



18<sup>th</sup> January 2025

## LGS Newsletter 166.6

Information about indoor meetings for the 166<sup>th</sup> session is available on the LGS website at:

<https://liverpoolgeologicalsociety.org/indoor-meetings>

### Liverpool Geological Society events

Tuesday 4<sup>th</sup> February 2025

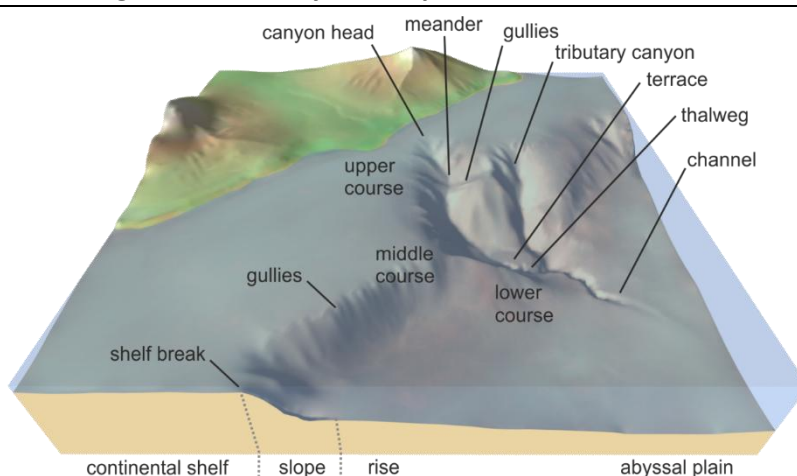
Lecture by Dr Kostas Kiriakouliakais, Liverpool John Moores University

Title: Submarine canyons

Location: Lecture Theatre B in the Central Teaching Hub, University of Liverpool



Dr Kostas Kiriakouliakais



Sketch showing the main elements of a submarine canyon  
By David Amblas - Own work, CC BY-SA 4.0

Submarine canyons are deep, steep-sided underwater valleys cutting into continental shelves and slopes, often extending from shorelines to abyssal depths. These large and widespread (>9,000 globally) geomorphic features are typically formed by a combination of tectonic activity and gravity flows, most commonly turbidity currents. Their morphology is also influenced by (internal) tides, ocean circulation and sediment supply; recent evidence suggests that anthropogenic activities may add to these. They serve as important conduits for the transport of natural and anthropogenic material to the deep ocean, often forming large deep-sea fans, and many of them host diverse ecosystems due to their complex physical and biogeochemical conditions. Submarine canyons can modify energy dissipation in their vicinity, occasionally affecting manmade installations, and they seem to influence marine ecosystem functions, such as primary productivity and carbon burial, and related ecosystem services such as fisheries and bioprospecting. Recent work has clearly shown that many of these features have been impacted by human activities, in the form of habitat destruction, pollution, ocean acidification and climate change. Understanding the functions, role and threats of submarine canyons remains a critical, yet undeveloped, area of marine research, with implications for broader ocean science and management.

### Down to Earth (DTE)

Electronic copies of this publication are available for LGS members. If you would like a pdf copy of the most recent publication DTE Extra number 145, please email Maggie Williams (Secretary) at [lgssecretary19@gmail.com](mailto:lgssecretary19@gmail.com) and copies will be emailed to you.

## Hazel Clark (further information)

- Society members will be pleased to hear that LGS plans to hold an annual Society event to celebrate Hazel's life and her contributions to the Society.
- Members who wish to send donations in memory of Hazel should send their donations to the Marie Curie Hospice, Liverpool. Details below:  
Marie Curie Hospice, Liverpool  
Speke Road  
Woolton  
Liverpool  
L25 8QA


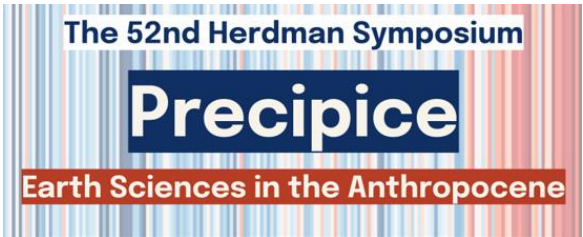
Phone: 0151 801 1400

Fax: 0151 801 1458

[liverpool.hospice@mariecurie.org.uk](mailto:liverpool.hospice@mariecurie.org.uk)

<https://www.mariecurie.org.uk/help/hospice-care/liverpool/how-to-support-liverpool-hospice>

## Herdman Symposium – Saturday 8th February 2025

 	<p><b>Speakers:</b></p> <p>Prof. Mark Maslin (University College London) How humans caused the Anthropocene</p> <p>Dr. Munira Raji (University of Plymouth) Sustainable energy and science diplomacy</p> <p>Prof. Babette Hoogakker (Heriot-Watt University) Ocean oxygenation and climate tipping points</p> <p>Dr Claus-Dieter Hillenbrand (British Antarctic Survey) Geological record of ice sheet tipping points</p> <p>Prof. Chris Jackson (WSP) Geological disposal of nuclear waste</p> <p>Prof. Richard Worden (University of Liverpool) Carbon capture and storage</p>
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Register your attendance for the symposium:

<https://payments.liv.ac.uk/conferences-and-events/events-at-liverpool/school-of-environmental-sciences/52nd-herdman-symposium>