

सीएसआईआर-केन्द्रीय वैज्ञानिक उपकरण संगठन
सैक्टर 30, चण्डीगढ़ 160030

सं. सीएसआईओ/7(1070)/2020-सत.

दिनांक: 08.12.2022

कार्यालय ज्ञापन

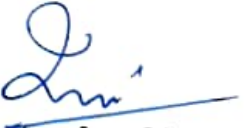
The Director, CSIR-CSIO has re-constituted an Institutional Committee on Ethics called the Standing Publications, Ethics and Scientific Vigilance Committee (SEC) as follows:-

1. Dr. Satish Kumar, Chief Scientist	Chairman
2. Dr. Samir Kumar Mondal, Sr. Principal Scientist	Ethics Officer & Member Secretary
3. Dr. Prashant Kumar, Senior Scientist	Member
4. Ms. Nalini Pareek, Sr. Scientist	Member
5. Dr. Anupma Sharma, Sr. T.O(1)	Member
6. Shri Harsh Kumar, Technical Officer	Member
7. AcSIR Student Representative	Member

The Standing Publications, Ethics and Scientific Vigilance Committee (SEC) would be responsible for training staff members on all aspects of scientific ethics and looking into best practices and publications to be observed by the scientific community. The Terms of Reference (TOR) of the committee would be as follows:-

1. The Committee shall regularly conduct seminars in Good Laboratory Practices and publications;
2. shall make mandatory implementation of communication numbers at the time of publications after obtaining the approval from Competent Authority;
3. shall check Similarity Index and Plagiarism of all publications;
4. shall ensure that the scientific audit of each publications is done;
5. shall advise and guide the Director on all matters pertaining to misconduct in scientific practices and research ethics;
6. shall respond to any external parties (on behalf of CSIR-CSIO) for compliance with ethical standards in respect of research projects undertaken by staff;
7. on an entirely voluntary basis, researchers may seek the inputs of this committee for consultation on ethical aspects of their research.

The tenure of SEC will be two years from the date of issue of the OM.


(एस.डी. ऋषि)

प्रशासनिक अधिकारी

प्रति:-

1. अध्यक्ष एवं समस्त सदस्य
2. प्रधान निजी सचिव, निदेशक
3. प्रमुख, आईएसडी-उपरोक्त कार्यालय ज्ञापन को सीएसआईआर-सीएसआईओ की वेब साइट में अपलोड करने हेतु।

सीएसआईआर-केन्द्रीय वैज्ञानिक उपकरण संगठन
सैक्टर 30, चण्डीगढ़ 160030

सं. सीएसआईओ/7(1070)/2020-सत.

दिनांक: 30.10.2020

कार्यालय ज्ञापन

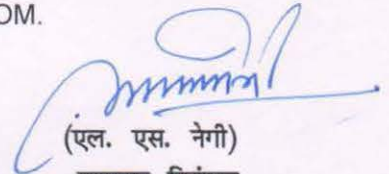
Director, CSIR-CSIO has constituted an Institutional Committee on Ethics called the Standing Publications, Ethics and Scientific Vigilance Committee (SEC) as follows:-

1. Dr. H.K. Sardana, Chief Scientist	Chairman
2. Dr. Shravana Kumar R.R., Sr. Principal Scientist	Ethics Officer & Member
3. Dr. Umesh Kumar Tiwari, Principal Scientist	Member
4. Dr. Rishemjit Kaur, Sr. Scientist	Member
5. Ms. Bandhana, Sr. T.O.(3)	Member
6. Sh. Mange Ram, Sr. T.O.(3)	Member
7. AcSIR Student Representative	Member

The Standing Publications, Ethics and Scientific Vigilance Committee (SEC) would be responsible for training staff members on all aspects of scientific ethics and looking into best practices and publications to be observed by the scientific community. The Terms of Reference (TOR) of the committee would be as follows:-

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(एल. एस. नेगी)
प्रशासन नियंत्रक

प्रतिलिपि:-

1. अध्यक्ष एवं समस्त सदस्य।
2. निजी सचिव, निदेशक।
3. प्रमुख, आईएसडी-उपरोक्त कार्यालय ज्ञापन को सीएसआईआर-सीएसआईओ की वेब साइट में अपलोड करने हेतु।



Ethics in Science and Governance – A Mandatory Practice

Viswajanani J Sattigeri

(With support from Shri Anoj Chadar and Shri RP Singh)

DG's, CSIR Meeting with Directors – 27 July 2021



Scientific Misconduct

“Violation of the codes of scholarly conduct and ethical behaviour in the publication of professional scientific research.

