



**SAN JUAN
MINING &
RECLAMATION
CONFERENCE**



S T U D E N T C H A L L E N G E

“Changing Approaches”

September 24-26, 2019 | Silverton, Colorado

This year, we are offering a scholarship fund awarded to the top three student poster presentations at the 2019 combined San Juan Mining & Reclamation Conference and Silverton Innovation Expo. We are seeking posters of high caliber that demonstrate innovative solutions to acid mine drainage through integrated research, collaborative partnerships, or sustainable market opportunities. Please see conference details below for suggested themes to guide your presentation.

Judging will involve scientists and faculty. Posters will be judged on scientific merit, significance to the field, and visual appeal. In addition to a cash scholarship award, the winner will have the opportunity to present their poster to an authentic audience of contractors, mining companies, innovators, and agency staff. Scholarships will be awarded as follows:

1st Place - \$600

2nd Place - \$400

3rd Place - \$200

TO APPLY: Applicants may apply by following the instructions for abstract submissions on the Call For Abstracts form at the end of this document, clearly indicating that they are interested in the Student Challenge. We will be accepting applications up until the week before the event (**September 17th**).

JUDGING CRITERIA

Student Challenge Oral Presentation:

Each student should have prepared an oral discussion of his or her exhibit. This discussion must not exceed 4 minutes. (Note that a videotape or demonstration cannot be submitted for the discussion). The oral presentation should be clear and concise and should include major points presented on the poster.

Criteria for Judges:

(30 points possible) Display –

- Clear presentation of results through visualization
- Photographs, drawings, charts, tables, or graphs should be well-organized and carefully chosen to quickly explain complicated technical concepts to a wide audience.
- Appropriate balance of function and design

(20 points possible) Significance to the Field of Study –

- Concept is innovative and creative,
- Appropriate for the audience and the message being conveyed,
- New direction in field/approach to visualizing the data

(30 points possible) Scientific Merit -

- Project design and execution
- Proper use of scientific method
- Concise interpretation of findings and conclusions
- Direction for future research

(20 points possible) Oral Presentation –

- Intended message is communicated clearly to a wide audience
- Data accurately represented without distortion and message is consistent with poster content
- Provocative, compelling, and memorable content and message

Total Points possible: 100

First Place: \$600

Second Place: \$400

Third Place: \$200

CALL FOR ABSTRACTS

Modern mining began in the San Juan Mountains nearly 150 years ago. Reclamation plans for active mines have been required for forty years, and remediation of abandoned and inactive historic mines in the San Juan Mountains has been ongoing for over 25 years. Much has been learned about mining and reclamation, and changes have occurred over the decades. Now may be a good time to contemplate what those changes are or could be, and given what we've learned, consider different approaches towards mining and reclamation.

The 9th annual San Juan Mining and Reclamation Conference and the 3rd Annual Innovation Expo are both happening in Silverton this year, so the two will be conjoined to focus on changing approaches in both mining and reclamation. Some of these changes are happening organically, some are planned locally, and some come from external sources outside of local control.

The San Juan Mining and Reclamation Conference

Previous San Juan Mining and Reclamation Conferences have focused on projects such as characterizing a watershed or remediating a mine site. Here was a site-specific problem; this was our plan to address it; here is how the implementation worked; these are the results of our efforts. We learn a lot from each other through these case studies, but this year we are planning a little different approach. The conference will be an opportunity to step back and look at the bigger picture of mining and reclamation activities in the San Juan Mountains. We plan to discuss the changes that are occurring or should occur in:

- ***Setting Overall Cleanup Goals for Watersheds***– Several San Juan Mountain watersheds have established cleanup goals for a couple of specific metals through negotiated settlements between large mining companies and regulatory agencies. In the Animas River watershed, goals for many metals at several locations were determined through a comprehensive, but now outdated process, driven by local stakeholders. Given a lack of pre-mining environmental data and natural sources of metal loading, **how should goals for cleanup be set? What are some approaches and can they be improved?**
- ***Voluntary Versus Regulatory Approaches for Mine Remediation***– Both voluntary and regulatory processes for mine cleanup have been utilized in the San Juans. **How well do they work and are they effective in meeting overall cleanup goals? Is one approach better than another?**
- ***New Funding and Partnership Opportunities*** – With the possible exception of Superfund, federal money for abandoned mine remediation is disappearing. Land management agencies see overall budgets declining and have more pressing priorities. Funding for 319 grants has significantly diminished. **What new approaches can be used to fund projects?**

- ***Mining While Minimizing Environmental Impacts*** – We all use mining products and unmined mineral deposits still exist in the San Juans. **How can these valuable ores be extracted without leaving the environmental consequences that historical mining did?**

For more information about the San Juan Mining & Reclamation Conference , please visit <http://www.mountainstudies.org/sjmrc>.

