AIMS AND SCOPE, PROCEDURES

Introduction:

Journal of Biotechnology provides a medium for the publication of both full-length articles and short communications on many aspects of Biotechnology. The Journal will accept submissions about novel scientific research results, ranging from genetic or molecular biological points of view to those covering biochemical, chemical or bioprocess engineering aspects, as well as computer application of new software concepts, provided that in each case the material is directly relevant to biotechnological systems and/or applications (details for each section provided below). Papers presenting information of a multidisciplinary nature, which would not be suitable for publication in a journal devoted to a single discipline are particularly welcome. The Journal features a "one-pass review process", *i.e.* submissions will be reviewed, and those, which need improvements (either minor or major) can be resubmitted once only before the decision whether to accept or reject is being taken by the Chief Editor.

Quality control:

Journal of Biotechnology only accepts submissions, which are novel and meet the highest scientific standards. Therefore, the quality of each new submission is checked on arrival. Submissions will be rejected outright, if the following deficiencies are identified by the Technical Editor:

- *Quality of the English Language:* Papers, which have language deficiencies will not be forwarded to the Associate Editors for the next review steps. It is highly recommended to have a native English speaker check the quality of the English language BEFORE submission to Journal of Biotechnology.
- *Scientific Fraud:* Submissions containing paragraphs, images, or data, which are a direct copy of previously published articles or other media (*e.g.* Wikipedia entries *etc*.), regardless of the question if the original publication was authored by the same authors or others, will be rejected outright. All new submissions to Journal of Biotechnology are checked for overlaps with the existing body of literature by the Technical Editor and duplications in any part of the submission will lead to an outright rejection of the submission. The Editorial Team of Journal of Biotechnology reserves the right to block authors who have submitted fraudulent papers to Journal of Biotechnology from ANY future submissions to Journal of Biotechnology. The Editorial Team at Journal Biotechnology also reserves the right to share findings about fraudulent submissions with the employers of the authors attempting fraud.
- *Reviewer Recommendations:* Submissions listing reviewers without an institutional email address (*e.g.* Hotmail, Gmail or similar addresses only) will be rejected as well. It is also highly recommended to suggest reviewers, who are not from the same country as the main author of the submitted paper. Suggesting reviewers, who were co-authors on other publications is also not acceptable.
- *Formatting Issues:* All formatting requirements have to comply with the description at https://www.elsevier.com/journals/journal-of-biotechnology/0168-1656/guide-for-authors. We want to emphasize that figures should be uploaded one-by-one as separate high-resolution, publication quality files. Line numbering must be present throughout the submission. The authors need to ensure that all materials necessary will be uploaded during the initial submission process otherwise a submission might be rejected outright.

Processing Time:

Please note that Journal of Biotechnology receives more than 1,500 submissions per year. Journal of Biotechnology attempts to process each submission as rapidly as possible. In general, this means that the review process should be completed within a time frame of three to four months. Most of this time is spent on the recruitment of the external reviewers and the time that they take before they submit their reviews back to Journal of Biotechnology. If there is a problem recruiting reviewers for a particular submission, authors may be asked to provide suggestions for additional reviewers by the Technical Editor, usually after at least two months have passed since the initial submission.
The submission status of each paper is visible to the authors via the Web interface, therefore emails to the Editorial team, worrying about the completeness of a submission, or questions about perceived problems with the review process, respectively, are unnecessary and shall not be answered. If a problem with a submission exists, the authors will be contacted by the Technical Editor in order to resolve the issue.
Once the reviewing process has been completed, no further communication about a submission is possible with the Editorial team of Journal of Biotechnology, regardless of the question whether the paper was accepted or rejected. After acceptance, all communications about the accepted papers need to be directed to the Elsevier publishing team, as the submission entries will have “disappeared” from the Web interface of the Editors of Journal of Biotechnology.

Outline of the Areas covered by the Journal:

Nucleic Acids/Molecular Biology: Novel contributions in the general area of Nucleic Acids/Molecular Biology will be considered. This includes studies for the physical and functional characterization of genomes, studies on the expression of genomic information in cellular and cell-free systems, the development and application of technologies for the detection of single molecules and molecular interactions (molecular recognition), the development and application of strategies towards the identification of biotechnologically interesting new compounds via chemical synthesis (combinatorial strategies in particular), molecular design and evolution, as well as bioinformatics. The development of automated systems for the above-mentioned fields may be of particular interest.

