

University Journal of **Current Trends in Research**

An International, Multidisciplinary, Peer-Reviewed Journal



University Journal of Current Trends in Research

An International, Multidisciplinary, Peer-reviewed Journal

CHIEF PATRON

Chancellor, AKS University Sh. B.P Soni

PATRON

Vice Chancellor, AKS University Prof. (Dr.) P. K. Banik

Chairman
AKS University
Er. Anant Soni,

Pro-Vice Chancellor, AKS University Dr. Harshvardhan Dr. R.S. Tripathi

ADVISORY EDITORIAL BOARD

Dr. R. P.S. Dhakarey

Prof. R.N. Tripathi Prof. R. S. Nigam Er. R. K. Shrivastava Prof. R.S. Pathak Prof. G. K. Pradhan

Prof. G. C. Mishra Prof. P. K. Mazumdar

EDITORIAL BOARD

Associate Editors:

Dr. B.K. Mishra

Dr. Pankaj Srivastava

Prof. Nand Ram

Dr. C. K. Teckchandani

Dr. Neeraj Verma

Prof. T. Singh

Prof. S. P. Gupta

Dr. Mahendra K. Tiwari

Dr. Neelesh Rai

Dr. Dinesh Mishra

Dr. Nemish Tripathi

Dr. Kaushik Mukharji

Managing Editor
Dr. Samit Kumar

Editor-in-Chief
Dr. Kamlesh Choure

Dear colleagues,

Sub: Invitation to submit your paper to University Journal of Current Trends in Research (UJCTR)

Greetings and best wishes from the University Journal of Current Trends in Research (UJCTR)

Following the successful launch of University Journal of Current Trends in Research (UJCTR), a new broad scope, open access journal, we are writing to invite you to submit your manuscript to the under listed areas to Editor-in-Chief (Email: editorujctr@gmail.com) for the forthcoming issue of UJCTR in March, 2016 as per Authors Guidelines attached herewith.

University Journal of Current Trends in Research (UJCTR) takes an objective and constructive approach to peer review, with an international editorial board evaluating your work based on its methodological soundness and scientific relevance rather than its perceived level of future importance.

Why should you publish with University Journal of Current Trends in Research (UJCTR)?

- Immediate, free access to your article anywhere in the world
- Retention of the full copyright in your work
- Fast publication on a state-of-the-art platform
- Innovative article-level performance metrics
- Global marketing and high production values
- Extensive indexing and archiving of your workA straightforward and friendly publishing service
- 71 straightforward and friendry publishing service

Submit your manuscript to University Journal of Current Trends in Research (UJCTR) today.

University Journal of Current Trends in Research (UJCTR) is a multi disciplinary, peer-reviewed journal that promotes and enhances research in all fields of science, engineering, humanities, commerce and management by publishing high-quality research papers that: 1) describe significant and novel findings; and 2) advance knowledge in a diversity of scientific fields. Being multi-disciplinary in nature, this journal publishes extensive contributions in all the areas listed below:

Basic and applied Science (biology, biotechnology, microbiology, chemistry, physics, biophysics, geology, mathematics), Agriculture, Engineering, Pharmaceutical Sciences, Humanities, Commerce, Management, Computer Science, Information technology

Please do not hesitate to get in touch if you have any queries.

Editor-in-Chief

DESCRIPTION

University Journal of Current Trends in Research (UJCTR) is an international, multi disciplinary, peer-reviewed journal that promotes and enhances research in all fields of science, engineering, humanities, commerce and management by publishing high-quality research papers that: 1) describe significant and novel findings; and 2) advance knowledge in a diversity of scientific fields. Being multi-disciplinary in nature, this journal publishes extensive contributions in all the areas listed below:

- ❖ Basic and applied Science (biology, biotechnology, microbiology, chemistry, physics, biophysics, geology, mathematics)
- **❖** Agriculture
- Engineering
- Pharmaceutical Sciences
- Humanities
- Commerce
- Management
- Computer Science
- Information technology

UJCTR also salutations submission of manuscripts from cross-disciplinary fields, including biophysics, bioengineering, chemical physics, commerce, management, computer science and environmental science; however, no area is excluded from consideration. In addition to original articles, UJCTR publishes reviews, mini-reviews, case reports, and letters to the Editor, thereby providing a forum for the reporting and discussion of cutting edge perspectives in science. The journal is committed to publish research works by utilizing a hasty, unbiased, and rigorous review process. All submitted papers are subjected to strict single blind peer review by its distinguished international Advisory Board members, as well as by other anonymous international and national reviewers.

