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DESCRIPTION

Forensic Chemistry publishes high quality manuscripts focusing on the theory, research and application of any chemical science to forensic analysis. The scope of the journal includes fundamental advancements that result in a better understanding of the evidentiary significance derived from the physical and chemical analysis of materials. The scope of *Forensic Chemistry* will also include the application and or development of any molecular and atomic spectrochemical technique, electrochemical techniques, sensors, surface characterization techniques, mass spectrometry, nuclear magnetic resonance, chemometrics and statistics, and separation sciences (e.g. chromatography) that provide insight into the forensic analysis of materials.

Evidential topics of interest to the journal include, but are not limited to, fingerprint analysis, drug analysis, ignitable liquid residue analysis, explosives detection and analysis, the characterization and comparison of trace evidence (glass, fibers, paints and polymers, tapes, soils and other materials), ink and paper analysis, gunshot residue analysis, synthetic pathways for drugs, toxicology and the analysis and chemistry associated with the components of fingerprints. The journal is particularly interested in receiving manuscripts that report advances in the forensic interpretation of chemical evidence.

Technology Readiness Level: When submitting an article to *Forensic Chemistry*, all authors will be asked to self-assign a Technology Readiness Level (TRL) to their article. The purpose of the TRL system is to help readers understand the level of maturity of an idea or method, to help track the evolution of readiness of a given technique or method, and to help filter published articles by the expected ease of implementation in an operation setting within a crime lab. Four TRL levels are available:

TRL 1: Basic research phenomenon observed or basic theory proposed, which may find application to a proposed area of forensic chemistry. Examples include one-off instruments that make unique measurements, the study of chemical properties of explosives, and the first reporting of some basic measurements or observations from chemical analysis.

TRL 2: Development of a theory or research phenomenon that has a demonstrated application to a specified area of forensic chemistry, including supporting data. Examples include the first application of an instrument or technique to a forensic application, or the application of a model or theory to simulated casework. Examples include models that predict weathering of ignitable liquids, new or improved separation or measurement capabilities, or development of chemometric tools with an aim to better describe the significance of chemical evidence.

TRL 3: Application of an established technique or instrument to a specified area of forensic chemistry with measured figures of merit, some measurement of uncertainty, and developed aspects of intra-laboratory validation. TRL 3 methods should be practicable on commercially available instruments and results of the first inter-laboratory trials can also be reported as TRL 3 communications.

TRL 4: Refinement, enhancement, and inter-laboratory validation of a standardized method ready for implementation in forensic laboratories. New knowledge in this area can be immediately adopted or used in casework. Examples are case reports, fully validated methods or protocols that have undergone or are currently being considered by a standard development organization, measures of error rates and database development and reporting.

The assignments of the TRL will be proposed by the authors during initial submission. TRL levels will be reviewed by the editors and peer reviewers and displayed in the final article online. Collections of the four TRLs can be found [here](#).

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Examples:

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59. <https://doi.org/10.1016/j.Sc.2010.00372>.

Reference to a journal publication with an article number:

[2] Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2018. The art of writing a scientific article. *Heliyon.* 19, e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

Reference to a book:

[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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