

King's College, University of Aberdeen
Tuesday 16th May – Wednesday 17th May

Tuesday 16th

08:30 - 09:00 – Registration & coffee

09:00 – 09:10 – Welcome

09:10 – 09:40. Keynote #1 Prof Pete Smith, U. Aberdeen

09:40 – 11:55. Talks #1 (8 talks with 15min break) T1+T4 "Land, Landscapes and Societal Interactions"

11:55 – 12:30. SAGES Phase 3: Opportunities for members & meet the new Director.

12:30 – 13:30. Lunch + posters + networking

13:30 – 16:00. Talks #2 (10 talks) T3+CESD+FIORD+Validate "Earth Systems: Ice, Land, Ocean, Atmosphere".

16:00 – 16:15. Poster pop-ups (30s stand-up no slides!)

16:15 - 18:00. Poster session + networking (breakout rooms available) plus drinks

19:00 Dinner – Rishi's Indian Aroma, 202-212 George Street, Aberdeen AB25 1BS

Wednesday 17th

09:00 – 09:20. Keynote #2 Prof Maggie Gill, Chair SSAC

09:20 – 10:00. SAGES Policy Intern showcase, Chaired by Maggie Gill

10:00 – 11:45. Talks #3 (4 talks + invited with break) "Integrated Water Cycle Management + Health and Wellbeing"

11:45 – 12:45. SAGES Saltire Emerging Researchers Showcase

12:45 – 14:00. Lunch

14:00 – 16:00. Talks #4 (8 talks) T2 + S2S. "Carbon"

16:00 – 16:20. Prizes

16:20. END (Breakout rooms available until 17:30)

Session Schedules

| Title: Welcome | |
|----------------------------|--|
| Day: Tuesday 16 May 2023 | |
| Start – End: 09:00 – 09:10 | |
| Time | Event |
| 09:00 – 09:10 | Welcome from Mark Inall, SAGES Director. |

| Title: Keynote #1 | |
|----------------------------|--|
| Day: Tuesday 16 May 2023 | |
| Start – End: 09:10 – 09:40 | |
| Time | Event |
| 09:10 – 09:40 | Professor Pete Smith, University of Aberdeen |

| Talks #1: Themes 1 & 4 Land, Landscapes and Societal Interactions | |
|---|---|
| Day: Tuesday 16 May 2023 | |
| Start – End: 09:40 – 11:55 | |
| Time | Event |
| 09:40 – 09:55 | Emma Cary (Aberdeen) - The state of UK rewilding policy |
| 09:55 – 10:10 | Liam Godwin (UHI) - The legacy of drainage on stream water quality following large-scale peatland restoration |
| 10:10 – 10:25 | Georg Kodl (St Andrews) - Soil erosion trends can be obscured in remote sensing data: evidence from a high-latitude tundra landscape undergoing shrub expansion |
| 10:25 – 10:40 | Leia Tilly (Aberdeen) - Northward Wanderings': - Roots of Late Pleistocene Scottish Communities, Both Vegetation and Human |
| 10:40 – 10:55 | Coffee Break |
| 10:55 – 11:10 | Qing Li (Edinburgh) - Multi-temporal river landform classification using machine learning |
| 11:10 – 11:25 | Shona Jenkins (Edinburgh) - Socio-ecological drivers of change in the central Congo Basin peatlands |
| 11:25 – 11:40 | Erin Corbett (UWS) - Antimicrobial Resistance in the Environment |
| 11:40 – 11:55 | Tracy Asamoah-Boateng (Aberdeen) - Exploring the Impacts of Solar Mini-Grids on People Living in Selected Rural Island Communities in Ghana |

| | |
|--|--|
| SAGES-Phase 3: Opportunities for members & meet the new Director | |
| Day: Tuesday 16 May 2023 | |
| Start – End: 11:55 – 12:30 | |

| |
|-----------------------------|
| Lunch, posters & networking |
| Day: Tuesday 16 May 2023 |
| Start – End: 12:30 – 13:30 |

| |
|--|
| Talks #2: Theme 3, CESD, FIORD, Validate "Earth Systems: Ice, Land, Ocean, Atmosphere" |
| Day: Tuesday 16 May 2023 |
| Start – End: 13:30 – 16:00 |

