

**A PRESENTATION ON  
“RESEARCH AND PUBLICATION STRATEGY FOR  
ACADEMIC CAREER”**

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**<http://nisheethdesai.com/>  
31<sup>st</sup> July, 2020**



National Education Policy (NEP) set a goal to enable, ‘a culture of high quality Research and Publication’

# NATIONAL EDUCATION POLICY (NEP) 2020

## Emphasizing on High Quality Research & Publication

- NRF will provide a reliable base of merit-based peer-reviewed research funding, helping to develop a culture of research in the country
- Fund competitive peer-reviewed grant proposals of all types and across all disciplines;
- Seed, grow, and facilitate research at academic institutions, particularly at universities and colleges where research is currently in a nascent stage,



- Act as a liaison between researchers and relevant branches of government as well as industry, so that research scholars are constantly made aware of the most urgent national research issues
- Recognise outstanding research and progress achieved via NRF funding/mentoring across subjects

# "RESEARCH AND PUBLICATION STRATEGY FOR ACADEMIC CAREER".

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## 1. What is research?

- ❖ Research is the extended human knowledge of the physical, biological and the social world beyond what is already known.



## 2. Why is research essential?

- ❖ The quest for knowledge is the basic principle behind research. The quality of research work directly translates to the quality of teaching and learning in the classroom, thereby benefiting the students, society and the country.
- ❖ The promotion of research in a huge and diverse country like India will help the nation evolve as a knowledge reservoir in the international arena.

# "RESEARCH AND PUBLICATION STRATEGY FOR ACADEMIC CAREER"

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## 3. Who can contribute to research?

Academicians, scientists, technocrats, students/research scholars and NGOs working for the service of the society.

## 4. What type of research encouraged?

Research which will be useful (including scientific, health related and socio economic issues) to the society at large and to the common people of the entire globe.

## What is Research philosophy?

Research philosophy is a standard way as to how experiment data be collected and analyzed.

## Ethics and integrity in research

Ethics plural in form but singular or plural in construction: that discipline dealing with what is good and bad with moral duty and obligation.

# WHY PUBLICATIONS ARE ESSENTIAL IN ACADEMICS?

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- **Accountability:**

Contribution towards scientific/social/economic growth of the society

- **Reputation:**

Recognition of your work to the community at large/peers

- **Wealth:**

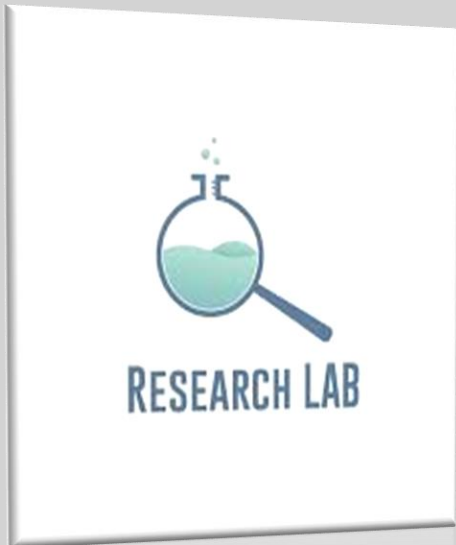
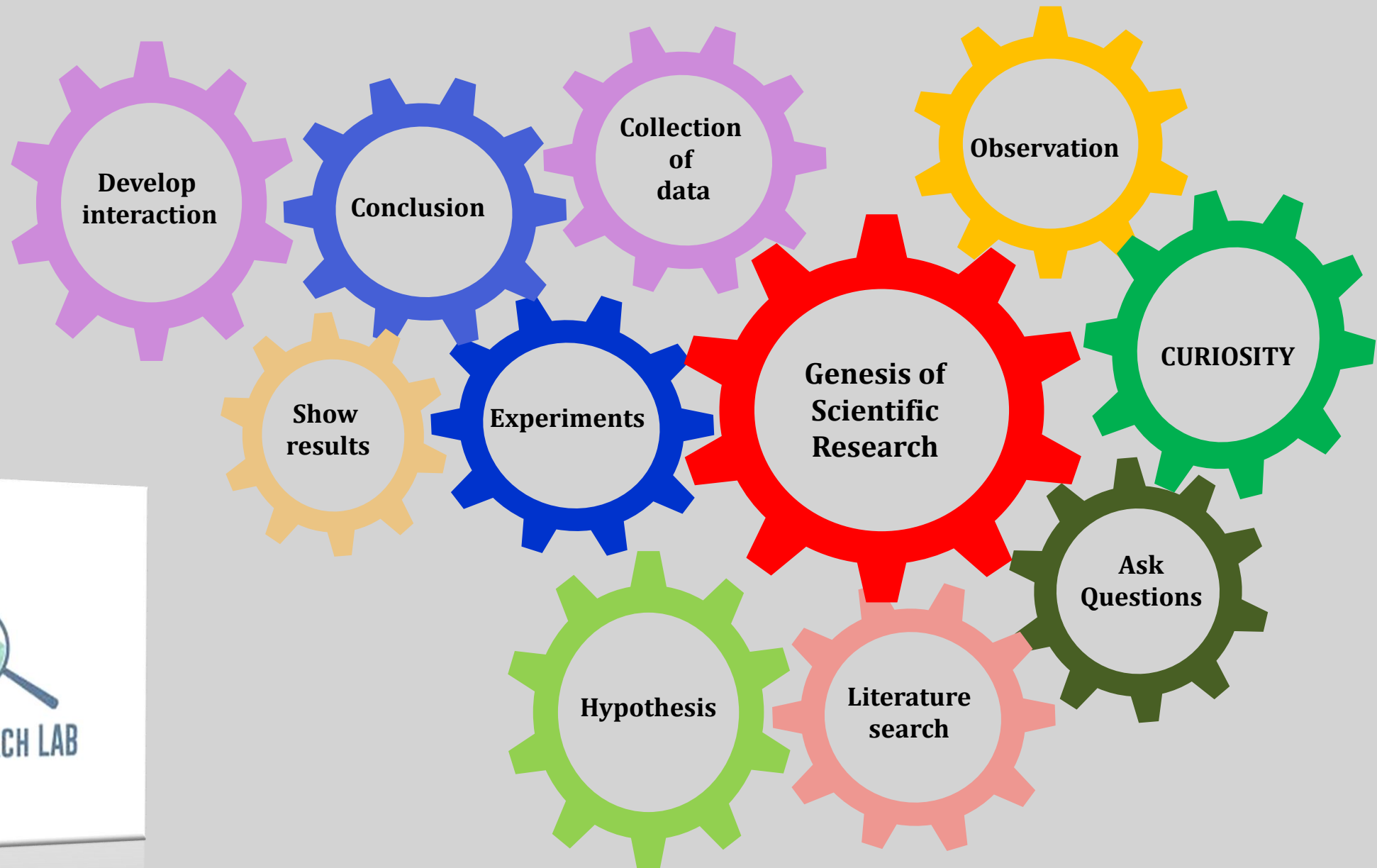
Promotion, grant applications, research funding

“If your research does not generate publications, it might just as well not have been done” George Whitesides (Harvard University)



# PHILOSOPHY OF RESEARCH

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# AUTHORSHIP IN MANUSCRIPT

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## What constitutes authorship?

