



INSTITUTE ON LAKE
SUPERIOR GEOLOGY

Serving geologists for over 60 years

69th ANNUAL INSTITUTE ON LAKE SUPERIOR GEOLOGY

April 23 –26, 2023, Eau Claire WI

Second Circular: Call For Papers and Registration

GENERAL INFORMATION

The 69th Annual Institute on Lake Superior Geology will be held from **Sunday, April 23 to Wednesday, April 26, 2023** at The Lismore, Eau Claire, Wisconsin.

IMPORTANT DATES:

March 27, 2023 Abstracts Due

March 25, 2023 at 11:59 pm Pre-registration Deadline

TENTATIVE SCHEDULE:

Meeting Headquarters The Lismore, Downtown Eau Claire, Wisconsin

(<https://www.hilton.com/en/hotels/eaudtdt-the-lismore-hotel-eau-claire/>)

Sunday, April 23

8:00 a.m. - 5:00 p.m.

Field Trips 1 and 2 (depart and return at The Lismore)

4:00 p.m. - 10:00 p.m.

Registration, Poster viewing and Reception

Monday, April 24

8:00 a.m. - 11:30 a.m.

Registration continues

8:00 a.m. - 11:30 a.m.

Technical Session I

11:30 a.m. - 1:00 p.m.

Student career lunch, all others on their own

1:00 p.m. - 3:40 p.m.

Technical Session II

4:00 p.m. - 5:00 p.m.

Poster Session

6:00 p.m. - 7:00 p.m.

Reception with Cash Bar

7:00 p.m. - 10:00 p.m.

Annual Banquet, Awards Presentation, and Guest Speaker

Tuesday, April 25

8:00 a.m. - 11:30 a.m.

Technical Session III

11:30 a.m. - 1:00 p.m.

Lunch on your own

1:00 p.m. - 4:10 p.m.

Technical Session IV

4:10 p.m. - 4:40 p.m.

Student awards

~7:00 p.m. - 11:00 p.m.

Bowling, pinball, & more at Reboot Social (220 S Barstow St)

Wednesday, April 26

8:00 a.m. - 5:00 p.m.

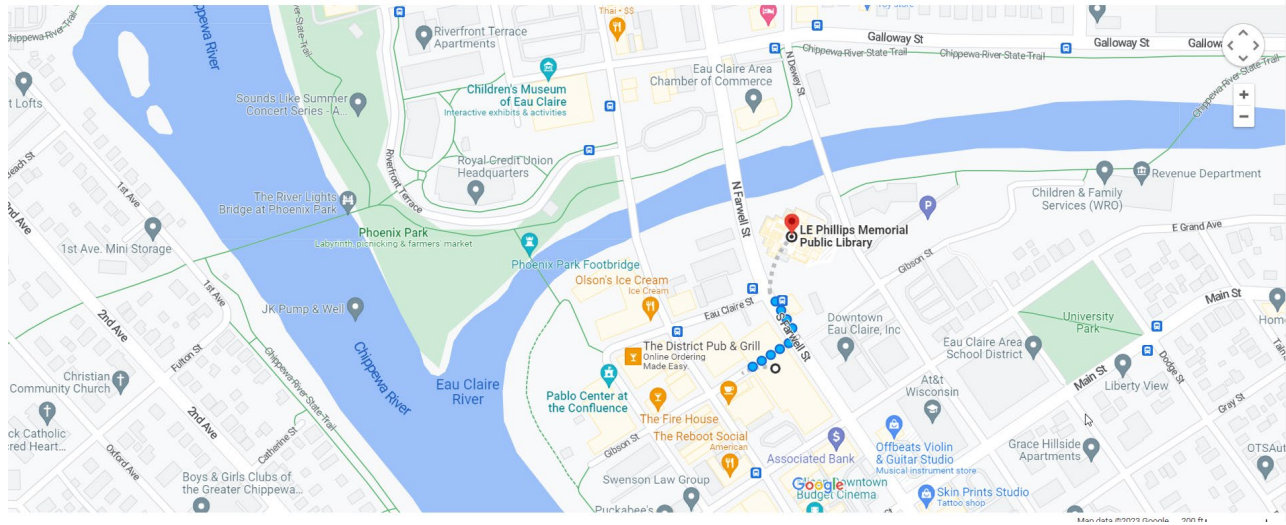
Field Trips 4 and 5 (depart and return at The Lismore)

STUDENTS

Students are especially encouraged to participate in all facets of the ILSG. Travel subsidies are available for qualified students who attend the 69th meeting. Applications for student travel awards are available on the website ([ILSG Eisenbrey Award \(lakesuperiorgeology.org\)](https://www.lakesuperiorgeology.org)). Applications must be completed and returned by **April 3, 2023**. Cash prizes will be awarded for the best student-authored presentations.