Submitted manuscripts must not have been published previously in any copyright form (print or electronic/online).

The general criteria for acceptance of a manuscript are

- advances multidisciplinary scientific knowledge
- * provides sufficient and relevant literature review
- * utilizes scientifically solid, reliable, and reproducible methodologies
- derives appropriate and justifiable conclusions based upon the experimental data presented
- ❖ written in English or Hindi and is of the utmost quality and clarity

UJCTR will be published 2 times per year. All accepted manuscripts are granted free online open-access immediately after publication, which permits its users to read, download, copy, distribute, print, search, or link to the full texts of its articles, thus facilitating access to a broad readership.

CHIEF PATRON

Chancellor, AKS University

Sh. B.P Soni

PATRON

Vice Chancellor, AKS University

Prof. (Dr.) Paritosh K. Banik

Chairman

Er. Anant Soni, AKS University

Pro-Vice Chancellor, AKS University

Dr. Harshvardhan

Dr. R.S. Tripathi

ADVISORY EDITORIAL BOARD

Dr. R. P.S. Dhakarey, Dean, Faculty of Life Science & Technology, AKS University

Prof. R.N. Tripathi, OSD, AKS University

Prof. R. S. Nigam, Dean, R&D, AKS University

Er. R. K. Shrivastava, Administrator, Faculty of Engineering, AKS University

Prof. R.S. Pathak, Dean, Faculty of Agricultural Sciences & Technology, AKS University

Prof. G. K. Pradhan, Dean, Faculty of Engineering, AKS University

Prof. G. C. Mishra, Director, Cement Technology, AKS University

Prof. P. K. Mazumdar, Head, Department of Civil Engineering

EDITORIAL BOARD

Associate Editors:

• Section: Engineering & Technology

Dr. B.K. Mishra (Mining)

Dr. Pankaj Srivastava (Mechanical Engineering)

• Section: Agricultural Sciences & Technology

Prof. Nand Ram (Agriculture Sciences: Soil Science)

Dr. C. K. Teckchandani (Food Technology)

Dr. Neeraj Verma (Agriculture Sciences: Pathology)

Prof. T. Singh (Agricultural Sciences: Agronomy, Horticulture)

• Section: Pharmaceutical Sciences

Prof. S. P. Gupta

• Section: Life Sciences

Dr. Mahendra Kumar Tiwari (Environmental Sciences)

• Section: Basic Sciences

Dr. Neelesh Rai (Physics)

Dr. Dinesh Mishra (Chemistry)

• Section: Humanities

Dr. Nemish Tripathi

• Section: Commerce and Management

Dr. Kaushik Mukharji (Management)

Managing Editor

Dr. Samit Kumar

Editor-in-Chief

Dr. Kamlesh Choure

GUIDELINES FOR AUTHORS

Editorial policy and general information

The University Journal of Current Trends in Research (UJCTR) shall publish original articles in the fields of the basic sciences, applied sciences and technology, biomedical sciences, humanities, management and related disciplines. UJCTR seeks to publish high-quality papers that

- describe significant and novel findings
- * advance knowledge in a diversity of scientific fields in the form of original articles, short communications, reviews, case reports, or letters to the editor

Review process

Manuscripts will be evaluated on the basis that they present new approaching into the investigated topic and are probable to contribute to research progress or a change in clinical practice. It is understood that all authors listed on a manuscript have agreed to its submission. The signature of the corresponding author on the letter of submission signifies that these conditions have been fulfilled. Received manuscripts will initially be examined by the UJCTR editorial office and those thought to have insufficient grounds for publication may be rejected without external evaluation. Manuscripts not prepared in the recommended style described in Research_Review_Article_Template will be sent back to authors for correction. The authors will be notified with the reference number, once the manuscript has been assigned to an Editor. The assigned manuscripts will be sent to 2-3 independent experts for scientific assessment. The assessment process commonly takes an average of 1-3 months.

Permissions

Authors wishing to include figures, tables, or text that have already been published elsewhere will be required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any received material lacking such evidence will be assumed to originate from the authors.

Disclaimer/Disavowal

Every effort may be made by the publisher and editorial board to ensure that no inaccurate or misleading data or statements appear in the UJCTR. However, they wish to make it clear that the data and opinions appearing in the articles herein are the responsibility of the authors concerned. Accordingly, the publisher and the editorial board accept no liability whatsoever for the consequences of any inaccurate or misleading data or statements, intentional or not.

Articles types

UJCTR seeks to publish experimental and theoretical research results of outstanding significance in the form of original articles, short communications, reviews, case reports, or letters to the editor.