- A person who agreed to review your manuscript before submission to the Journal
- A person who had provided materials for the research or provide basic research facilities
- Should this person be an author?

## Considerations:

- Authorship criteria: substantial contribution and accountability for the research
- Is acknowledgement rather than authorship more appropriate?
- Reviewer should also have decided Conflict of Interest



# PLAGIARISM

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- **Intentional Plagiarism:**

A researcher presents ideas or findings from other published papers as his own Instead of citing those papers.

- **Unintentional Plagiarism:**

A researcher is extensively referencing past works and ends up using too much of the original text from those works

## **Considerations:**

- Where in the text do the similarities occur?
- Direct copying and theft? Or use of prior published article as inspiration?
- Is the data authentic? Are the results new?
- If yes, a correction could be appropriate citing the previous publication
- If no, a retraction could be appropriate



# CRITERIA FOR SELECTION OF THE JOURNALS

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## Publishing standards

- I. Publication timeline
- II. International editorial board
- III. Bibliographic information
- IV. Peer review process



## Diversity

- i. Editors, AU, Board members represents international community
- ii. Does this Journal address the international or regional targeted audience



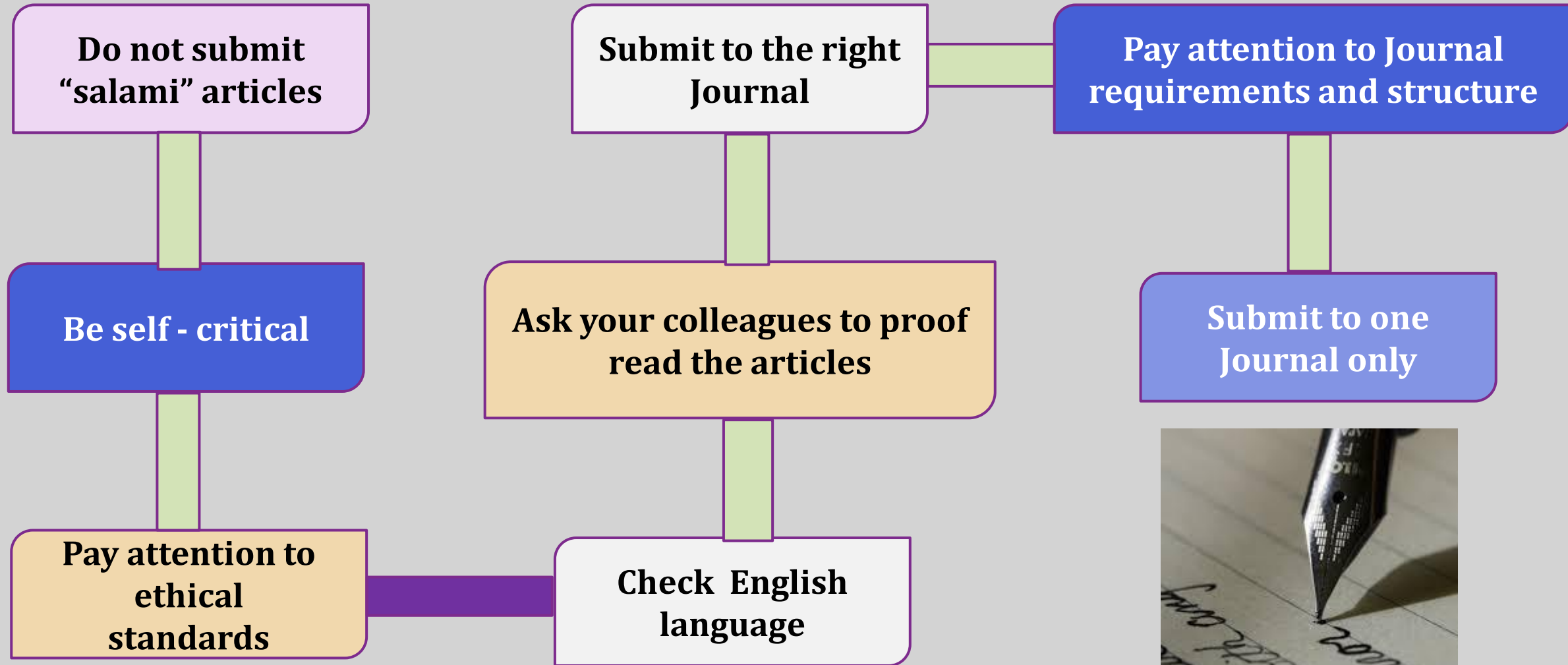
## Editorial Contents

- i. Is subject already well covered?
- ii. How does this Journal compare with other journals on the same topics?