Includes all acts from the initiation of an idea, its experimental verification, accuracy of results, accurate reporting without resorting to any malpractice in the presentation of data/images, due acknowledgement of all sources of information and people”



Chem journal yanks paper because authors had stolen it as peer reviewers

The UK's Royal Society of Chemistry has retracted a 2017 paper in one of its journals after learning that the authors stole the article from other researchers during peer review.



The offending article, "Typical and interstratified arrangements in Zn/Al layered double hydroxides: an experimental and theoretical approach," appeared in *CrystEngComm* and was written by Priyadarshi B. Hury and Kris Phantacharyy of IISc.

Two years: That's how long it took a PLOS journal to flag a paper after a sleuth raised concerns

Two years after being alerted to a questionable figure in a 2016 paper by a group with a questionable publication history, a PLOS journal has issued an expression of concern about the article.



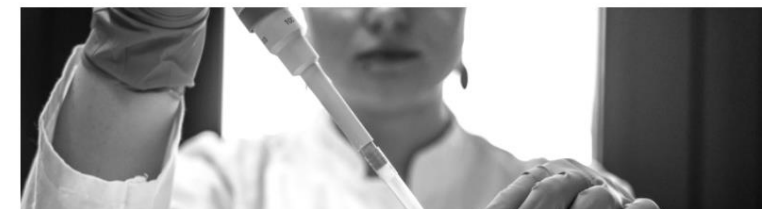
The paper, "Deprivation of L-Arginine Induces Oxidative Stress Mediated Apoptosis in *Leishmania donovani* Promastigotes: Contribution of the Polyamine Pathway," was published in *PLOS Neglected Tropical Diseases* and was written by a team based at the Rajendra Memorial Research Institute of Medical Sciences in Patna, India, along with a few other institutions in that country.

The penultimate author of the paper is [Chandra Prasad](#), of the CSIR [Central Drug Research Institute](#); his name appears dozens of times on PubPeer, where posters have flagged the figures in his papers. In a 2019 article in *The Hindu*, [Prasad](#) hinted that an institutional investigation into his work was underway but he dismissed the prob-

THE SCIENCES

NCBS Retraction: New Allegations Intensify Spotlight on Institute

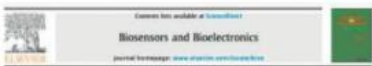
14/07/2021



Student, Meet Bus July 14, 2021

127 papers from India retracted for image duplication, manipulation

R. Prasad
JULY 13, 2019 19:11 IST
UPDATED: JULY 13, 2019 19:13 IST



Since 2011 and particularly in the last three-four years more papers are getting flagged and retracted for problematic images

Unlike plagiarism in papers published in scientific journals, image duplication in the same paper or in different papers and image manipulation have hardly received any attention. Fortunately, this is beginning to change. Since 2011 and particularly in the last three-

Single cell imprinting on the surface of Ag-ZnO bimetallic nanoparticle-modified graphene oxide sheets for targeted detection, removal and photothermal killing of E. Coli
Rishi Nayak, Santanu Patra, Ashutosh Tripathi, Kishore Mahapatra, Pradyumn Kumar, et al.



IISc has 33 papers listed on Pubpeer for image duplication

R. Prasad
CHENNAI, JULY 10, 2019 16:56 IST
UPDATED: JULY 10, 2019 17:10 IST



The Indian Institute of Science in Bengaluru. | Photo Credit: V. Sreemitha Murthy

India's premier institution Indian Institute of Science (IISc), Bengaluru too seems to have problems with images in papers published in journals. At last count, 33 papers published by half a dozen researchers have images that have been duplicated. While most of the image duplication is within the same paper, a couple of images have been reused in more than one paper. None of the images appear to have been manipulated.



NATIONAL

CSIR scientist dismissed for fabricating data



R. Prasad

CHENNAI, JULY 23, 2016 03:00 IST
UPDATED: SEPTEMBER 18, 2016 15:48 IST

SHARE ARTICLE | [f](#) | [t](#) | [w](#) | [g](#) | [e](#) | [p](#) | [p](#) | [p](#) | A | A | A

Committees that probed the matter reportedly found 'hard evidence' of the fraud by I

), a CSIR lab, was removed from service early this month for fabricating data in three papers published in 2013 (April 17, October 1 and October 8) in a scientific journal *PLOS ONE*. All the three papers were retracted by the journal in July 2014.

Data fabrication was found in four more papers where he was the senior author. This is the first time in recent years that the CSIR has taken the extreme step of terminating the service of a senior scientist for scientific misconduct.