- Original articles: Articles which represent in-depth research in various scientific disciplines.
- ❖ Short communications: Should be complete manuscripts of significant importance. However, their length and/or depth do not justify a full-length paper. The total number of figures should not exceed 6 whereas total number of tables should not exceed 2. The number of words should be = 3,000
- * Review articles: Should normally comprise less than 10,000 words; contain unstructured abstract and includes up-to-date references. Meta-analyses are considered as reviews. Special attention will be paid to the teaching value of review papers.
- ❖ Mini reviews: These are reviews of important and recent topics that are presented in a concise and well-focused manner. The number of words is limited to 5,000 words.
- ❖ Case reports: A detailed report of the symptoms, signs, diagnosis, treatment, and follow-up of an individual patient (i.e., clinically important information on common and rare conditions).
- ❖ Letter to the editor for comments on recently published articles.
- Special reports: Papers may be accepted on the basis that they provide a systematic, critical and

up-to-date overview of literature pertaining to research or clinical topics.

BEFORE YOU BEGIN

Ethical approval

Studies on patients or volunteers require Ethics Committee and/or Independent Review Board (IRB) approval, and, where relevant, the patients' written informed consent, which should be documented in the Methods section of the paper. If such a study was not approved by the appropriate Ethics Committee or IRB, a statement as to why it was exempted should be included. The Editors reserve the right to refuse publications where the required ethical approval/patient consent is lacking.

Conflict of Interest (mandatory)

A conflict of interest may exist when an author or the author's institution has financial or other affiliations with people or organizations that may inappropriately influence the author's work. A conflict can be actual or potential and full disclosure to the journal is the safest course. All submissions to the journal must include disclosure of any relationships that could be viewed as potential conflicts of interest. The journal may use such information as a basis for editorial decisions and may publish such disclosures if they are believed to be important to readers in judging the manuscript. This declaration (with the heading "Conflict of interests") should be uploaded among the files submitted on the EES.

Submission declaration

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

Changes to authorship

Request to changes in authorship is not allowed once the paper is accepted. In case any such changes need to be made then the author would have to withdraw his paper and resubmit it with the new author details in the Editorial System.

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Copyright Transfer Agreement'. Acceptance of the agreement will ensure the widest possible dissemination of information. Subscribers may reproduce tables of content or prepare lists of articles including abstracts for internal circulation within their institutions.

Role of the funding source

Please list the source(s) of funding for the study, for each author, and for the manuscript preparation in the acknowledgements section. List all contributors who do not meet the criteria for authorship, such as technical assistants, writing assistants or head of department who provided only general support. Financial and other material support should be disclosed and acknowledged.

Open access

Every peer-reviewed research article appearing in this journal will be published open access. This means that the article is universally and freely accessible via the internet in perpetuity, in an easily readable format immediately after publication.

Language

Manuscripts must be written either in English or in Hindi in a clear and concise manner. Any author who is not fluent in idiomatic English/Hindi is urged to seek assistance with manuscript preparation prior to

submission. Reviewers will not expected to correct grammatical errors and any deficiency in this area may detract from the scientific content of the paper and result in acceptance delays or rejection

Submission

Our online submission system will guide you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Referees

Please submit the names and institutional e-mail addresses of three potential referees. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

General information

Authors should submit their manuscripts to the editorial office as word files via e-mail: editorujctr@gmail.com. The corresponding author's full mailing address, including mail codes, phone number, fax number, and email address should be included. The original manuscript should be formatted with double line spacing using Arial or Times New Roman fonts (12 pt). The text must be in a single-column format with justified margins. Use bold face, italics, subscripts, and superscripts where appropriate. To avoid unnecessary errors, the authors are strongly advised to use the "spell-check" and "grammar check" functions of their word processing software. Use continuous line numbering throughout the text and all manuscript pages must be numbered at the bottom right corner of each page.

Revised manuscripts

The authors must submit the revised version of their submissions within one month of receiving the editorial decision. Revision does not mean that the manuscript will be accepted for publication, as the amended submissions could be sent out for re-evaluation. In response to reviewer's comments, the authors must ensure that each comment is followed by their revision and/or response. In instances where an author disagrees with a comment or suggestion of a reviewer, please justify the reason. Any associated changes in the manuscript must be highlighted on the revised form of the manuscript to facilitate the process of re-evaluation.