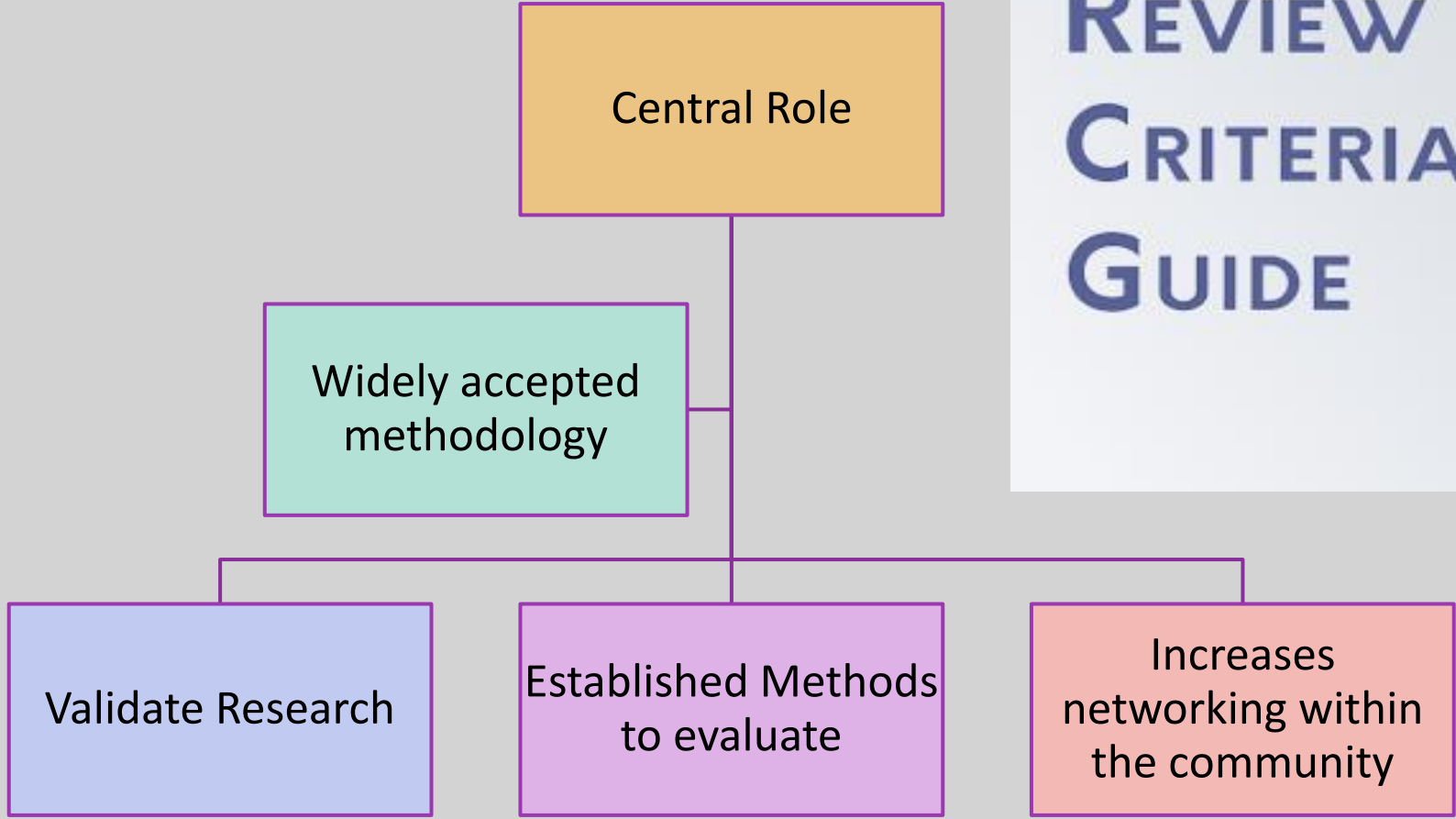


# IMPORTANT POINTS TO REMEMBER FOR SUBMISSION OF MANUSCRIPT

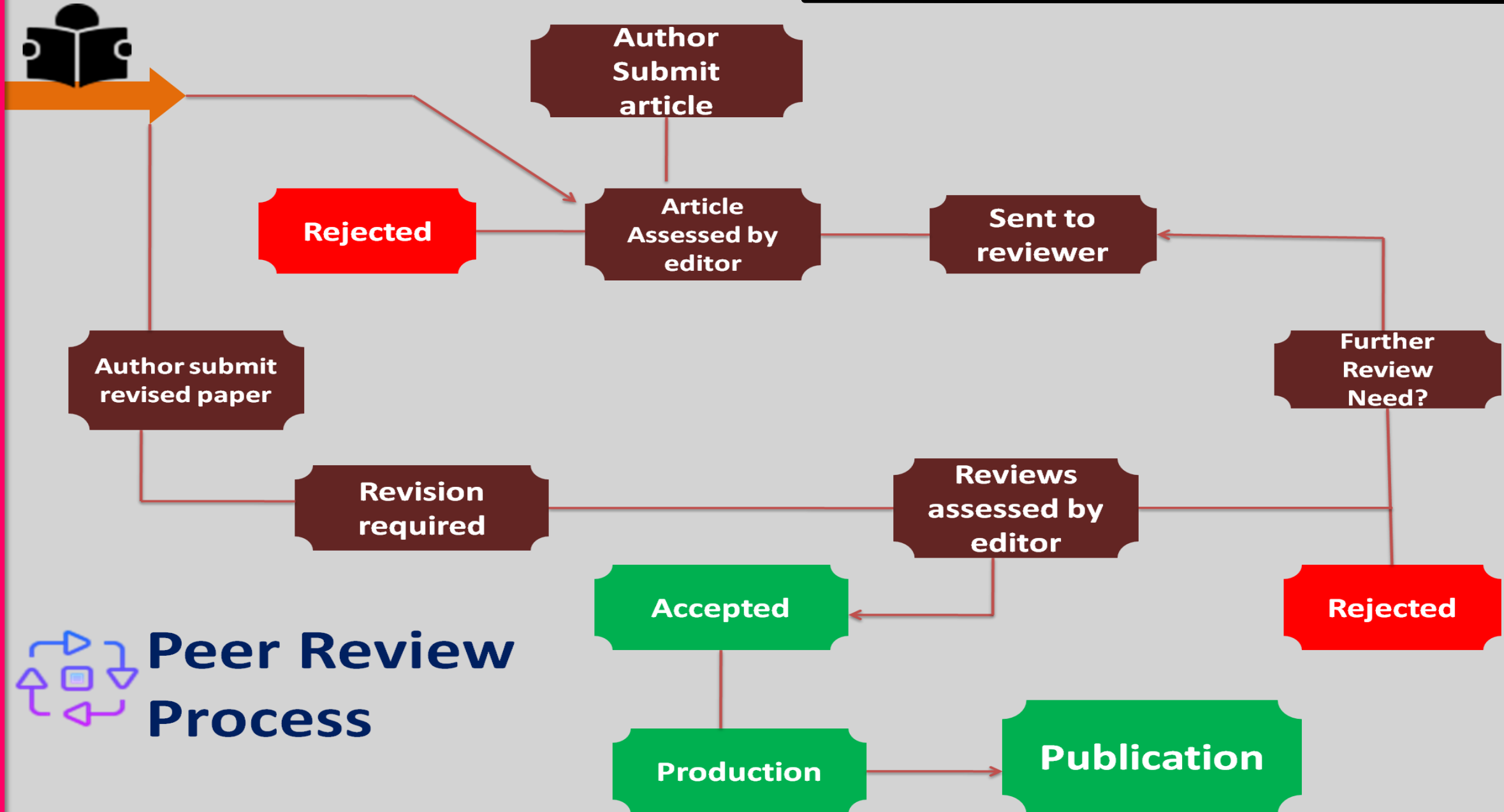
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# PEER REVIEW PROCESS

