

Terms of Latin origin relating to sample characterization (IUPAC Technical Report)

Vanessa K. Peterson, Matteo Bianchini, Karena W. Chapman, Martina Elice, David Brynn Hibbert, Paul Roche, Luigi Silvano, Lorenzo Stievano
Pure and Applied Chemistry, 2024
Vol. 96, no. 11, 2024, pp. 1531-1540
<https://doi.org/10.1515/pac-2022-1103>

The use of Latin origin terms, relevant for sample characterization modalities, is described with a focus on samples under controlled conditions, samples within devices, and samples during physico-chemical evolution. The terms *in vitro*, *in vivo*, *in situ*, *ab initio*, *in silico*, *post mortem*, *ex situ*, *posthumous*, *in vacuo*, *(in) operando*, *post facto*, and *ex post facto*, as used in the scientific literature, are considered. Uses of the Latin origin terms *in situ*, *extra situm*, *in operando*, *in vivo*, *in vacuo*, *in vitro*, *extra vivum*, *post facto* and *ex post facto*, *ab initiis*, *computatro*, and *post mortem* are discussed. It is suggested that these terms are to be used without hyphenation and that all Latin derived terms are set in italic font.

<https://iupac.org/project/2021-009-2-500/>

Glossary of terms used in biochar research (IUPAC Technical Report)

Fotis Biliadis, Divine Damertey Sewu, Seung Han Woo, Ioannis Anastopoulos, Frank Verheijen, Johannes Lehmann, Wenceslau Geraldes Teixeira, Dionisios Gasparatos, Kathleen Draper and Dimitrios Kalderis
Pure and Applied Chemistry, 2014
Vol. 96, no. 11, 2024, pp. 1541-1572
<https://doi.org/10.1515/pac-2021-0106>

Biochar is the solid carbonaceous product of biomass pyrolysis. The properties of biochar depend on the biomass feedstock as well as the pyrolysis temperature and time. Therefore, biochars with different properties and functionalities can be produced. Biochar research has been intensive in the past 15 years, focusing mainly on soil applications, wastewater treatment, and contaminant remediation. However, a formal definition of biochar and related terms is missing, which hinders the standardization of scientific results worldwide and the scaling-up of research at the industrial level. Furthermore, an official terminology may promote the

development of a harmonized legal framework for biochar production and applications, both at regional and national levels. This glossary of terms consists of 178 scientifically sound definitions of the most commonly used terms in biochar research. The definitions of this glossary are interconnected, allowing the reader to further explore the synergies between terms. The distribution of terms reflects the multidisciplinary nature of biochar research: chemistry, material science and engineering, and soil science are the main disciplines represented here. The list of terms is by no means exhaustive and the strategic objective of this effort is to develop a dynamic document in which more terms will be added in the future, and the existing ones will be refined, as biochar research evolves.

<https://iupac.org/project/2015-056-3-600/>

Properties and units in the clinical laboratory sciences. Part XXVIII. NPU codes for characterizing subpopulations of the hematopoietic lineage, described from their clusters of differentiation molecules (IUPAC Technical Report)

Evita Maria Lindholm, Eli Taraldsrud, Jakob Thaning Bay, Mats Bemark, Jens Magnus Bernth Jensen, Rebecca Ceder, Elisabeth Abrahamsen, Fatma Meric Yilmaz, Sridevi Devaraj, Eline van der Hagen and Helle Møller Johannessen
Pure and Applied Chemistry, 2024
Vol. 96, no. 11, 2024, pp. 1573-1582
<https://doi.org/10.1515/pac-2023-0806>

Examination results from clinical laboratories in the health area has increased through the last decades. Coding of laboratory analyses is an efficient way of securing standardized and accurate recording of patient information, which can then serve as an invaluable resource for clinical treatment decisions, improved patient care and medical research. The Nomenclature for Properties and Units (NPU) terminology was developed to support correct and standardized exchange of data across laboratories and ehealth systems. Use of the NPU terminology allows clinical examination results to be recognized, compared, reused in calculations, extracted for research or statistics, and stored for documentation, without loss of meaning. The terminology has been developed since the 1990's with support from the international organizations IFCC (International