The Innovation Expo

The first Innovation Expo conference took place in August of 2017, and – advertised only through word of mouth—was attended by over 75 participants representing delegates from Colorado, Washington, Utah, Oregon, and Norway. The Expo grew substantially in the second year and included businesses, mining industry, consultants, community members, scientists, engineers, start-ups, venture capital, accelerators, and local, regional, state and federal agencies. This year’s event will highlight changes and innovations related to mining and remediation with a focus on technological development and business opportunities to bring those innovations to market for more widespread use. Technological areas will include:

- ***New Methods for Monitoring, Remote Sensing, and Modeling***
- ***Innovative Treatment of Mine Drainage and Mine Waste***
- ***Source Prevention of Acid Generation and In-Situ Treatment***
- ***Developing Valuable Products from Mine Water or Waste Material***

While other conferences or expos may be larger, this event is intentionally targeting pioneers, early adopters, and those on the leading edge of technology and innovation to a targeted conversation to advance innovation in remediation.

The 2019 San Juan Mining and Reclamation & Innovation Expo offers unprecedented opportunities to engage your targeted audience and deliver on your marketing objectives with a more dynamic and interactive presence.

We invite companies and partners to present, demonstrate their product(s), sponsor, and exhibit at the event. For information on sponsorship and exhibitor opportunities including custom events, please visit <https://mountainstudiesinstitute.com/expo>

CONFERENCE COMMITTEE:

Uncompahgre Watershed Partnership, Mountain Studies Institute, Animas River Stakeholders Group, the Colorado Division of Reclamation, Mining and Safety, San Miguel Watershed Coalition, Willow Creek Reclamation Committee, and Lake Fork Valley Conservancy

ALL CONFERENCE DETAILS:

<http://www.mountainstudies.org/expo>

INSTRUCTIONS FOR ABSTRACT SUBMISSION FOR THE SAN JUAN MINING AND RECLAMATION CONFERENCE AND INNOVATION EXPO

Guidelines for Presentations, Posters, and Discussions

The Conference & Expo committee invites abstracts for talks, posters, and roundtable discussions to support the themes of this year's event. Please submit all information contained in the online form (below), including your abstract, by **July 1st** at 5 p.m. MST. Abstract titles are limited to 12 words and abstract descriptions should be no more than 250 words. We welcome the submission of abstracts for oral presentations (20 minutes), posters (up to 42" x 60"), and topics for roundtable discussions (\leq 12 person break-out groups). We will balance content contributed by industry, government, businesses, academia and nonprofit organizations in the final program. Your contribution should align well with the themes outlined in the table below:

San Juan Mining & Reclamation Conference Themes	Innovation Expo Themes
1. <i>Setting Overall Cleanup Goals for Watersheds</i>	5. <i>New Methods for Monitoring, Remote Sensing, and Modeling</i>
2. <i>Voluntary vs. Regulatory Approaches for Mine Remediation</i>	6. <i>Innovative Treatment of Mine Drainage and Mine Waste</i>
3. <i>New Funding and Partnership Opportunities</i>	7. <i>Source Prevention of Acid Generation and InSitu Treatment</i>
4. <i>Mining While Minimizing Environmental Impacts</i>	8. <i>Developing Valuable Products from Mine Water or Waste Material</i>

If you are uncertain about which category suits your topic or you have any questions related to abstract submission, contact Haley Farwell at haley@mountainstudies.org.

Submissions will be reviewed by the Conference & Expo committee, who will evaluate the advantages and novelty of the technical features being demonstrated, the challenges in producing such a system, the expected impact, and the timeliness and relevance for the Innovation Expo audience.

ABSTRACT SUBMISSION REQUIREMENTS

- Complete the online abstract submission form below
- If necessary, email a pdf with additional diagrams, appendices and references to haley@mountainstudies.org

[ONLINE ABSTRACT SUBMISSION FORM](#)

THANK YOU FOR YOUR CONTRIBUTION!!!