCIATION OF CO-OPERATIVE COLLEGES

Second Session, Tuesday, June 15, 1926.

The second session of the Association of Co-operative Colleges was called to order by Professor Chas. W. Lytle, Temporary Chairman, on Tuesday, June 15, 1926.

Assistant Dean Burns, of the University of Cincinnati, announced that those of the delegates who are interested in commercial co-operative work are invited to meet at 12:30 P.M. in the faculty lunchroom of the University, where, after the serving of lunch, a meeting for the discussion of topics in which they are particularly interested will be held. Professor Max B. Robinson, Evansville College, will act as Chairman.

APPENDIX (B). THE CONSTITUTION

The Committee on the Forming of a Constitution reported, through Professor C. W. Park, of the University of Cincinnati, a tentative constitution which was thoroughly discussed and amended, and finally adopted as follows:

ARTICLE I. *Name.*

The name of this organization shall be the Association of Co-operative Colleges.

ARTICLE II. *Object.*

The object of the organization shall be to promote the study of problems of co-operative education and to provide for an interchange of opinion and experience among colleges conducting co-operative courses.

ARTICLE III. *Membership.*

Section 1. Active Membership.

Active membership in the association shall be open to teachers and administrative officers in co-operative schools of collegiate grade that are approved by the Membership Committee.

Section 2. Associate Membership.

Subject to the approval of the Membership Committee, associate membership shall be open to executives in business and industrial firms engaged in the training of co-operative students.

Section 3. Institutional Membership. See p. 114.

ARTICLE IV. *Officers.*

The government of the Association shall be vested in an Executive Board of six members, consisting of the President, the Vice-President, the Secretary-Treasurer, and three others to be elected from the membership at large.

The officers shall be elected annually by a majority of the active mem-

bers voting, except that the Secretary-Treasurer shall be elected for a term of three years.

ARTICLE V. *Amendment.*

Amendments to this constitution shall be made by a two-thirds vote of the active membership, after having been submitted in writing three months in advance of the time at which the vote is taken.

The Nominating Committee, through Professor Stewart Scrimshaw of Marquette University, reported the following nominations:

President—Dean Herman Schneider, University of Cincinnati.

Vice-President—Dr. K. G. Matheson, Drexel Institute.

Secretary-Treasurer—Professor Chas. W. Lytle, New York University.

Members at Large—Professor Dugald C. Jackson, Jr., University of Louisville; Dean Fred E. Ayer, Municipal University of Akron; Dean F. C. French, Marquette University.

On motion of Professor Scrimshaw, seconded, the nominees were elected.

Thereupon Dean Schneider took the Chair.

Assistant Dean George W. Burns, of the University of Cincinnati, reporting for the Committee on Syllabi, stated that the committee proposed the sending of three copies of a mimeographed questionnaire to each representative at this meeting, in which the following information would be sought:

1. What syllabi the schools have available and are willing to have used by members of the association.
2. What syllabi their staffs would be willing to work on during the coming year.
3. What sources of information they have found useful in the preparation of work reports.
4. What syllabi are especially needed.
5. Any suggestions which would be helpful to students on work reports.

The committee requested that these questionnaires be filled out and returned to the secretary of the Association, and that the information be made available to the membership at large.

Professor S. B. Mathewson, of Antioch College, brought up the question of territorial rights of co-operative colleges in the placing of students on jobs. It was the sense of the meeting that every school has the right to place men in any plant in any city.

Dean Allan R. Cullimore, of Newark Technical School, then took the Chair. Dean Cullimore spoke of the need for some methods of measuring results from the co-operative course after they have been reached. The school's job is the proper mixing of work and theory. The proper development of the individual and the building up of character is, perhaps,

the greatest thing which the co-operative course has to do, therefore, there is a need for basic research on some of these imponderables.

Dean Cullimore, chairman, then announced the next order of business to be the presentation of papers referring to "Recent Experiments in Co-operative Education."

Papers were presented by Professor Chas W. Lytle,¹ New York University; Professor Cecil A. Kapp, Drexel Institute; Dean Philip C. Nash, Antioch College; Professor J. E. McDaniel, Georgia School of Technology.

The members present manifested much interest in learning the number of students who are working on the co-operative basis and which the universities in this way have supplied to industry.

On motion by Dean Philip C. Nash, of Antioch College, seconded by Professor Stewart Scrimshaw, of Marquette University, a rising vote of thanks was extended to Dean Herman Schneider and the University of Cincinnati for the calling of this association and for their hospitality on this occasion, which has been one to which the members will look back with much interest.

Dean Nash invited the members of the association to hold their next meeting at Yellow Springs, Ohio.

Dean Schneider said that the discussion at these meetings demonstrated the wide elasticity of the co-operative plan and showed that there are fundamental principles but no fundamental details.

The meeting, on motion, adjourned.

E. W. HENNINGS,
Acting Secretary.

APPENDIX (C). BRIEF BIBLIOGRAPHY

ANONYMOUS. Co-operative Railway Engineering Courses: Central of Georgia Railway and Georgia School of Technology. Working out Ambitious Program. *Railway Age*, Nov. 22, 1924.

ALEXANDER, M. W., AND JACKSON, D. C. Requirements of the engineering industries and the education of engineers; the Schneider plan as applied to the co-operative plan between the General Electric and M. I. T.—*Mech. Eng.* 43 : 391-5.

ALEXANDER, M. W. Discussion of Timbie's "Co-operative Course in Electrical Engineering of M. I. T." *Journal of the American Institute of Electrical Engineers*, 1925, October.

AYER, FRED E. A co-operative course in civil engineering. *Concrete Engineering*. June, 1909.

——— Discussion, co-op. courses at M. I. T., *The Journal of Engineering Education*, Dec., 1927, pp. 293-301.

¹ See *The Management Review*, March, 1926, The Amer. Management Association.

Check out the membership fees.

THE ASSOCIATION OF CO-OPERATIVE COLLEGES

President—HERMAN SCHNEIDER

Vice-President—KENNETH G. MATHESON

Secretary-Treasurer—CHARLES W. LYTLE, New York University,
University Heights, New York, N. Y.

Mr.

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