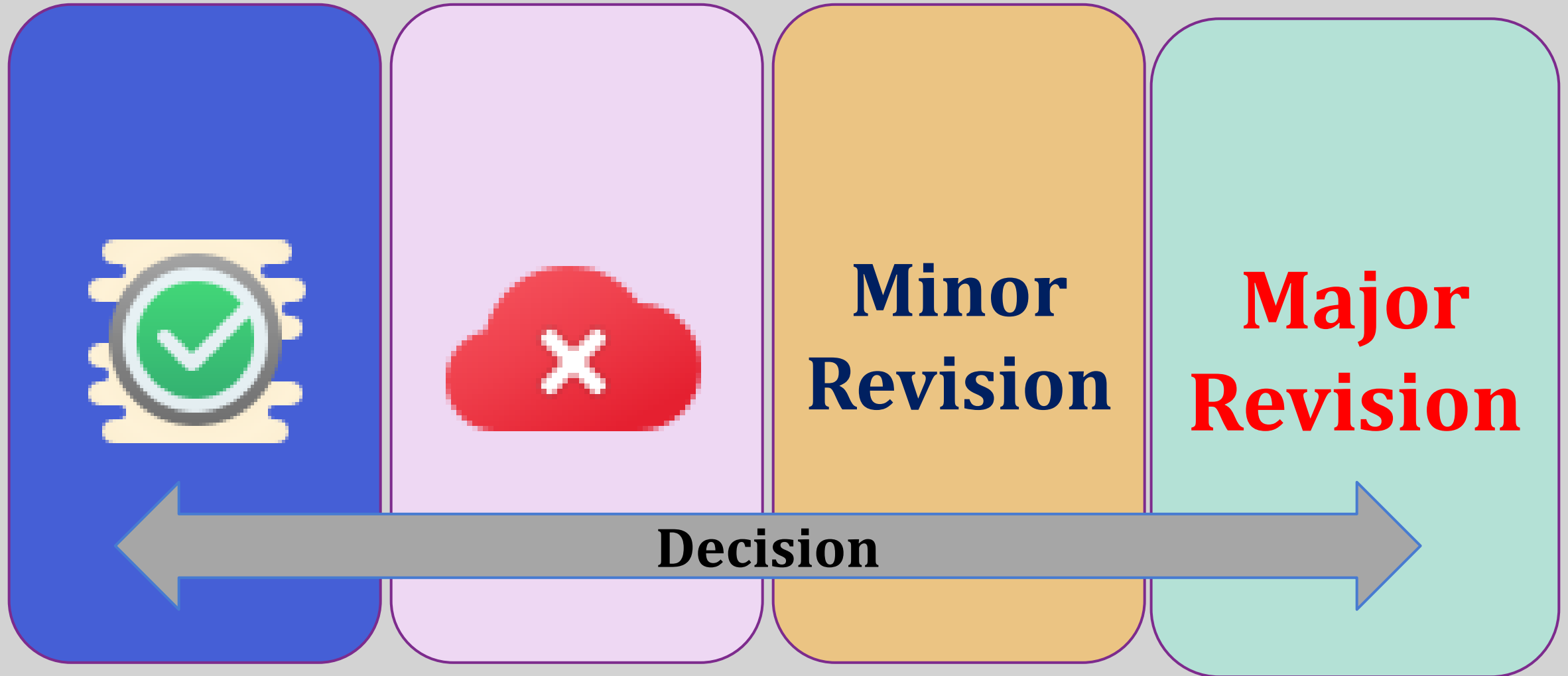


# LANDSCAPING OF RESEARCH TO PUBLICATION



# TYPES OF EDITORIAL DECISION

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# RESEARCH AND IMPACT FACTORS

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1. It may provide guidance but should not be the sole reason to submit in a Journal.
2. It give information to the recent citations/number of publications in a last two years in a Journal.

The most impactful research changes our fundamental understanding or open new path of investigations

Suppose if we want to calculate the IF of Journal X then for 2019,

Citation of papers published in	2018 = 220
	2017 = 439
	Total = 659

No of papers published in	2018 = 128
	2017 = 145
	Total = 275

Calculation: 
$$\frac{\text{Citation s of recent punlications}}{\text{Number of recent publications}} = \frac{659}{273} = 2.414$$

# DEFINITION: PREDATORY JOURNALS AND PUBLISHERS

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“Predatory journals and publishers are entities that prioritize self-interest at the expense scholarship and are characterized by false or misleading information, deviation from best editorial and publication practice, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices”

University Grant Commission Consortium for Academic and Research Ethics

UGC-CARE Reference List of Quality Journals (UGC-CARE List).

<http://www.nature.com/articles/d41586-019-03759-y>

<http://mbio.asm.org/content/10/3/e00411-19>



# HOW TO IDENTIFYING PREDATORY PUBLISHERS AND JOURNALS?

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- **Unsolicited request** for submission to the journal via E-mail and not through a submission portal.
- The journal **has no address or contact information** or
- Author Guidelines- is there mention of **peer review process** or basic submission requirements?
- **Review/ Read a few published papers** – Papers accepted quickly may indicate lack of peer review. There is no article retraction policy.
- Papers published on all subjects/large number of new journals from the same publisher
- Images or logos are distorted/fuzzy or misrepresented/unauthorized.  
Website contains spelling and grammar errors
- The website is not professional in quality – ex: visible visitor counter on journal websites

## ThinkCheckSubmit

Seeks to educate scientist authors about how to decide which journals to submit their work to.

It is sponsored by an international group of publishers and libraries and offers a checklist for evaluating a journal's legitimacy.

<http://thinkchecksubmit.org/>

<http://onlinelibrary.wiley.com/doi/10.1087/20140405/pdf>

## PREDATORY PUBLISHERS AND JOURNALS.....

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- Check whether Publisher is a member of Committee of Publications Ethics
- If the journal states that it is Open Access,
  - **Is it listed in the Directory of Open Access Journal's <https://doaj.org/>?**
  - **Is the a member of Open Access Scholarly Publishers' Association?**
- Article Publication Charges (APC) are **only** charged from the author if the article is **accepted** after completion of peer review- **it is a publication fee** and NOT submission fee- Authors maintain copyright

<http://thinkchecksubmit.org/sample-page/check/>

# FABRICATION OF DATA

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- Peer reviewer suspects data manipulation in a submitted manuscript
- What could the editor do?

## Considerations:

- Request time-stamped original data files
- Raise with author's institution to investigate
- If satisfactory explanation, peer review can proceed
- If unsatisfactory explanation, manuscript will be rejected.



# HOW TO REVIEW THE RESEARCH PAPER?

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- Identify the MS-full length paper/ short communication/Letter/Review article.
- Parameters are different i.e. literature survey is an important for review, previous work, capability of authors should be checked and then one has to give the final decision.
- In full paper - Results and discussion characterization are key factors.
- In short communications or letters experimentation and conclusion are very important



# REVIEW THE RESEARCH PAPERS.....

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1. Check the title and match with MS
2. Abstract is in tune with the MS
3. Key words
4. Introduction, Including rationale and justification of work reported in the MS and literature survey
5. Chemistry, results and discussion, biological activity including units, spectroscopy
6. Scheme, including conditions and substitutions
7. Check Table carefully including unit of physical constants
8. Experimental including name of instruments, elemental analysis, IR,  $^1\text{H}$  NMR,  $^{13}\text{C}$ , Mass spectra including workload
9. SAR, Conclusion, SI data
10. Most important references, Language and plagiarism



# CURBING ON PLAGIARISM

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## PART-II

BY

UNIVERSITY GRANTS COMMISSION (PROMOTION  
OF ACADEMIC INTEGRITY AND PREVENTION OF  
PLAGIARISM IN HIGHER EDUCATIONAL  
INSTITUTIONS) REGULATIONS, 2018

New Delhi

23<sup>rd</sup> July, 2018

F. 1-18/2010(CPP-II)

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UGC  
REGULATIONS  
FOR  
PLAGIARISM

[www.researchexperts.in](http://www.researchexperts.in)

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ज्ञान-विज्ञान विमुक्तये



# “PLAGIARISM” MEANS THE PRACTICE OF TAKING SOMEONE ELSE’S WORK OR IDEA AND PASSING THEM AS ONE’S OWN.

## Exact Overlap

## Synonym (Thesaurus Replacement)

### Gurava & Gurava (2017)

Plagiarism can be minimal or significant, accounting for entire chapters of books, complete published articles, or stanzas and some sentences. This brings up an important concern about the lower limit of plagiarism. Principally, it may consist of one special word that was used creatively, e.g. for naming a novel concept, thus bringing new dimensions to an area of research.<sup>23</sup> Using common words such as "and", "it", "when", "sometimes", "are" can never constitute plagiarism. Nor can the use of series of words, or stanzas, which are so common that they cannot meaningfully be attributed to a certain writer. The Committee on Publication Ethics (COPE) provides the example of "smokers with chronic obstructive pulmonary disease" being used in science as a standard phrase, with more than 58,000 hits on Google.<sup>24</sup> However, if a significant number of ordinary sentences are arranged after each other in exactly the same manner as written by another author, then this may again be considered plagiarism.<sup>25</sup> Thus, plagiarism can comprise as little as one word, while there are many standard phrases and terms that will not be labelled as plagiarism even if, in fact, copied from someone else's research write-up.

