

# JOURNAL OF BACTERIOLOGY

## Instructions to Authors

Abstract. An Abstract appears at the beginning of each paper (except Notes) in the *Journal*. This Abstract is also printed in *Biological Abstracts*. The Abstract should indicate all subjects dealt with in the paper; it must *not* present anything that isn't treated in the paper. The Abstract should not exceed 250 words.

Introduction. The Introduction usually has two important functions: (i) it outlines the nature of the problem under investigation; and (ii) it then describes the purpose, scope, and method of the investigation itself. It usually, but not necessarily, provides a *brief* review of the literature. Where possible, a recent review paper should be cited, rather than a large number of individual references.

Materials and Methods. This section should contain only two types of information: (i) a description of the equipment and materials employed, and (ii) an explanation of the way in which the work was done. Sufficient details should be given so that a competent worker in the field could repeat the experiments. Standard laboratory procedures should not be described in detail. Literature references to methods employed will often suffice. New methods or techniques should be described precisely. Names and addresses of manufacturers and other incidental information should be given parenthetically, *not* as footnotes.

Results. This section of the paper provides a description of the results obtained. Although considered the most important part of a paper, it is often the shortest, especially if it is preceded by a well-written Materials and Methods section and followed by a well-written Discussion. Usually, the data obtained can best be presented in tables or graphs.

Discussion. The purpose of the Discussion is to discuss the relationships among observed facts. The author should discuss, and not just recapitulate the results. A good Discussion might well include: (i) a discussion of the main principles, causal relations, and generalizations that are shown by the results; (ii) exceptions and opposing theories, and explanations of these; (iii) comparison of results and interpretations with those of other workers; (iv) conclusions; and (v) evidence for *each* conclusion. It should be remembered that the data should be kept in the Results, and the Discussion should be reserved for interpretation. The author should give particular emphasis to unsettled or controversial points, subjects on which further investigation is planned (or needed), and possible applications of his results.