

# ICASTOR JOURNAL OF ENGINEERING

---

**INDIAN CENTRE FOR ADVANCED SCIENTIFIC AND TECHNOLOGICAL RESEARCH (ICASTOR)** has been set up with a view to promote, encourage, facilitate and organise scientific and technological research work. The Centre is devoted to advancement of science and technology that may prove beneficial to humanity in its endeavour of building a better world.

Keeping in view of the above, the Centre publishes the **ICASTOR Journal of Engineering**. This **open access** journal devotes itself to publication of original research papers, research notes with special emphasis on unsolved problems and open questions in different branches of Engineering. It is brought out thrice a year, the first issue in **January**, the second in **May** and the third in **September**.

We in **ICASTOR** are proud to have a group of eminent scientists and scholars from various corners of the globe in the **Editorial Advisory Board** of the Journal.

We now invite original research papers and research notes from research workers all over the world for our forthcoming issues.

We believe that active cooperation from the scientific fraternity will enable this journal to achieve its goal and make it a successful event.

*icastor*

**INDIAN CENTRE FOR ADVANCED  
SCIENTIFIC AND TECHNOLOGICAL RESEARCH**

7/1 RAJENDRA MULLICK STREET, ROOM NO. B/22, 2<sup>ND</sup> FLOOR.

(K.I.T. BUILDINGS) KOLKATA – 700 007, INDIA

**TELEPHONE:** + 91 – 8420396666

**E-MAIL:** [icastorindia.2006@gmail.com](mailto:icastorindia.2006@gmail.com)

**WEBSITE:** [www.icastorindia.org](http://www.icastorindia.org)

**EDITOR** : **Biswajit Ghosh** ( *ICASTOR, India* )

**JOINT EDITOR** : **Bhaskar Sengupta** ( *ICASTOR, India* )

**ASSOCIATE EDITOR** : **Amlan Dutta** ( *ICASTOR, India* )

**EDITORIAL ADVISORY BOARD**

- **Gyula Patko** ( *University of Miskolc, Hungary* )
- **Ken Thomas** ( *Waterford Institute of Technology, Ireland* )
- **Igor Kononenko** ( *University of Ljubljana, Slovenia* )
- **Linda Ericksen** ( *University of Advanced Technology, U.S.A.* )
- **Horacio A. Falomir** ( *Universidad Nacional de La Plata, Argentina* )
- **Walter Fürst** ( *École Nationale Supérieure de Techniques Avancées, France* )
- **Gianni Albertini** ( *Universita Politecnica delle Marche, Italy* )
- **Tadeusz Borzecki** ( *Gdansk University of Technology, Poland* )
- **Anatoly N. Gromyko** ( *Mari State Technical University, Russia* )
- **Archie Johnston** ( *University of Technology Sydney, Australia* )
- **Krzysztof Kurek** ( *Politechnika Śląska, Poland* )

**Technical Details**

Overall Size : 180 × 240 m m  
Printing Area : 130 × 180 m m  
Language : English  
Frequency : Thrice a year  
(*January, May & September*)