## source

Helgesson & Eriksson (2015) <https://www.ncbi.nlm.nih.gov/pubmed/24993050>

Plagiarism may consist in very short passages of text. In principle, it may consist in one word or expression only. But that would have to be a very special, novel word or expression creatively used, e.g. for naming a new concept, perhaps something that throws new light on an area of interest. It would also have to be a situation where the plagiariser, by plagiarising, gives the impression that s/he invented the concept.

Using ordinary words like "and", "it", or "are" can never, as such, constitute plagiarism. Nor can the use of series of words, or sentences, which are so ordinary that they cannot meaningfully be ascribed to anyone. Examples: "He saw me", "Open the door", or "I am tired and need some sleep."

[...]

(ordinarily due) notification. The Committee on Publication Ethics (COPE) gives the example of "smokers with chronic obstructive pulmonary disease" being used in science as a standard phrase, having more than 58,000 hits on Google (Wager 2011). Other examples are "The questionnaire was distributed to a random selection of...", "Statistical analysis was conducted using SPSS ...", and "The study was granted ethical approval by the ethical review board in ...". It is our firm belief that researchers can produce many more examples of this kind from their respective fields.

However, one reservation is called for. If a sufficient number of ordinary sentences not really belonging to anyone are put after each other in exactly the same way as by another author, then this may again be considered to be plagiarism. The longer passage may uniquely be attributed to a particular author, even though the individual sentences cannot.

[...]

To summarise, we claim that plagiarism (in principle) can consist in as little as one word, while there are many standard sentences describing research methods that will not be plagiarism even if, in fact, copied from someone else. This is to say that the unmarked reuse of some very short passages might be plagiarism, even though the reuse of other equally short passages would not.



# EXCLUSION OF PLAGIARISM AS PER UGC NOTIFICATION

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The similarity checks for plagiarism shall exclude the following,

- All quoted work reproduced with all necessary permission and/or attribution.
- All references, bibliography, table of content, preface and acknowledgements.
- All generic terms, laws, standard symbols and standards equations.

# PENALTIES IN CASE OF PLAGIARISM IN ACADEMIC AND RESEARCH PUBLICATIONS

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Similarities up to 10% - Minor similarities, no penalty.

Similarities above 10% and above : Shall be asked to withdraw manuscript.

Level 2: Similarities above 40% to 60%

- I. Shall be asked to withdraw manuscript.
- II. Shall be denied a right to one annual increment.
- III. Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student/scholar for a period of two years.

Level 3: Similarities above 60%

- I. Shall be asked to withdraw manuscript.
- II. Shall be denied a right to two successive annual increments.
- III. Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student / scholar for a period of three years.





Date: 22/07/2019

CERTIFICATE BY THE GUIDE

This is to certify that the contents of this thesis entitled “**Studies on pharmaceutically important heterocyclic compounds as potential antimicrobial agents**” is the original research work of Miss. **Joshi Surbhiben Bharatkumar** carried out under my guidance.

I further certify that the work has not been submitted either partly or fully to any other University or Institution for the award of any degree.

As per the UGC gazette No. F. 1-18/2010(CPP-II) dated 23<sup>rd</sup> July 2018, page. No. 10[7], the similarity checks for plagiarism shall exclude the following:

1. All quoted work reproduced with all necessary permission and/or attribution.
2. All references, bibliography, table of content, preface and acknowledgements.
3. All generic terms, laws, standard symbols and standard equations.

The content of this is checked by Urkund software and Urkund analysis report is appended in the thesis.

Signature and Designation of Guide

Dr. Nisheeth C Desai

Professor & Head

Department of Chemistry

Mahatma Gandhi Campus

Maharaja Krishnakumarsinhji Bhavnagar University

Bhavnagar-364 002, (India).

## Urkund Analysis Result

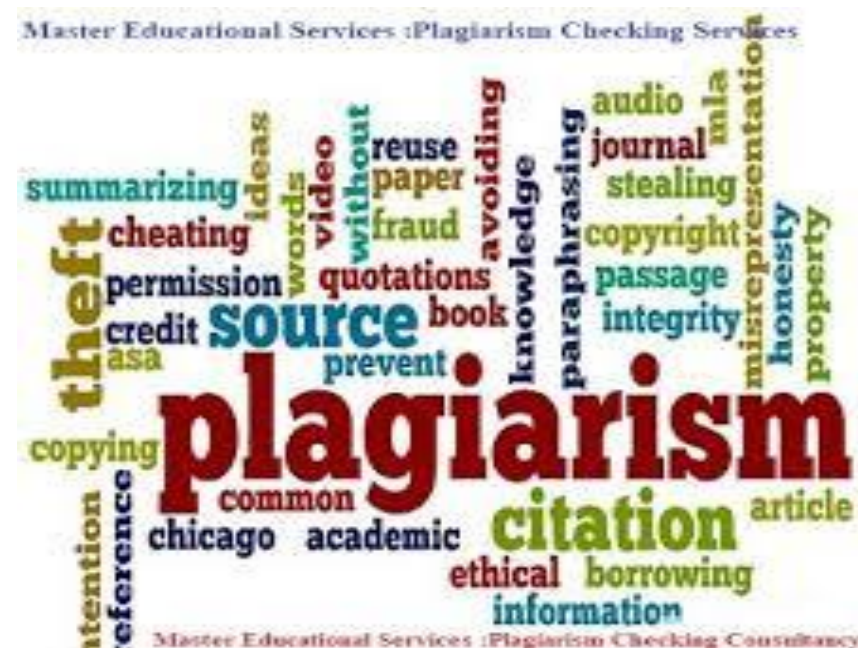
**Analysed Document:** NCD urkund.docx (D54451866)  
**Submitted:** 7/16/2019 2:54:00 PM  
**Submitted By:** dnisheeth@rediffmail.com  
**Significance:** 1 %

Sources included in the report:

ARUNA KUMARI THESIS.pdf (D40837085)  
<https://www.who.int/mediacentre/news/releases/2018/antibiotic-resistance-found/en/>  
<https://www.medicalnewstoday.com/articles/157973.php>

Instances where selected sources appear:

4





# PLAGIARISM SOFTWARES

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Urkund is mainly used by academicians and researchers across India.

## THE SOLUTION TO PLAGIARISM

URKUND is an automatic text-recognition system made for detecting, preventing and handling plagiarism, no matter language. We are passionate about helping schools, universities and corporations to encourage original writing and have done so for almost 20 years.



