Thanks to our judges for their generous time & expertise.

Architectural Engineering
Rachel Delventhal, AIA / LEED AP - Tobin & Associates, P.C.
Jon Gardzelewski, Assoc. AIA / LEED AP - UW College of Engineering
Noel Griffith, Jr. - Noel Griffith Jr., & Associate Architects
Chet Lockard, Jr., AIA - UW Facilities Planning
Brandon VanTassell, Assoc. AIA / LEED AP - Tobin & Associates, P.C.

Chemical Engineering
Clinton Butcher - Holly Frontier Refinery, Cheyenne, WY
Dr. David Bell – UW College of Engineering and Applied Science
Dr. Patrick Johnson - UW College of Engineering and Applied Science
Dr. Gordon Harris - UW College of Engineering and Applied Science
Dr. Joe Holles - UW College of Engineering and Applied Science
Kevin Schilling, Class TA, UW

Civil Engineering/Environmental
Darrin Harris, 2011 AWWA/WEF Water Treatment Competition Winner
Emily Huth, 2011 AWWA/WEF Water Treatment Competition Winner

Civil Engineering/Structures
Matthew Chase, Turbine Fdn. Engineer Towers-Vestas Technology R&D
John Hanlon, PE, Structural Engineer - Denver, Colorado
Dr. Jennifer Tanner, Assoc. Prof. – UW Civil & Architectural Engineering

Civil Engineering (Transportation)
Joe Henderson, P.E., Traffic Engineer/Principal - Sustainable Traffic Solutions
Larry Ketcham, P.E., City Engineering - City of Laramie
Tammy Reed, P.E., Project Engineer - TriHydro
Claudia Torrence, P.E., Project Engineering - TriHydro

Computer Science
Pat Malone, Director of Software Architecture - Aristatek Inc.
Kim Buckner, UW Computer Science Department

Electrical and Computer Engineering
Cameron Wright, Acting Head – UW Electrical & Computer Engineering
Jerry Cupal, Professor Emeritus – Electrical & Computer Engineering
Fred Benson, UW Alum, Chair - Department Advisory Committee,
Retired from Rockwell Collins
Walt Marshal, UW Alum, Retired from Aramco

Petroleum Engineering
TBD
## Senior Design Symposium Schedule

### Presentations Times Vary by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Room</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural Engineering</td>
<td>L52</td>
<td>9 am (Poster Presentations)</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>2101</td>
<td>8 am</td>
</tr>
<tr>
<td>CHE 4050</td>
<td>by 1060</td>
<td>9am (Poster Exhibits)</td>
</tr>
<tr>
<td>Civil Engineering (Structures)</td>
<td>2105</td>
<td>3 pm</td>
</tr>
<tr>
<td>Civil Engineering (Environmental)</td>
<td>1062</td>
<td>8 am</td>
</tr>
<tr>
<td>Civil Engineering (Transportation)</td>
<td>1062</td>
<td>1 pm</td>
</tr>
<tr>
<td>Computer Science</td>
<td>2104</td>
<td>8:30 am</td>
</tr>
<tr>
<td>Electrical &amp; Computer</td>
<td>by 1060</td>
<td>8 am (Posters)</td>
</tr>
<tr>
<td></td>
<td>2105</td>
<td>9:30 am (Presentations)</td>
</tr>
<tr>
<td>Petroleum Engineering</td>
<td>2104</td>
<td>10:30 am</td>
</tr>
</tbody>
</table>

### Posters and Exhibits

**First Floor Student Lounge (near 1060) & Room L52**

### Breaks (refreshments available)

**Room 1060**

### 12:00 pm

**Judges and Advisors Luncheon**

**Room 1060**

## Electrical & Computer Engineering Presentations - Room 2105

**Coordinator: Dave Whitman**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Poster Sessions – Student Lounge---near EN 1060</td>
</tr>
<tr>
<td>9:30 am</td>
<td>DC Relay Control Simulation</td>
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<tr>
<td></td>
<td>Edward McComas &amp; A.J. Wlaschin</td>
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<tr>
<td>10:00 am</td>
<td>Personal Area Network for Safety Monitoring</td>
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<tr>
<td></td>
<td>Aaron Bassham &amp; James Plocek</td>
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<tr>
<td>10:30 am</td>
<td>Break</td>
</tr>
<tr>
<td>11:00 am</td>
<td>Time and Temperature Controlled Power Switch</td>
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<td></td>
<td>Jason Johnson</td>
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<tr>
<td>11:30 am</td>
<td>Automated Frost Free Hydrant</td>
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<tr>
<td></td>
<td>Clay Stocklin</td>
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<tr>
<td>12:00 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 pm</td>
<td>Medication Reminder and Dispenser</td>
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<tr>
<td></td>
<td>Ye Feng</td>
</tr>
<tr>
<td>1:30 pm</td>
<td>Communication Device for Hearing/Speaking Impaired</td>
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<tr>
<td></td>
<td>James Branscomb &amp; Scott Rigg</td>
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<tr>
<td>2:00 pm</td>
<td>Smokehouse Automation Design</td>
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<tr>
<td></td>
<td>Patrick McDowell &amp; Ben Lampe</td>
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<tr>
<td>2:30 pm</td>
<td>Cellular-Based Multimedia Alert Home Security System</td>
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<tr>
<td></td>
<td>Anthony Allen</td>
</tr>
</tbody>
</table>
Civil Engineering (Transportation)  
Room 1062  
Coordinator: Rhonda Young

1:00 pm Introduction – Rhonda Young. Each group will present a different approach to the re-design of 15th Street between Garfield Street and Willett Drive in the City of Laramie.