Physiology/Biochemistry: This section covers biochemical and physiological studies of metabolism and enzymes as relevant to product formation including intermediary metabolism of micro-organisms, tissue culture cells and cell-free systems; bio-regulatory investigations at the molecular level including transcription/translation control and growth/product-synthesis relationships; design and engineering of products by molecular strategies with emphasis on protein/enzyme engineering and modification; quality improvement of non-protein products; engineering of cellular modification and transport systems such as post-translational protein modifications as well as protein and metabolite secretion; novel (molecular) strategies of screening for new or modified products (e.g. pharmaceuticals, bioactive compounds, enzymes) including applications based on directed evolution and combinatorial strategies.

Biochemical Engineering/Bioprocess Engineering: Of special interest for this section is

the rational manipulation of reactions and reaction networks through metabolic engineering and systems biotechnology techniques, the design of specific biocatalysts both at the gene or molecular level, or optimization of bioprocesses that lead to enhanced bio-manufacturing of metabolites or biomaterials with unique properties. Classical Biochemical Engineering topics such as transport phenomena, reaction kinetics, design of reactors, downstream operations and software applications, as well as research on cellular biology and physiology in biochemical processes employing enzymes, micro-organisms, mammalian cells, plant cells and tissue will also be considered if truly innovative approaches and/or novel results are presented. The use of a quantitative framework for the description of the bioprocesses to enhance the understanding of the experimental results is highly encouraged.

Industrial Processes/New Products: Articles describing the design, simulation, experimental testing/validation and economic evaluation of novel processes using biotechnological approaches, their products or devices constitute the area of interest of this section. Papers dealing with biologically based process integration with clear rational approaches to design and evaluation are particularly welcome; similarly, products and devices should be interpreted in the broadest sense and use or integrate different technologies, as long as the core technology and/or the design rationale are biologically or biochemically based.

Medical Biotechnology: Manuscripts submitted for the *Medical Biotechnology* section are expected to put current progress in life sciences and life technologies into therapeutic perspective. Medical Biotechnology is covering pioneering activities related to molecular diagnostics and drug discovery, genetic and protein-based vaccines, gene therapy, tissue engineering, stem cell biology, cancer markers and therapeutics, drugs and drug targets for treatment of human pathologies, metabolic and infectious diseases and molecular characterization of viral, bacterial and parasitic infections.

Agro- and Food Biotechnology: Manuscripts in this section should focus on plant improvement; research on both, model plants and crops, respectively will be considered. Conservation and utilization of biodiversity, development of tools contributing to marker-assisted breeding, substantially improved transformation approaches, introduction of novel traits and contributions to unravel host-pathogen interactions and to improve pest control and abiotic stress tolerance are of particular interest. Issues related to intellectual property, nutritional aspects concerned by improved quantification assays and control measures for desirable or undesirable compounds, as well as reports of plants used for bioremediation, could also be submitted to this section.

Genomics and Bioinformatics: This section accepts articles, which are focused on the application of Genomics and Bioinformatics *in Biotechnology research*. This includes the characterization of genomes of organisms, which are relevant to Biotechnology by DNA sequencing and the use of Transcriptomics, Proteomics and Metabolomics applications. In addition, Bioinformatic tool development and analyses relevant to Biotechnology are also encouraged. Special emphasis is given to the applicability of the results. The Short Genome Communications section, which was previously featured within Journal of Biotechnology is now closed. Articles, which are similar to the ones previously published in the Short Genome Communications section are not accepted any longer and should also not be submitted to the Genomics and Bioinformatics section.

Outline of the Areas, which clearly fall outside of the scope of Journal of Biotechnology:

- Manuscripts *lacking novelty*. Papers, which could be improved iteratively in a lengthy process will be rejected with a recommendation to transition them to the Sister Journal of Journal of Biotechnology called Biotechnology Reports. This transition process is optional and valid for a limited time only. The transfer needs to be initiated by the authors by using the link that is provided by separate email. Biotechnology Reports is an Open Access Journal, also published by Elsevier.
- *Review Articles* submitted without previous invitation by an Editor.
- Submissions dealing with the following *Environmental-related Subjects*: waste water treatment, bioremediation, biodegradation.
- Reports on the cloning and/or expression of naturally occurring enzymes *without direct biotechnological application*.
- Research on *natural products* without biotechnological modification.
- *Toxicological* research.
- *Pharmacological* research.
- *Food Science*-related research without biotechnological application.
- *Engineering Articles*, which do not deal with the direct improvement of biotechnological processes.
- Short Genome Communications.

Other requests:

The members of the Editorial Panel and the Editorial Board of Journal of Biotechnology are exclusively chosen by the existing Editors. Voluntary submissions of applications for these panels are not recognized by the Editors and will not be answered.

Journal of Biotechnology currently receives more than 1,500 submissions per year, which need to be processed in a timely manner. This means that outside of the documentation provided during, and on completion, of the review process to submitters and reviewers alike, no further documentation can be created by the Editors due to lack of time.