# Talanta

# The International Journal of Pure and Applied Analytical Chemistry

# Aims & Scope

*Talanta* provides a forum for the publication of original research papers, preliminary communications, and critical reviews in all branches of pure and applied analytical chemistry. Papers are evaluated based on established guidelines, including the fundamental nature of the study, scientific novelty, substantial improvement or advantage over existing technology or methods, and demonstrated analytical applicability. Original research papers on fundamental studies, and novel sensor and instrumentation development, are especially encouraged. Novel or improved applications in areas such as clinical and biological chemistry, environmental analysis, geochemistry, and materials science and engineering are welcome.

Analytical performance of methods should be determined, including interference and matrix effects, and methods should be validated by comparison with a standard method, or analysis of a certified reference material. The developed method should especially comprise information on selectivity, sensitivity, detection limits, accuracy, and reliability. However, applying official validation or robustness studies to a routine method or technique does not necessarily constitute novelty. Proper statistical treatment of the data should be provided. Relevant literature should be cited, including related publications by the authors, and authors should discuss how their proposed methodology compares with previously reported methods.

Since classical spectrophotometric measurements and applications (including derivative spectrophometry), fluorimetry, solvent extraction, titrimetry, chemometrics, etc. are well established and are considered routine analytical methods, studies in such areas should demonstrate a unique and substantial advantage over presently known systems. New reagents or systems should demonstrate clear advantage, and their presentation should be comprehensive rather than generating a series of similar papers for several analytes or similar reagents. Modifications of reagents should demonstrate significant improvements. Obvious application of known chemistries or methods to established instrumental techniques are discouraged.

Application of established analytical approaches to relatively simple matrices having no major interferences, such as pharmaceutical preparations, are discouraged unless considerable improvements over other methods in the literature are demonstrated. Papers dealing with analytical data such as stability constants,  $pK_a$  values, etc. should be submitted to more specific journals, unless novel analytical methodology is demonstrated, or important analytical data are provided which could be useful in the development of analytical procedures.

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