## iThenticate



Protect your reputation and publish with confidence.

[Get Started Today](#)

# FREELY AVAILABLE PLAGIARISM CHECKER TOOLS

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PlagScan  PaperRater  PLAGTRACKER

SmallSEQTools  UNICHECK 

noplug  turnitin  quetext

 grammarly 

# PART-III

Credit Courses For Awareness About  
Publication Ethics And Publication  
Misconducts entitled Research and  
Publication Ethics (RPE)

BY

UNIVERSITY GRANTS COMMISSION  
NOTIFICATION

New Delhi, December, 2019

F. 1-1/2018(Journal/Care)





# SYLLABUS IN DETAIL

RPE 01: Philosophy and ethics (3 hrs.)

RPE 02: Scientific conduct (7 hrs.)

Practice

RPE 03: Publication ethics(7 hrs.)


RPE 04: OPEN ACCESS PUBLISHING (4 hrs.)

RPE 05: PUBLICATION MISCONDUCT (4 hrs.)

B. Software tools (2 hrs.)

Use of plagiarism software like Tumitin, Urkund and other open source software tools

## CHECKING FOR ORIGINALITY

<p><b>10,399</b> Technical institutions</p>	<p><b>20 lakh</b> Students enrolled</p>	<p><b>6 lakh</b> Faculty members</p>	<ul style="list-style-type: none"> <li>➤ Awareness workshops be held to promote integrity &amp; prevent plagiarism</li> </ul>
<p><b>PROGRAMS</b> Engineering and technology, management, computer applications, pharmacy &amp; architecture</p>			<ul style="list-style-type: none"> <li>➤ Institutes should warn stakeholders about penal action</li> </ul>
<ul style="list-style-type: none"> <li>➤ Circular advised AICTE approved institutions to create awareness about academic integrity &amp; use credible anti-plagiarism software for academic and R&amp;D related activities such as MTech/BTech project reports, PhD thesis and research publications</li> </ul>		<ul style="list-style-type: none"> <li>➤ Penalty as per the draft UGC</li> <li>➤ Faculty, staff &amp; researchers will face action such as denial of increment &amp; up to <b>3 years</b> ban</li> </ul>	
			<ul style="list-style-type: none"> <li>➤ UG &amp; PG students, will face cancellation of registration</li> </ul>



# SYLLABUS IN DETAIL

## RPE 06: DATABASES AND RESEARCH METRICS (7 hrs.)

### A. Databases(4 hrs.)

1. Indexing databases
2. Citation databases: Web of science, Scopus, etc.

### B. Research Metrics (3 hrs.)

1. Impact factor of journal as per journal citation report, SNIP (Source Normalized Impact per Paper), SJR (SCImago Journal Rank), IPP (Informatics Project Proposal), Cite score
2. Metrics: h-index, g index, i10 index, almetrics

**INSTITUTING INTEGRITY**  
UGC regulations for promotion of academic integrity and prevention of plagiarism in higher educational institutions

**LEVELS OF PLAGIARISM & PENALTIES**

**Level 0** | Similarities up to 10% - Minor similarities, no penalty

**Level 1** | Similarities above 10% to 40% - Will be asked to submit revised script within a stipulated time period not exceeding 6 months

**Level 2** | Similarities above 40% to 60% - Students shall be debarred from submitting a revised script for a period of one year

**Level 3** | Similarities above 60% - Registration for that programme shall be cancelled


**PENALTY IN CASE WHERE THE DEGREE/ CREDIT HAS ALREADY BEEN OBTAINED**

**Level 1** | Similarities above 10% to 40% - Shall be asked to withdraw manuscript

**Level 2** | Similarities above 40% to 60% - Has to withdraw manuscript, denied right to one annual increment, not to be allowed to be a supervisor to any new scholar for period of two years

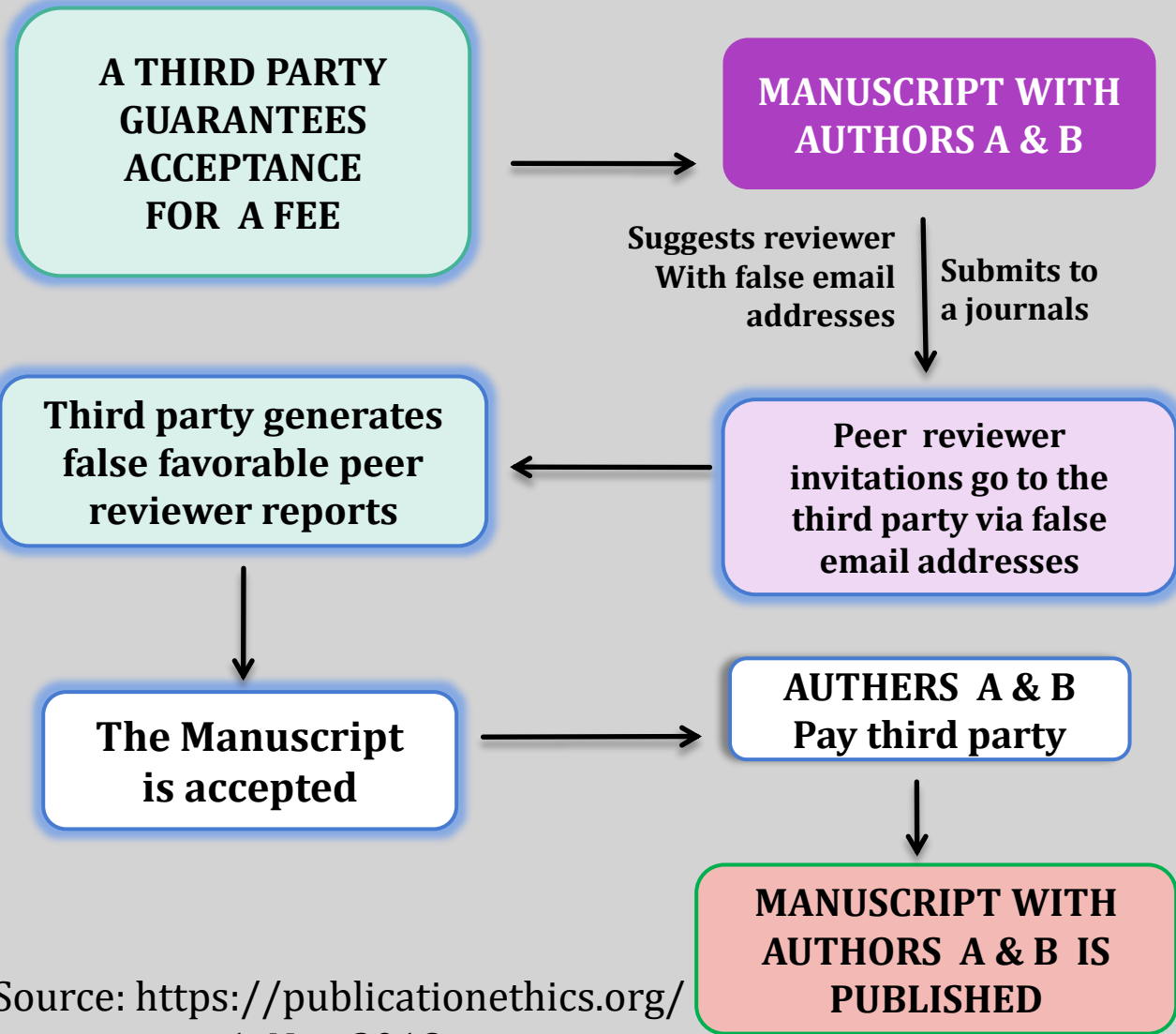
**Level 3** | Similarities above 60% - Has to withdraw manuscript, denied right to two successive annual increments, not to be allowed to be a supervisor to any new scholar for period of three years