1:15 pm Traditional Approach: Courtney Ewell, Andrew Hooten, Jordan Sheets and Ryan Welling

2:00 pm Roundabout at Grand: Carlos Casas, Philip Mann, and Evgeniya Tyson

2:45 pm Grade Separation at Ivinson: Jonathan Cockrell, Elizabeth Hollowed, Marissa Larson, and Timothy Schneider.

3:30 pm Implementation of UW Campus Plan: Alejandro Barrientos, Zachary Field, Mallory Hunt, and Shawn Thorson.

Civil Engineering (Structures)  
Room 2105  
Coordinator: Charles Dolan

3:00 pm Introduction – Charlie Dolan

Design of Wind Turbine Tower Test Facility

3:05 pm Kadi Wood, Sara Dunne, Jeff Austin

3:20 pm Wade Burkett, Margaret Kimble, Meadow Ridley

3:40 pm Darby Hacker, Rob Phares, Phil Furiosi

4:00 pm Pietro Colongo, Dan Maurais, Tim Baumel, Fangzhou Dai

4:20 pm Johnny Davis, Greg Ranft, Jera Schlotthauer

4:40 pm Sarah Ebright, Angela Jones, Dane Hopkin
Chemical Engineering – Poster Exhibits
CHE 4050 Unit Operations Lab II Coordinator:  David Bell

9 am  Poster Exhibits - Near Room 1062

Chemical Engineering
Room 2101
Coordinator:  John Myers

8:00 Opening Remarks, Professor John Myers

8:15 Chemical Looping Combustion of Syngas - Team Ferrous Wheel
Paul Bonifas, Rizan Fazily, Clark Newbold, Ying Wang
Mentors: Dr. David Bell, Professor John Myers

8:45 Benzene Reduction in Gasoline - Team Frontier Cowboys
Dylan Mair, Jordan Mette, Robert Slipp, Kyle Spencer,
& Ben Walkley  Mentors: Clinton Butcher (HollyFrontier Refinery, Cheyenne), Professor John Myers

9:15 Microfluidic Raman Spectrometer Biosensor - Team Aqua Jones
Nathan Fletcher, Sharlee Mahoney
Mentor: Dr. Patrick Johnson

9:45 Ibuprofen Pain Patch - Team Pain Killers
Team Members: Logan Gradisher, Analisa Stephens
Mentors: Dr. Patrick Johnson

10:15 High Selectivity Para-Xylene via Toluene Methylation
Team Pot-valiant Xerxes: Nathan Bennett, Sandeep Chandrasekaram, Dominique Schoech, Kyle Wemhoff,
& Guangjun Wu  Mentor: Professor John Myers

10:45 The Implementation of Organosolv Pretreatment Into a Cellulosic Ethanol Plant - Team Biosolv
Alyssa Hughes, Neil Neuberger, Shuai Tan, Kelsey Thrush
Mentors: Professor John Myers, Dr. Patrick Johnson

11:15 Biobutanol Process Design - Team Butifuel
Alec Cookman, Jennifer Graves, Kyle Hanson, Justin Martin,
& Hui Zhong
Mentors: Professor John Myers, Dr. Patrick Johnson

11:45 Closing Remarks, Professor John Myers

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Computer Science
Room 2104
Coordinators: Jeff Van Baalen

8:30 am  Introduction – Jeff Van Baalen

8:35 am  In a Lonely Place
Zachary Marius Hansen & Abdulsalam Alamari

9:05 am  WareApp
Dietrich Wambach, Jay Wuensch, & Neera Pradhan

9:30 am  GreekedIn
Zeb Fross, Paul Ogle, & Odion Oisamoje

10:00 am  Red vs. Blue
Mark Allen, Will Dowd, & Keith Ellington

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Petroleum Engineering
Room 2104
Coordinator: Brian Towler

10:30 am  The Niobrara Potential in Wyoming
Team: Abdulaziz Alhubil, David Scadden, Joseph Lawson, Rachael Molyneux, Gabriel Grubac

11:15 am  Plugging Wells with Bentonite (Plug Production & Field Trials)
Team: Allan Tainsh, Peter Lemke, Shawn Cody, Yao Yao, Eid Al Hajri

Noon  Lunch Break

1:00 pm  Plugging Wells with Bentonite (Lab Studies)
Team: Yifan Zhang, Kendra Willia ms, Tracy Quance, Ahmed Elgohary

1:45 pm  Simulation of Production in Silo Field
Team: Gregory Williamson, Jonathan Daraie, Yang Jiang, Justin Dunn

2:30 pm  Investigation of the Macando Well Blowout
Team: Richard Newman, Andrew Baltes, Darrin Moe, Gabrielle Stuckenschneider, Yu Liang

3:15 pm  Fracture Stimulation Investigations (Group 1)
Team: Daniel Transtrom, Jacob Ness, Swayne Redinger, Mohamed Sharker

3:45 pm  Fracture Stimulation Investigations (Group2)
Team: Alex Williams, Josie Skinner, Katie Barsness, Limin Fu