**Contact**

7/1 RAJENDRA MULLICK STREET,  
ROOM NO. B/22, 2<sup>ND</sup> FLOOR  
(K.I.T. BUILDINGS) KOLKATA – 700 007

Telephone : +91 -8420396666

icastorindia.2006@gmail.com

Website : www.icastorindia.org

**RNI Registration No.  
WBENG/2008/25759**

## Information for Authors

- Authors are requested to submit their manuscripts electronically and post the same at **icastorindia.2006@gmail.com**. Electronic text files should be in Microsoft Word or PDF format, typewritten on A4 size paper (210 x 297 mm) with minimum margins of 25 mm on all sides, and in single-column, double-space format. All related materials including tables, charts, graphics, photographs, etc. are to be sent with the manuscripts. Each manuscript must be accompanied by a signed **Letter of Submission** stating that it has not been published elsewhere, and that it has not been submitted simultaneously for publication elsewhere. A format of the letter of submission is appended below.
- Authors can send their manuscripts by post also. In that case, they are to send 3 (three) copies of their manuscripts, typed on white A4 size paper (210 x 297 mm) on one side only with double spacing and minimum margin of 25 mm on all sides. All related materials including tables, charts, graphics, photographs, etc. are to be sent with the manuscripts. One electronic version (as an MS Word or PDF file on a CD/DVD) must be sent with manuscripts.
- Contributions must be in English. It is not possible to return the manuscripts in case of revision or rejection.
- The title should be informative, brief and precise. A brief abstract of the writing (in about 300 words) followed by an introduction is required. A list of key words should also be given.
- Name(s), affiliation(s) and address(s) of author(s) must be given in the first page. Indicate to whom correspondence should be sent, including a telephone number, fax number and e-mail address.
- Tables, charts, graphics, etc., if any, should be made on separate pages. They should be numbered sequentially and made to fit the printing area (130 x 180 mm). The numbers of such tables, charts, graphics, photographs, etc. must be typed separately in sequence in the appropriate space of the manuscript paper.
- The use of System International (SI) units as primary units of measure is mandatory.
- Manuscripts are accepted with the understanding that the same work has not been published and/or is presently submitted elsewhere, and that all persons listed as authors have given their approval for submission.
- ICASTOR as well as editor(s) and members of the Editorial Advisory Board will not, in any way, be responsible for the views expressed by individual author(s) in articles published in the journal.
- In order to alleviate part of the publication cost, an invoice will be sent to the author(s). The author(s) shall be responsible for payment of such invoice. Postal charges and colour printing will be charged extra **in case of print version**.
- Cheques are to be drawn in favour of "ICASTOR".
- **10 (ten)** free reprints without covers of their work will be sent to the author(s) **in case of print version**. If required, additional reprints in multiples of 10 (ten) will be available against order and payment in advance.
- Any change in address(s) of author(s) during the process of publication must be communicated to the Editor.
- Manuscripts should be sent to :

**THE EDITOR  
ICASTOR JOURNAL OF ENGINEERING  
INDIAN CENTRE FOR ADVANCED SCIENTIFIC  
AND TECHNOLOGICAL RESEARCH  
7/1, RAJENDRA MULLICK STREET, ROOM NO.B/22, 2<sup>ND</sup> FLOOR,  
(K.I.T. BUILDINGS) KOLKATA – 700 007,  
INDIA**

- All correspondence should be sent to the Editor at the above address.
- For any further information, contact us at **icastorindia.2006@gmail.com**

### Subscription

#### *Single issue*

India – Rs. 800.00

Foreign – USD 75.00

#### *Annual*

India – Rs.2, 250.00

Foreign – USD 210.00

(Issue from 2007 – 2019)

- Bookseller's / Agent's Commission (Minimum order 10 copies) – 20%.

**LETTER OF SUBMISSION - FORMAT**

The Editor  
ICASTOR Journal of Engineering  
Indian Centre for Advanced Scientific  
and Technological Research  
7/1, Rajendra Mullick Street, Room No. B/22, 2<sup>ND</sup> Floor,  
(K.I.T. Buildings) Kolkata – 700 007,  
India

Dear Sir,

**Re: Publication of Research Paper in *ICASTOR Journal of Engineering***

I/We would like to request you to consider my/our paper entitled \_\_\_\_\_

\_\_\_\_\_

for publication in ICASTOR Journal of Engineering. I/We enclose herewith a copy of the same.

I/We declare that the work mentioned above is an original one. It was not published in any other journal before, and it is not being considered for publication at present.

I/We do hereby agree to pay the partial publication charges for the paper mentioned above in case of its acceptance for publication in your journal.

I/We wish/do not wish to receive the **printed reprints** of the published paper by post.

Yours truly,

\_\_\_\_\_  
(Signature of the author(s))

Place:

Date:

Encl. as stated

\_\_\_\_\_  
Name(s): Mr./Ms.

Title: Professor / Associate Professor/Assistant Professor/Dr./ Research Assistant  
(strike out which is not applicable)

Institution(s):

Corresponding Author's postal address:

Telephone No.:

Fax No.:

E-mail: