The GeoPT proficiency testing programme for whole rock geoanalytical techniques

Proficiency testing is one of the most effective ways for a laboratory to monitor its performance, not only against its own expectations, but also against an external fitness-for-purpose criterion and the standards of performance set by other laboratories participating in the test. Proficiency testing represents, therefore, an 'external' form of quality control which helps both to highlight reliable determinations and those measurements that may be subject to unsuspected bias.

The **GeoPT proficiency testing programme** is designed to be part of the routine quality control system employed by an analytical geochemistry laboratory engaged in the bulk analysis of geological materials. A laboratory can monitor its performance on a regular basis through proficiency testing, detect unsuspected errors in its analytical procedures and take remedial action as appropriate.

The scheme has been operating successfully for over 20 years and currently more than 110 laboratories are signed up from every corner of the globe. They include a wide spectrum of commercial, governmental and academic institutions undertaking a huge variety of analytical procedures.

The **Steering Committee** for the Geo*PT* programme comprises:

Peter Webb, formerly of The Open University, Milton Keynes

Michael Thompson, Birkbeck College, University of London

Phil Potts, The Open University, Milton Keynes

Charles Gowing, The British Geological Survey, Keyworth

Test samples provided for the Geo*PT* programme are normally produced from silicate rocks or comparable materials of geological origin. A different routine test material is distributed

to participants at six-monthly intervals. It may occasionally be accompanied by a supplementary material that is analytically more challenging. A period of at least six weeks is allowed for laboratories to submit their results online through our web-based system. A report containing all contributed results, consensus values (both assigned and provisional) for the test material, and



Enquiries about:

corresponding *z*-scores (for around 50 to 60 constituents) for data submitted is made available online for download about six weeks after the submission deadline.

Full details about the **operation and organisation** of the scheme may be obtained from the **GeoPT protocol** at: <u>http://www.geoanalyst.org/wp-content/uploads/2018/06/GeoPT-revised-protocol-2018.pdf</u>

Further information about the scheme, particularly the nature and availability of previous test materials, may be found at:

- <u>www.geoanalyst.org</u>
- <u>www.iageo.com</u>

Prospective participants wishing to <u>register an interest</u> can do so through the link on the login page, where contact details can be supplied.

- the organization of the GeoPT programme should be addressed to our Administrator: <u>Peter Webb</u> (geopt.iag@gmail.com)
- subscriptions to GeoPT should be addressed to our Subscriptions Manager: Chris Jackson (iag-treasurer@virginmedia.com)

