

**Workshop title:** From field apps to data repositories: Improving tephra data discoverability, access, and workflows to support next generation research

**Dates/Times** - *note start times are different each day:*

- January 28 - 09:00 - 17:00
- January 29 - 08:00 - 16:15 (includes half day field trip to a tephra outcrop), release early
- to prepare for opening ceremony

*nAll times and dates are for New Zealand so check your dateline and time zone*

**Location:** Millennium Room 4 at the [Millennium Hotel](#), 1270 Hinemaru Street, Rotorua, NZ, +64 7 347 1234

**Workshop conveners (\* in person):**

\*Steve Kuehn, Concord University; [sckuehn@concord.edu](mailto:sckuehn@concord.edu)

Doug Walker, University of Kansas; [jdwalker@ku.edu](mailto:jdwalker@ku.edu)

\*Ellen Nelson, University of Wisconsin-Madison; [emnelson8@wisc.edu](mailto:emnelson8@wisc.edu)

\*Kerstin Lehnert, Columbia University; lehnert@ideo.columbia.edu

\*Kristi Wallace, USGS Alaska Volcano Observatory; [kwallace@usgs.gov](mailto:kwallace@usgs.gov)

Marcus Bursik, University of Buffalo; [mib@buffalo.edu](mailto:mib@buffalo.edu)

\*Andrei Kurbatov, University of Maine; [akurbatov@maine.edu](mailto:akurbatov@maine.edu)

Simon Goring, University of Wisconsin-Madison; [goring@wisc.edu](mailto:goring@wisc.edu)

## WORKSHOP PROGRAM (NZ timezone)

**DAY 1: SATURDAY JANUARY 28, 2023**

Zoom connection (for virtual participants):

<https://concorduniv.zoom.us/j/94515857171?pwd=T2FYa1NvbHl0SVA5ME9COEhJS3BDQT09>

Meeting ID: 945 1585 7171 Passcode: 298997

9-9:15: Meet and greet

9:15-10:00: Background and big picture concepts

- Update on recent developments and tools (Kristi Wallace)
- How the ideas in ThroughputDb.com can help the tephra community (Simon Goring – [Presentation Link](#))
- Networking Cyberinfrastructure resources (Kerstin Lehnert)

*10-10:15: Tea break*

10:15-12:15: Tephra workflow: Introductions to each tool (20 minutes each)

- Field collection: Strabo (Ellen Nelson)

- Sample registration: SESAR (Kerstin Lehnert)
- Lab work: Sparrow (Daven Quinn)
- StraboMicro (Ellen Nelson)
- Data Archiving: EarthChem Library (Kerstin Lehnert)
- Data Discovery & Access (Kerstin Lehnert)
  - EarthChem extraction & synthesis tools
- Data annotation and linking (Simon Goring)

*12:15-13:15: Lunch break-on your own*

**13:15-14:45: Guided Hands-on session I -tephra workflow**

- Field collection: Strabo (Ellen Nelson)
- Sample registration: SESAR (Tephra Portal) (Kerstin Lehnert)  
Link to demo file:  
[https://docs.google.com/spreadsheets/d/1vpt6OGZoh3q5srv6l3WH6xi4Cnk6j-5k/edit?usp=share\\_link&oid=113017960081572823966&rtpof=true&sd=true](https://docs.google.com/spreadsheets/d/1vpt6OGZoh3q5srv6l3WH6xi4Cnk6j-5k/edit?usp=share_link&oid=113017960081572823966&rtpof=true&sd=true)
- Lab work: Sparrow installation demo (Daven Quinn)

*14:45-15:00: Tea break*

**15:00-16:15: Guided Hands-on session II -tephra workflow (continued)**

- Lab work: StraboMicro (Ellen Nelson)
- Data Archiving: EarthChem Library (Kerstin Lehnert)
- Data Discovery: EarthChem Synthesis tools (PetDB) (Kerstin Lehnert)
- Data annotation and linking (Simon Goring)

**16:15-17:00: Community driven discussion I: What tools are needed to improve the tephra workflow, feedback from the community.**

## **DAY 2: SUNDAY JANUARY 29, 2023**

Zoom connection for virtual participants: (afternoon only):

<https://concorduniv.zoom.us/j/92819890067?pwd=UHFja21nR3A3bGcvTC9mNGdleVdrZz09>

Meeting ID: 928 1989 0067 Passcode: 996919

**08:00-08:15: Introduction to the day - meet at workshop room ( Millennium Room 4)**

**08:15-13:00: Hands-on session II - field trip to Okareka Loop Rd section (15 minutes drive, transportation provided) - StraboSpot practice session.**

*Lunch provided by conveners*

13:00: Reconvene at Millennium Room 4 to continue tephra workflow exercise

13:15-13:45: Post field StraboSpot- clean up and visualization

13:45-14:45: Sample registration (NZ section or real data)

*14:45-15:00: Tea Break*

15:00-16:00: Prepare and upload geochemical dataset to a data repository/Data discovery (EarthChem)

*Feel free to bring your own geochemical data (we will have an example dataset)*

16:00-16:15: Community feedback & discussion-future tephra data systems (questionnaire)