| Time | Event |
|---------------|--|
| 13:30 – 13:45 | Poppy Clark (Aberdeen) - New Machine Learning Tool allows Long-term Deep-sea Sponge Behaviour Study |
| 13:45 – 14:00 | Bertie Miles (Edinburgh) - Unanchoring of Antarctic ice shelves over the past 5 decades |
| 14:00 – 14:15 | Fei Yao (Edinburgh) - Air pollution and solar energy generation |
| 14:15 – 14:30 | Beatriz Recinos (Edinburgh) - A framework for time-dependent Ice Sheet Uncertainty Quantification, applied to three West Antarctic ice streams |
| 14:30 – 14:45 | Neil McDonald (Stirling) - Ice stream and floating-ice tongue collapse in the Minch, NW Scotland |
| 14:45 – 15:00 | Florian Brouillet (St Andrews) - 1783 Laki eruption: new insights of volcanic plume from high time resolution ice core analysis |
| 15:00 – 15:15 | Jize Jiang (Edinburgh) - Quantifying climate-dependent NH ₃ emissions from global agriculture |
| 15:15 – 15:30 | Simona Caruso (Aberdeen) - Seismic geomorphology of a glacigenic basin floor fan system offshore West of Shetland |
| 15:30 – 15:45 | Ben Fisher (Edinburgh) - Marine phytoplankton in a sea ice free west Antarctic Peninsula |
| 15:45 – 16:00 | Donald Slater (Edinburgh) - Submarine melting of glaciers in Greenland amplified by atmospheric warming |

| |
|---------------------------------|
| Title: Refreshments and Posters |
| Day: Tuesday 16 May 2023 |
| Start – End: 16:00 – 18:00 |

| Time | Event |
|---------------|---|
| 16:00 – 16:15 | Poster pop-ups (30 s stand-up no slides!) |
| 16:15 – 18:00 | Poster session, networking, breakout rooms & drinks |
| 19:00 | Conference Dinner, Rishi's Indian Aroma |

| Title: Keynote #2 | |
|----------------------------|-----------------------------------|
| Day: Wednesday 17 May 2023 | |
| Start – End: 09:00 – 09:20 | |
| Time | Event |
| 09:00 – 09:20 | Professor Maggie Gill, Chair SSAC |

| SAGES Policy Intern showcase, Chaired by Maggie Gill | |
|--|----------------------------------|
| Day: Wednesday 17 May 2023 | |
| Start – End: 09:20- 10:00 | |
| Time | Event |
| 09:20 – 09:35 | Alison Brown (Glasgow) - Biochar |
| 09:35 – 09:50 | Szabolcs Pap (UHI) - Biochar |

| Talks #3: Integrated Water Cycle Management and Health & Wellbeing | |
|--|--|
| Day: Wednesday 17 May 2023 | |
| Start – End: 10:00 – 11:45 (with coffee break) | |
| Time | Event |
| 10:00 – 10:25 | Josie Geris (Aberdeen) - Nature based solutions in rural landscapes for management of droughts and floods |
| 10:25 – 10:40 | Coffee break |
| 10:40 – 10:55 | Anna McWilliam (UHI) - Brashly Improving Water Quality |
| 10:55 – 11:10 | Diorbhail Wentworth (Edinburgh) - Barriers and enablers to the use of human excrement as fertiliser in Karnataka, India |
| 11:10 – 11:25 | Lydia Niemi (UHI) - Exploring relationships between pharmaceutical pollution and prescribing |
| 11:25 – 11:40 | John Moreau (Glasgow) - Investigating hexavalent chromium mobility in an urban waterway |
| 11:40 – 11:45 | Rachel Helliwell (SEFARI/CREW) - Connecting opportunity with capability in water science and policy: Register of Expertise |

| SAGES Saltire Emerging Researchers Showcase | |
|--|---|
| Day: Wednesday 17 May 2023 | |
| Start – End: 11:45 – 12:45 | |
| Time | Event |
| 11:45 – 12:00 | Lea Rhien (SAMS) - Svalbard glaciers |
| 12:00 – 12:15 | Jazz Rhoades (St Andrews) – Climate and Trees |
| 12:15 – 12:30 | Elisa Giammarini (UWS) – Metals and Soil |
| 12:30 – 12:45 | Kiri Rodgers (UWS) – Organic Pollution |

| | |
|--|--|
| Lunch, posters & networking | |
| Day: Wednesday 17 May 2023 | |
| Start – End: 12:45 – 14:00 | |

| Session 4: Theme 2 & Source 2 Sink: Carbon | |
|---|---|
| Day: Wednesday 17 May 2023 | |
| Start – End: 14:00 – 16:00 | |
| Time | Event |
| 14:00 – 14:15 | Nadeem Shah (Forest Research) - The Effects of Land Use on Aquatic Carbon Transport |
| 14:15 – 14:30 | Celeste Kellock (Stirling) - Source to Sea: Challenges and Opportunities |
| 14:30 – 14:45 | Alison Brown (Glasgow/CEH) - Sources and controls of greenhouse gases and heavy metals in acid mine water and effectiveness of mine water treatment |
| 14:45 – 15:00 | Carla Comadran Casas (Glasgow) - Greenhouse gas fluxes of Microbial-Induced Calcite Precipitation in quartz sand |
| 15:00 – 15:15 | Selena Georgiou (Edinburgh) - Inundation mapping and scaling up greenhouse gas fluxes over the Cuvette Centrale peatland complex in the Central Congo Basin |
| 15:15 – 15:30 | Adnan Khan (Abertay) - High-resolution Digital soil Mapping at Finzean Estate (5m) |
| 15:30 – 15:45 | Alexandra Morel (Dundee) - Human Appropriated Net Primary Productivity (HANPP) in Smallholder Coffee Landscapes |
| 15:45 – 16:00 | Holly Hourston (Glasgow) - The effect of heating on early solar system organics |