***NEW 2023!* Student career panel lunch**

The 2023 ILSG co-chairs are working to coordinate a student career panel lunch, which will give students an opportunity to meet with professional geologists from various local industries, state, and federal government. Pizza and drinks will be provided. The lunch will be held in the **Riverview Room (Room 306) at L.E. Phillips Memorial Public Library on Monday, April 24, 2023 from 11:30am to 1:00pm**. The library is located at 400 Eau Claire St, Eau Claire, a two-minute walk from the conference hotel (The Lismore).



ACCOMMODATIONS

Most events for the 69th Annual ILSG Meeting will take place at the Lismore, downtown Eau Claire, Wisconsin. The Lismore has a block of rooms for ILSG registrants. An additional block of rooms is available at the Oxbow Hotel, within walking distance to the conference. Information on how to reserve from one of the room blocks is available on the ILSG website (<https://www.lakesuperiorgeology.org/EauClaire2023/Hotels.html>). An additional list of hotels in Eau Claire is available on the Visit Eau Claire website ([Hotels & Motels Eau Claire | View Locations & Amenities \(visiteauclaire.com\)](https://www.visitauclaire.com)).

REGISTRATION

Early registration: February 27 – March 25th at 11:59pm

Student: \$78.00

Professional: \$155.00

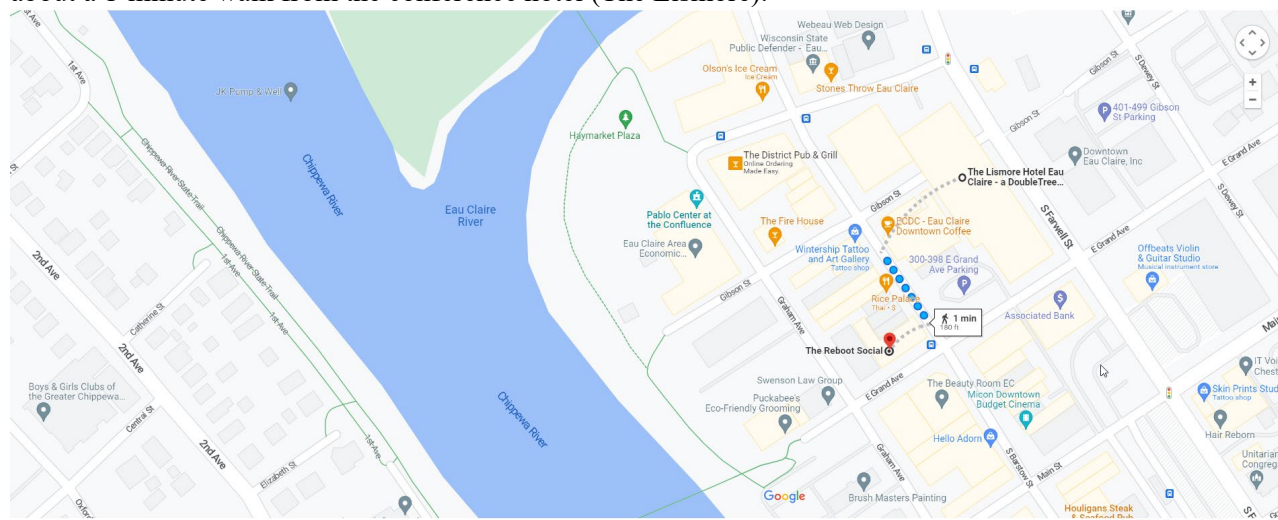
Normal registration: March 26 and after

Student: \$95.00

Professional: \$195.00

Tuesday night social event

ILSG participants are invited to gather at Reboot Social (220 S Barstow St) on Tuesday evening after the technical session for socializing, bowling, pinball, pool & darts, arcades, and more. Reboot Social is located about a 1-minute walk from the conference hotel (The Lismore).



CALL FOR PAPERS

Abstract Submission Deadline: March 27, 2023

All abstracts will be reviewed for formatting.

Formatting Specifications include:

- A. Limit of two pages (8½" x 11") including illustrations and references
- B. Use left, top, and right margins of 1" and bottom margin of 1.3"
- C. New Times Roman font with sizes described on word document template available on website ([ILSG - Eau Claire 2023 \(lakesuperiorgeology.org\)](https://www.lakesuperiorgeology.org))
- D. Follow ILSG Format (see recent Proceeding Volumes online as guideline)

Abstract Submittal and Questions

Authors must submit a print-ready abstract in two forms (PDF and MS Word). **Send Abstracts by March 27, 2023 deadline to:**

Carsyn Ames, WGNHS, carsyn.ames@wisc.edu

FIELD TRIPS

All field trips are capped at 45 people and cost \$50.00.