If there is any complaint of plagiarism against the Head of an HEI, a suitable action, in line with these regulations, shall be taken by the controlling authority of the HEI

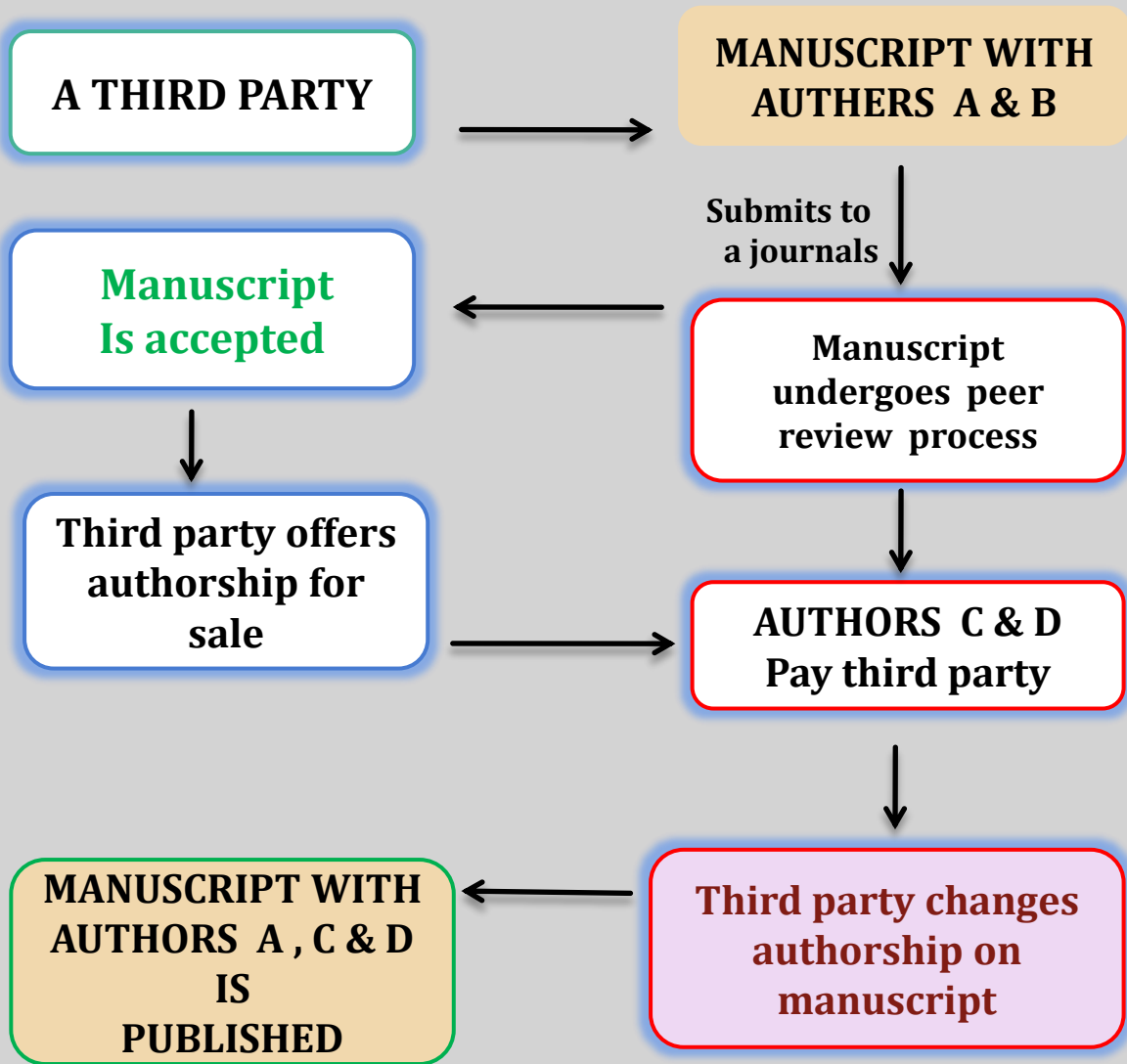


# SYSTEMATIC MANIPULATION AND AUTHORSHIP FOR SALE

**Fig 1. An Example of Peer Review Manipulation**



**Fig 2. An Example of Authorship for Sale**



Source: <https://publicationethics.org/> version 1, Nov 2018

*Chemists in the Community*

How to cite:

International Edition: [doi.org/10.1002/anie.202004721](https://doi.org/10.1002/anie.202004721)

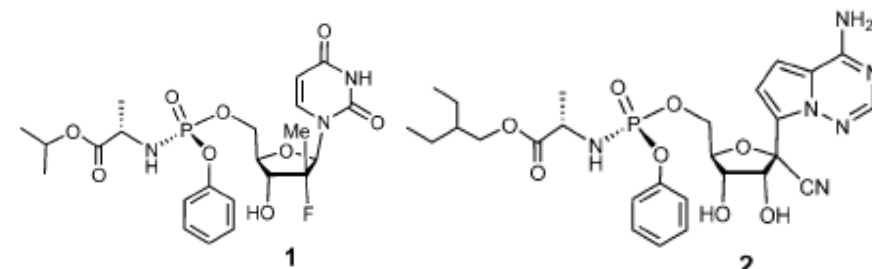
German Edition: [doi.org/10.1002/ange.202004721](https://doi.org/10.1002/ange.202004721)

# Thoughts on What Chemists Can Contribute to Fighting SARS-CoV-2 – A Short Note on Hand Sanitizers, Drug Candidates and Outreach

*Till Opatz, Joerg Senn-Bilfinger, and Clemens Richert\**

*Dedicated to the health care professionals who lost their lives fighting SARS-CoV-2*

alcohols · antivirals · disinfectants · pandemic ·  
SARS-CoV-2



**Sofosbuvir**

**r**

**Remdesivir**

# DATA FABRICATION

First big research scandal of the COVID-19 era for the data fabrication,



Authors: Sapan Desai, Mandeep Mehra, Frank Ruschitzka and Sapan Desai, (Chloroquine)

