



International Union of Geological Sciences (IUGS), Initiative on Forensic Geology (IFG)

Monthly Update and Information for IUGS E-Bulletin, March 2025

Abstract and Registration Deadline, IUGS Initiative on Forensic Geology Conference, Rome, Italy, May 2025

The abstract submission deadline is 14 April 2025, for the IUGS Initiative on Forensic Geology Conference, 21-23 May 2025, in Rome, at Spazio Europa, the conference hall managed by the European Parliament Office in Italy. Registration will also close soon. Co-funding is not automatically guaranteed, therefore if you wish to apply for co-funding please contact Dr Laurance Donnelly (Chair, IUGS-IFG) and Prof Lorna Dawson (Treasurer, IUGS-IFG).

<https://www.iugs-ifg2025.com>

81st IUGS Executive Committee Meeting, Geological Society of France, Paris, 17-18 March 2025

Dr Laurance Donnelly (Chair, IUGS-IFG) was invited to attend the 81st IUGS Executive Committee meeting in Paris, on 17-18 March 2025. This included the presentation of the IUGS-IFG Chair's Annual Report for 2024, and a budgetary request for 2025. A series of meetings were held with the new IUGS President, Secretary General, Treasurer and Executive Committee, and UNESCO. The following provides a high-level summary.

1. The meetings went extremely well, the new executive seemed impressed with IUGS-IFG, including our achievements, diversification and the significant visibility we bring to IUGS.
2. The past four years and IUGS-IFG's plans for the next term of the executive, to 2028, were discussed.
3. A planned programme of events throughout 2025 and a budgetary request was submitted for US\$ 15,000.
4. Two members of the Geological Society of London were also in attendance and were supportive of IUGS-IFG.
5. A meeting was held with the International Commission on the History of Geological Sciences (INHIGEO), as they will be in attendance in Rome as part of a joint session with IUGS-IFG.



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38th International Geological Congress, Calgary, Canada, 2028

The next, International Geological Congress (IGC) will be held in Calgary in 2028. At the 81st IUGS Executive Committee meeting in Paris, IUGS-IFG offered to hold a forensic geology workshop. Prof Grant Wach (IUGS-IFG Officer for Canada) and Dr Laurance Donnelly have been in preliminary contact to discuss the possible content of a workshop. An IUGS-IFG Committee meeting will be arranged to fully consider the workshop, probably based on similar forensic geology sessions held at past IGCs and for law enforcement and delegates training globally.

<https://www.igc2028canada.org/>

Gold Traceability, Yanomami Indigenous Territory, Brazil

IUGS-IFG has been supporting the Clean Gold Programme in Brazil in association with the Brazilian Federal Police. A paper has been published by investigators in Brazil on, '*Forensic geology and gold traceability: a case study from the Yanomami Indigenous Land*'. The results draw attention to the effectiveness of accessible analytical techniques for the purposes of gold traceability for illegally mined gold, and to strengthen regulatory enforcement in the gold supply chain. The techniques used were X-ray fluorescence (XRF), electron microprobe analysis (EPMA), scanning electron microscopy (SEM), and grain-scale compositional mapping.

<https://www.lyellcollection.org/doi/abs/10.1144/jgs2024-227>

https://www.researchgate.net/publication/389524488_Forensic_geology_and_gold_traceability_a_case_study_from_the_Yanomami_Indigenous_Land



Publications on Forensic Geology from Australia and New Zealand

The following publications, provided by Prof Robert Fitzpatrick (IUGS-IFG Vice-Chair) are available on different aspects of forensic geology, from Australia and New Zealand.

- Fitzpatrick R. W., Raven, M. D., Self P. and Long, J. (2024) Determining the geographic origin of illegally imported Chinese dinosaur nests retrieved in Australia. Abstract and Oral paper presented at the International Geological Congress, 2024, Busan Korea; August 25-31, 2024. Case study submitted to Journal of Forensic Sciences (October 2024).
- Fitzpatrick R. W., Raven M., and Self P. (2024). Mineralogy and morphology of soils in vehicle wheel-rims as significant trace evidence in a double murder and arson investigation in Australia. Oral Abstracts Handbook, Joint New Zealand Society of Soil Science and Soil Science Australia Conference, Rotorua New Zealand; December 2-5, [623971_885bc87253ba40dabae5e067908ca764.pdf](https://doi.org/10.1144/SP492-2021-81)
- Fitzpatrick R.W. (2021). Sampling and analyses of 16 soil samples from sandals, vehicle, road pavement surfaces and road verges relating to an alleged arson investigation by the South Australian Police concerning the Cherry Gardens Bushfires. Centre for Australian Forensic Soil Science, Restricted Client Report No. CAFSS_231. 23rd July, 2021. 70pp
- Fitzpatrick R. W., and Donnelly L. J. (2021). *Introduction to forensic soil science and forensic geology: A synthesis*. In R.W. Fitzpatrick and L.J. Donnelly (Eds.), Forensic Soil Science and Geology. Geological Society of London, Special Publications, 492 1-32. <https://doi.org/10.1144/SP492-2021-81>
- Fitzpatrick, RW, Raven, M. D. and Self P. G. (2017). The role of pedology and mineralogy in providing evidence for 5 crime investigations involving a wide range of earth materials. *Episodes (Journal of International Geoscience)*. 40 (2) 148-156. <http://dx.doi.org/10.18814/epiiugs/2017/v40i2/017017>