Pre Meeting: Sunday April 23

Trip 1. Precambrian geology of the Chippewa River Valley. *Trip Leaders: Rob Lodge, Bob Hooper (both UW-Eau Claire).* This trip will explore some of the most southerly exposures of the Precambrian rocks of the Canadian Shield. Along the Chippewa River, there are numerous erosional outliers of the Paleoproterozoic Pembine-Wausau and Archean Marshfield terranes of the Penokean Orogen. Additionally, there are mafic intrusions associated with the Mid-Continent Rift. Since the last time that ILSG has visited the region in the 80's and 90's, our understanding of the geologic history and tectonic significance of rocks exposed along the Chippewa River and surrounding drainages has vastly improved. This trip will discuss some of the "recent" and "actually recent" data collected and how our understanding of the southernmost exposures of the Canadian Shield has changed. The trip will start by examining the nonconformity beneath the Cambrian Mt. Simon Formation and stop at several classic Precambrian outcrops that are exposed around several dams on the river while presenting our new interpretations of the Precambrian tectonic development of the southern Lake Superior region. Note that this trip will include moderate hiking on uneven, rocky terrain adjacent on the banks of rivers and streams. One location will require a 2 km return-trip hike and a small stream crossing.

Trip 2. Upper Cambrian Strata, West-Central Wisconsin: Sedimentology, stratigraphy and industrial applications. *Trip Leaders: Brian Mahoney and Kent M. Syverson (both UW-Eau Claire).* Silica sand has been mined in Wisconsin for over 100 years, and is used extensively in the glass, foundry, ceramic, chemical, and filtration industries. Technological advances in horizontal drilling and hydraulic fracturing in the petroleum industry since 2008 led to a dramatic increase in the demand for 'Northern White' silica sand from Wisconsin, although industry economic trends in the last five years have reduced the demand. Upper Cambrian siliciclastic strata in the upper Midwest unconformably overlie Proterozoic basement, and comprise a cyclic succession of quartzose sandstone units interbedded with thin-bedded, finer-grained intervals. These cratonic successions are characterized by extremely slow subsidence, widespread shallow bathymetry, and a subdued shelf topography. Application of modern sequence stratigraphic techniques on a regional scale permit recognition of subtle unconformities that have significantly expanded our understanding of these cratonic successions (Runkel et al., 2007). This field trip will examine the sedimentology and stratigraphy of basal Upper Cambrian strata in west-central Wisconsin (Mt. Simon, Eau Claire, Wonewoc, and Lone Rock formations). Participants will first examine the sedimentology and stratigraphy of these units in the field, and will then explore the industrial uses of silica sand at the Covia silica sand facility and the Cardinal Glass float glass plant in Menomonie, Wisconsin.

Post Meeting: Wednesday April 26

Trip 3. Precambrian Geology of the Eau Claire River Valley. *Trip leaders: Rob Lodge and Evan Weber (student) (UW-Eau Claire).* This trip will examine one of the Paleoproterozoic volcanic complexes within the Penokean orogen that is exposed in several erosional outliers in the Eau Claire River valley. The Eau Claire Volcanic Complex is the same age (~1.8 Ga) as the Ladysmith-Rhinelander Volcanic Complex to the north that hosts ~150 million tonnes of volcanogenic massive sulfide mineralization, but the tectonic setting and metallogeny of the Eau Claire Volcanic Complex is poorly constrained. Previous tectonic models interpret the Eau Claire Volcanic Complex as an arc system built upon the Archean Marshfield terrane, but new preliminary data questions that interpretation. This trip will discuss some of the new geochronological data and tectonic interpretations of the Eau Claire Volcanic Complex and its place in the geologic history of the southernmost Canadian Shield. The trip will start by examining the nonconformity beneath the Cambrian Mt. Simon Formation and stop at several classic Precambrian outcrops that are exposed around several dams and parks on the river. Note that this trip will include moderate hiking on uneven, rocky terrain adjacent on the banks of rivers and streams.

Trip 4. Quaternary Geology and Geomorphology of the Eau Claire Region. *Trip Leaders: Doug Faulkner (UW-Eau Claire) and Elmo Rawling (WI Geological & Natural History Survey)* We will begin the field trip at the David R. Obey Ice Age Interpretive Center located approximately 30 miles NNE of UW-Eau Claire. The Center is in the hummocky landscape of the Chippewa Moraine, dominated by stagnant ice features including ice-walled lake plains. Here we will discuss the late Wisconsinan history of the Chippewa Lobe of the Laurentide Ice Sheet. We will then proceed down the valley of the Chippewa River, the main meltwater stream that drained the Chippewa Lobe, to sites approximately 10 miles WSW of UWEC. We will make several stops along the way to discuss the river's history of late Wisconsinan aggradation and post-glacial incision. The focus of these stops will be on landforms created when the river incised through glacial sediments and into a buried bedrock landscape. We will, however, also consider the many stream terraces found in this section of valley and the complex history of incision they represent. In addition, we will discuss Holocene aeolian activity in the valley, emphasizing its relationship to both regional climatic variations and erosion of the Chippewa River into its valley's fluvioglacial fill. Note that this trip will include moderate hiking on established trails, both paved and unpaved.