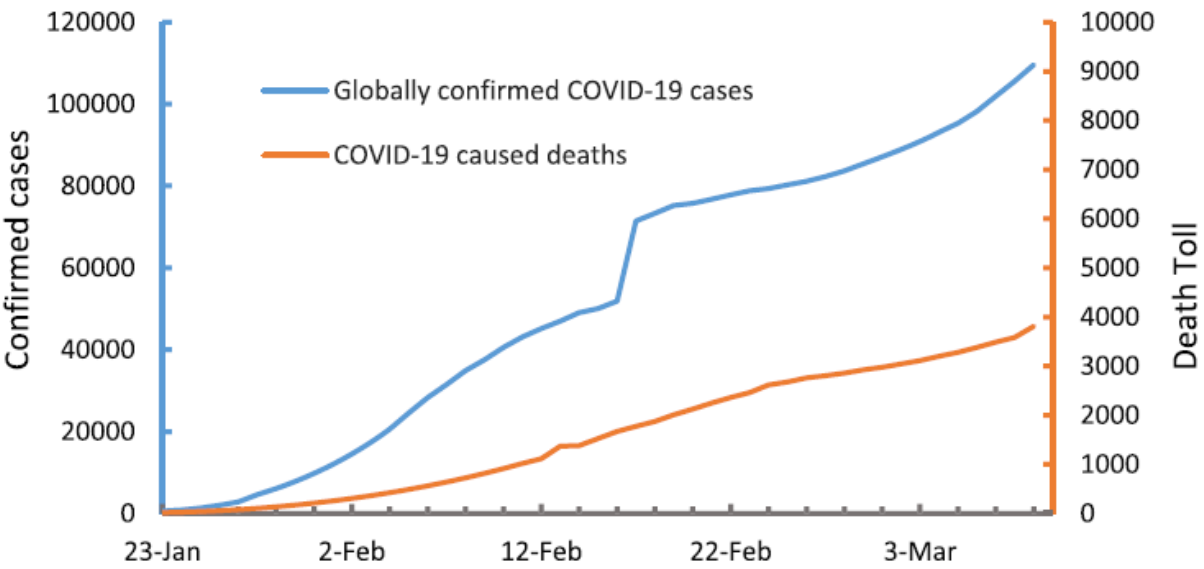
Authors: Sapan Desai, Mandeep Mehra, Timothy Henry and Sapan Desai, (ACE)

- The Lancet paper (IF-60.392), which claimed an antimalarial drug touted by President Donald Trump for treatment of COVID-19 could cause serious harm without helping patients, had had a global impact, halting trials of one of the drugs by the World Health Organization (WHO) and others.
- The NEJM (IF-74.699) study that was retracted had concluded, based on Surgisphere-provided data from hospitals around the world, that taking certain blood pressure drugs, including angiotensin-converting enzyme (ACE) inhibitors, didn't appear to increase the risk of death among COVID-19 patients, as some researchers had suggested.





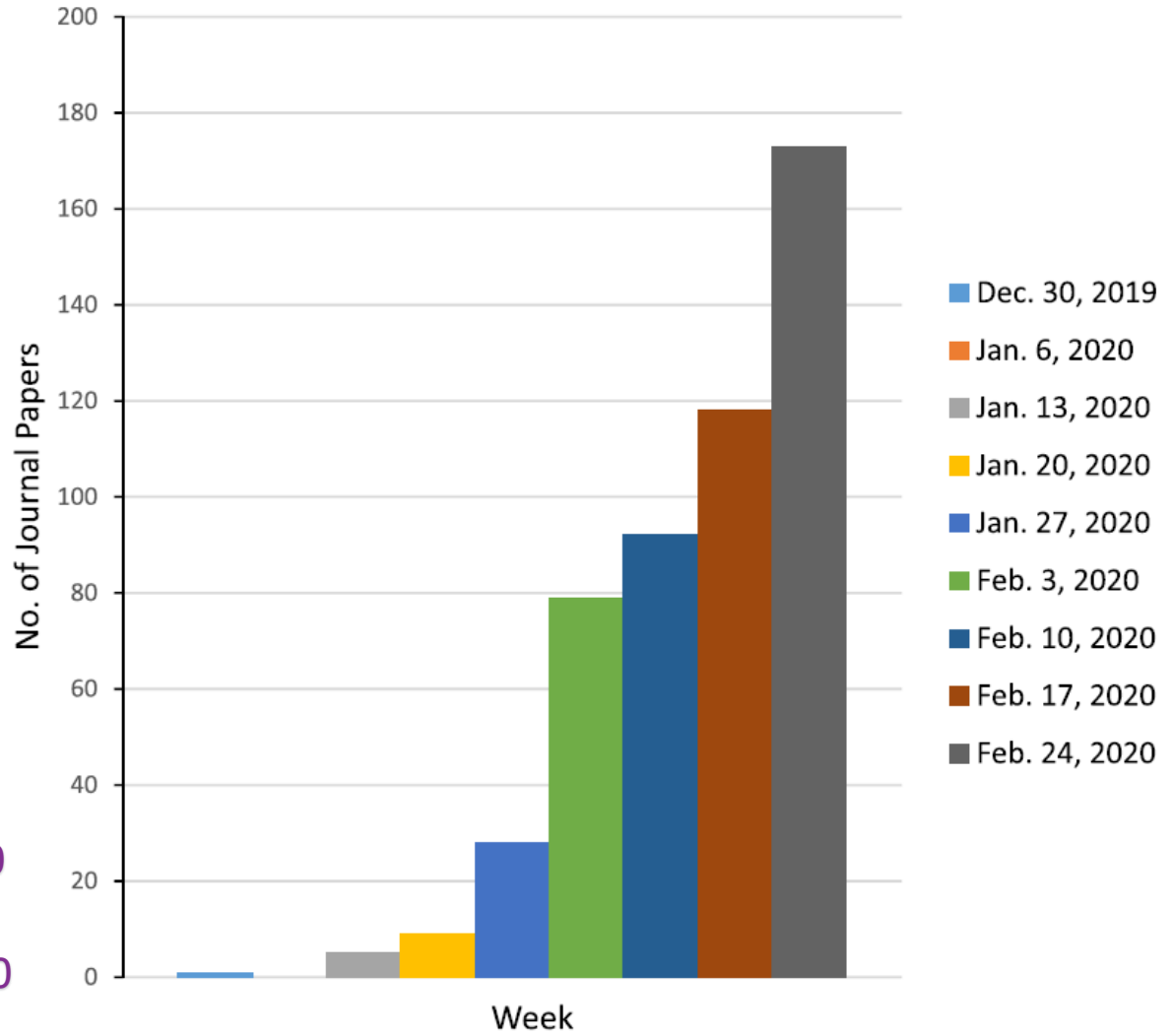
# RESEARCH AND DEVELOPMENT - COVID-19



Over 500 journal articles were published in the first two months of 2020, and the number of published articles has increased each week since the week of January 13, 2020.

Received: March 6, 2020  
 Revised: March 9, 2020  
 Accepted: March 9, 2020

Reference : <https://dx.doi.org/10.1021/acscentsci.0c00272>



Number of journal articles related to COVID-19 published each week

# Research Group of

Prof. N. C. Desai







# THANK YOU

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**Professor N. C. Desai**  
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<https://nisheethdesai.com/>



**NisheethD**

**ORCID ID : 0000-0001-6864-8661**