| |
|----------------------------|
| Title: Prizes |
| Day: Wednesday 17 May 2023 |
| Start – End: 16:00 – 16:20 |

| |
|--|
| Title: Conference close - Breakout rooms available |
| Day: Wednesday 17 May 2023 |
| Start – End: 16:20 – 17:30 |

Poster details

| Posters – Session 1: Themes 1 & 4 Land, Landscapes and Societal Interactions | |
|--|---|
| Name | Title |
| Sophie Baldwin (Edinburgh) | Magmatism at the Cameroon Volcanic Line |
| Simon Cook (Dundee) | A universal size classification system for landslides |
| Laura Ebeler (Glasgow) | Development of social-ecological mangrove typologies |
| Carla Huynh (Edinburgh) | Holocene/Lateglacial glaciation in southernmost Patagonia |
| Kira Lutter (UHI) | Unravelling the impact of potentially toxic metals on functionalised Biochar on soil and plants |
| Callum Thompson (UHI) | Developing a trait-based approach to understanding <i>Sphagnum</i> responses to hydrological stress |
| Ian Watt (Edinburgh) | A laboratory investigation of carbon dioxide mineralization in basalt |

| Posters – Session 2: Theme 3, CESD, FIORD, Validate "Earth Systems: Ice, Land, Ocean, Atmosphere | |
|--|---|
| Name | Title |
| Prerita Agarwal (Edinburgh) | Modelling the dynamics of aerosol-boundary layer interactions during severe atmospheric pollution |
| Hannah Bryant (Edinburgh) | Climate Modelling the Atmospheric and Environmental effects of Hydrogen |
| Wenquan Dong (Edinburgh) | A 2007 forest biomass map for China using random forest |
| William Harcourt (Aberdeen) | Assessing ice mélange impacts on tidewater glaciers using high-resolution radar small satellites |
| Ed Holt (Edinburgh) | An accelerating lake-terminating glacier |
| Leam Howe (Edinburgh) | Machine learning (ML) for remote sensing and modelling of mountain snow patches |
| Ryan Ing (Edinburgh) | The Impact of Late-Season Melt Events on the Dynamics of the Greenland Ice Sheet |
| Eleanor Johnstone (Edinburgh) | Investigating glacial fjord processes using box models |
| Velveth Perez (Glasgow) | Volcanic processes and hazard assessment of the Torfajökull volcanic area, Iceland |
| Brice Rea (Aberdeen) | Direct measurement of warm Atlantic Intermediate Water close to the grounding line of Nioghalvfjærdsfjorden (79°N) Glacier, Northeast Greenland |
| Shuaiyi Shi (Edinburgh) | Global Climate Effect of Biomass Burning Aerosol from Six Main Biomass Burning Regions |

| Posters – Session 3: Integrated Water Cycle Management and Health & Wellbeing | |
|---|--|
| Name | Title |
| Wisdom Adza (UWS) | Exploring the Combined Association between Road Traffic Noise and Air Quality Using QGIS |
| Miriam Glendell (Hutton) | Decision support tool for sustainable prescribing |
| Jamie Stevenson (Aberdeen) | Ecological partitioning heterogeneity under contrasting urban vegetation |
| Kai Wan (Edinburgh) | Projection of mortality burden associated with extreme temperatures in Scotland under aligned scenarios of climate, population, and adaptation |

| Posters – Session 4: Theme 2 & Source 2 Sink: Carbon | |
|--|---|
| Name | Title |
| Mary Abed Al Ahad (St Andrews) | The spatial-temporal effect of air pollution on individuals' reported health and its variation by ethnic groups in the United Kingdom: A multilevel longitudinal analysis |
| Emily Bonsall (Stirling) | Reactive iron species preserve organic carbon – what does this mean for finding evidence of past life on Mars? |
| Ilgaz Cakin (UHI) | Comparison of methods for community profiling of wetland bacteria |
| Li Wang (St Andrews) | Holocene carbon accumulation dynamics of a Scottish lowland peatland |
| Chenzhe Xu (Edinburgh) | Do published field experiments inform the longevity of biochar in soil? |