Resubmission of a rejected manuscript

When resubmitting a manuscript previously rejected by UJCTR, the authors are required to upload the decision letter from the Editor requesting submission of the rejected manuscript, the original reviewer comments of the rejected manuscript, the responses to the reviewer comments, and the original manuscript number. The resubmitted manuscript must indicate, in color, where the revisions were made in the paper in response to the reviewer comments

Article structure

The manuscript should be compiled in the following order: The manuscript should be compiled in the following order: Novelty Statement, List of five referees with their full contact information, Title, Authors & Affiliations, Abstract, Keywords, Introduction, Experimental, Results and Discussion, Conclusion, Acknowledgments, References and Notes, Legends, Tables, Figures, and Schemes.

Novelty Statement: A statement of novelty should be provided in not more than 100 words giving a brief description of the original research conducted in the submitted manuscript.

Title: The title should be brief, specific, and rich in informative words; it should not contain any literature references or compound numbers.

Authors and Affiliations: Where possible, supply given names, middle initials, and family names for complete identification. Use superscript lowercase letters to indicate different addresses, which should be as detailed as possible and must include the country name. The corresponding author should be indicated with an asterisk, and contact details (email, fax) should be placed in a footnote. Information relating to other authors (e.g., present addresses) should be placed in footnotes indicated by the appropriate symbols (overleaf).

Abstracts: Authors must include a short abstract of approx 100 - 300 words that states briefly the purpose of the research, the principal results, and major conclusions. References and compound numbers should not be mentioned in the abstract unless full details are given.

Keywords: Authors should provide with at least 4 keywords that define the major areas of the manuscript's focus of research. These keywords will be used for indexing purpose.

Introduction

The author(s) should endeavor to define the significance of the work and the justification for its publication. Any background discussion should be brief and restricted to relevant material.

Material and methods (Experimental or Methodology)

Authors should be as concise as possible in experimental descriptions. The experimental section must contain all of the information necessary to assurance reproducibility. Previously published methods should be indicated by a reference and only relevant modifications should be described. All vendor details, including company, city, and country, should be mentioned for chemicals, reagents, strains, etc. For statistical analysis, please state the appropriate test(s) in addition to hypothesized p-value or significant level (for example 0.05).

Results

The study results should be clear and concise. Restrict the use of tables and figures to depict data that is essential to the message and interpretation of the study. Do not duplicate data in both figures and tables. The results should be presented in a logical sequence in the text, tables and illustrations.

Discussion

This should explore the significance of the results of the work, not repeat them. Include in the discussion the implications of the findings and their limitations, how the findings fit into the context of other relevant work, and directions for future research.

Conclusion(s)

The main conclusion(s) of the study should be presented in a short conclusion statement that can stand alone and be linked with the goals of the study. State new hypotheses when warranted.

Include recommendations when appropriate. Unqualified statements and conclusions not completely supported by the obtained data should be avoided.

Acknowledgements: An acknowledgement section may be included. It should be placed after the manuscript text and before the references.

Abbreviations: Standard ACS abbreviations should be used throughout the manuscript and are employed without periods. The preferred forms for some of the more commonly used abbreviations are mp, bp, μC , K, min, h, mL, μL , g, mg, μg , cm, mm, nm, mol, mmol, μmol , mM, μM , ppm, HPLC, TLC, GC, 13C NMR, 1H NMR, GCMS, HRMS, FABHRMS, UV, FTIR, EPR, ESR, DNase, IV, XRD, EDX, XPS, ED50, ID50, IC50, LD50, im, ip, iv, mRNA, RNase, rRNA, tRNA, cpm, Ci, dpm, Vmax, Km, k, t1/2. All nonstandard abbreviations should be defined following the first use of the abbreviation.

References Citation in text: All citations in the text should refer to:

- 1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication (Smith, 2003)
- 2. Two authors: both authors' names and the year of publication (Smith & Jones, 2004)
- 3. Three, four or five authors: all authors names and year of publication (Smith, Jones, & Brown, 2005). For all subsequent citations of this work use et al. (Smith et al., 2005).
- 4. Six or more authors: first author's name followed by et al. and the year of publication (Black et al., 2007). Citations may be made directly or parenthetically. Groups of references should be listed first alphabetically, then chronologically, e.g., (Allan, 1996a, b, 1999; Allan & Jones, 1995; Allen et al., 1994). Kramer et al. (2000) have recently shown..."

Research_Review_Article Template

Title (write your title here, Times New Roman size 15, bold)

Authors: List all the contributing authors here, full first and last names followed by initials of middle name if there is (for example: Ashutosh Tiwari^{1*}, Yogendra K. Mishra², Samit Kumar^{1*}, Deepak K. Mishra)

(All the associated affiliations must be listed here with proper number)

ABSTRACT

(Times New Roman 10, Justified, 100-300 words maximum)

Please write here a concise abstract (max 300 words) which clearly reflects the exact findings demonstrated in the manuscript.

Keywords (up to 5): Supply appropriate keywords (each separated by ';').

Introduction

A detailed introduction is required here with proper emphasis about: (i) Importance of the addressed subject in general, (ii) importance of addressed subject in particular, (iii) related aspects covered in the literature, (iv) at the end a clear motivation about what is distinctiveness about the present work (what is new here or how it differs from the previous works). It must be written in such a way that readers can get a detailed overview about the addressed subject (past, present and future perspectives and challenges). References should be listed as initial first (Kumar, 2015; Kumar and Negi, 2012).

Introduction can be up to 1000 words (but this is not absolute limit).

Experimental

Provide appropriate experimental details in this section in form of subsections:

Materials/ Chemicals details
Material synthesis / Reactions
Characterizations / Device fabrications / Response measurements

Results and discussion

Discuss all the results and corresponding discussions in this section. Make sure a proper that proper coherency is maintained and appropriate discussions are included.

1

¹Author-affiliation 1: Department Name, Institute, University, Street address, city, postal code, country.

²Author-affiliation 2: Department Name, Institute, University, Street address, city, postal code, country.

^{*}Corresponding author/authors complete details (Telephone + E-mail)

Authors are especially encouraged to include attracting graphic schematic designs for material importance/synthesis method/growth model/device concept/involved physical and mechanisms/material modification etc. (whatever suits well with respect to addressed subject in the manuscript).

Figure can be directly inserted with the running text at relevant places (they can also be given at the end, after the references in the order of figure number, figure and a caption, one figure on one page).

A maximum of 6 figures (including schematics) is allowed. Each figure can be combined with multiple figures in form of a, b, c, d...... (In exceptional case 7 figures would be fine).

Remaining figures can be given in supplementary information file as additional supporting data (which will be freely available on the journals website). The supplementary info figures must be appropriately indexed in the text at the relevant places in the main manuscript.

A maximum of two tables are allowed and authors must choose only those table for the main manuscript which delivers main and most important information. Remaining table must be included in supplementary information.

Make sure that good quality figure with clear: (i) key messages, (ii) levels/font sizes, (iii) scales, (iv) color contrasts, (v) line widths/symbol sizes are necessary (qualifying this criteria is minimum requirement for manuscript publication irrespective of referee comments).

If authors plan to use any figure which is already published, they must get copyright permission from www.rightlinks.com

Use chemdraw to insert chemical formula.

Use of mathtype to insert mathematical formula/equations

Conclusion

Appropriate conclusion needs to written here which reflects the exact finding demonstrated in the paper.

Acknowledgements

This work was supported by Funding Program for Next-Generation World-Leading Researches (NEXT Program) and KAKENHI from JSPS. A.A. and T.S. thank the Japan Society for the Promotion of Science for a Young Scientist Fellowship.

Author's contributions

Conceived the plan: xx, xy, yz; Performed the experiments: xx, xy; Data analysis: xx yz; Wrote the paper: xx, xy, yz (xx, xy, yz are the initials of authors). Authors have no competing financial interests.

References (follow reference style as below, journal abbreviation must be taken from Chemical Abstract Service, CAS database).

(a) Scientific article

Sanchez, C., Belleville, P., Popall, M., & Nicole, L. (2011). Applications of advanced hybrid organic–inorganic nanomaterials: from laboratory to market. *Chemical Society Reviews*, 40(2), 696-753.

(b) Book

Tiwari, A., & Kobayashi, H. (Eds.). (2013). Responsive Materials and Methods: State-of-the-art Stimuli-responsive Materials and Their Applications. John Wiley & Sons.

(c) Book Chapter

Nam, K.; Kishida, A. (2012). Application of the Collagen as Biomaterials, In Biomedical Materials and Diagnostic Devices; Tiwari, A.; Ramalingam, M.; Kobayashi, H.; Turner, A.P.F. (Eds.); Wiley: USA, pp. 3-18.,

(d) Patent

Taguchi, N. (1962). Published patent application in Japan. S37-47677, October.

(e) Meeting/Conference/Symposium Abstract:

Kumar, S. and Negi, Y. S. (2012), Nanoparticles Synthesis from Corn Cob (Xylan) and Their Potential Application as Colon-Specific Drug Carrier. Macromol. Symp., 320: 75-80.

SUPPORTING INFORMATION

Include all the supporting information data here like

a) Experimental setups/ Schematics
b) Chamical formulas/ Theoretical calculations
c) Digital photographs/ Figures/ Videos
d) Tables/ Other evidences

- e)