In a retraction note published in July 2014, the journal said: "The Council of Scientific and Industrial Research (CSIR) has carried out an investigation about several publications by this group [led by evaluate concerns raised about the authenticity of the data. The investigation committee... concluded that there are no data available underlying this study and thus the published results are fabricated. As a result, [CSIR] has requested the retraction of the publication."

SCIENCE

CSIR- scientist has 28 papers with manipulated, duplicated images



R. Prasad

CHENNAI, JUNE 08, 2019 17:25 IST
UPDATED: JUNE 08, 2019 17:25 IST

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SCIENCE

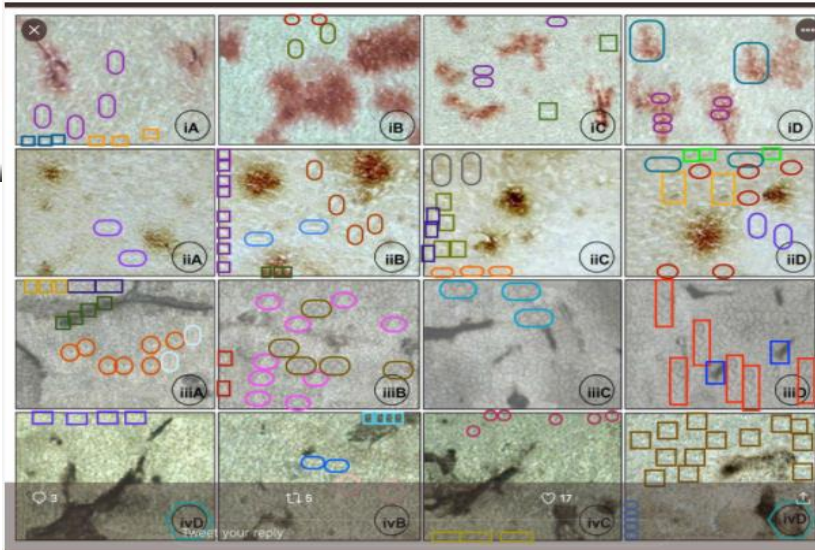
Additional 33 problematic papers from CSIR- listed on Pubpeer



R. Prasad

CHENNAI, JUNE 01, 2019 10:47 IST
UPDATED: JUNE 01, 2019 20:53 IST

SHARE ARTICLE | [f](#) | [t](#) | [w](#) | [g](#) | [e](#) | [p](#) | [p](#) | [p](#) | A | A | A



This comes a day after 73 problematic papers from CSIR- were found listed on Pubpeer, taking the grand total to 106 papers.

SCIENCE

CSIR- researchers to correct mistakes in images



R. Prasad

CHENNAI, JUNE 20, 2019 19:07 IST
UPDATED: JUNE 20, 2019 19:07 IST

SHARE ARTICLE | [f](#) | [t](#) | [w](#) | [g](#) | [e](#) | [p](#) | [p](#) | [p](#) | A | A | A

Except one scientist who does not fully agree with the comments made on Pubpeer, no other scientist has challenged the allegations. Two scientists had even earlier communicated to the journals for an erratum to be published in their respective papers. All the other scientists maintain that image duplication does not warrant a correction. However, a few scientists appear to have stopped with posting the correct image on Pubpeer and not communicated with the journals to set the record straight.

30 papers published between 2011 and 2018 found to contain reused or duplicated images

A couple of days after a June 4 report in *The Hindu* was published detailing about journal papers containing images with duplication and/or manipulation, Director of Lucknow's Central Drug Research Institute (CSIR-CDRI) Prof. Tapas K. Kundu has asked all scientists to take appropriate steps to correct the problematic images.



Constitution of Committee for Developing the Guidelines

DG, CSIR constituted a Committee in July 2019

for

Developing Guidelines on Scientific Ethics, Good Publication Practices and dealing with the alleged cases of plagiarism, data manipulation, image duplication / manipulation in scientific publications in CSIR



Prof. D. Balasubramanian

Former President, IAS and Director, LVP Eye Institute



Prof. AK Singhvi
Hon. Scientist, PRL & VP INSA



Prof. K. Muralidhar
Univ. of Hyd. & INSA Fellow

Dr. S. Chandrasekhar
Director, CSIR-IICT



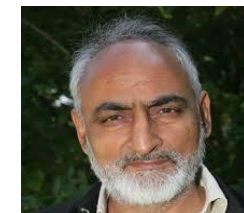
Dr. A. Ajayaghosh
Director, CSIR-NIIST



Dr. Anurag Agarwal
Director, CSIR-IGIB



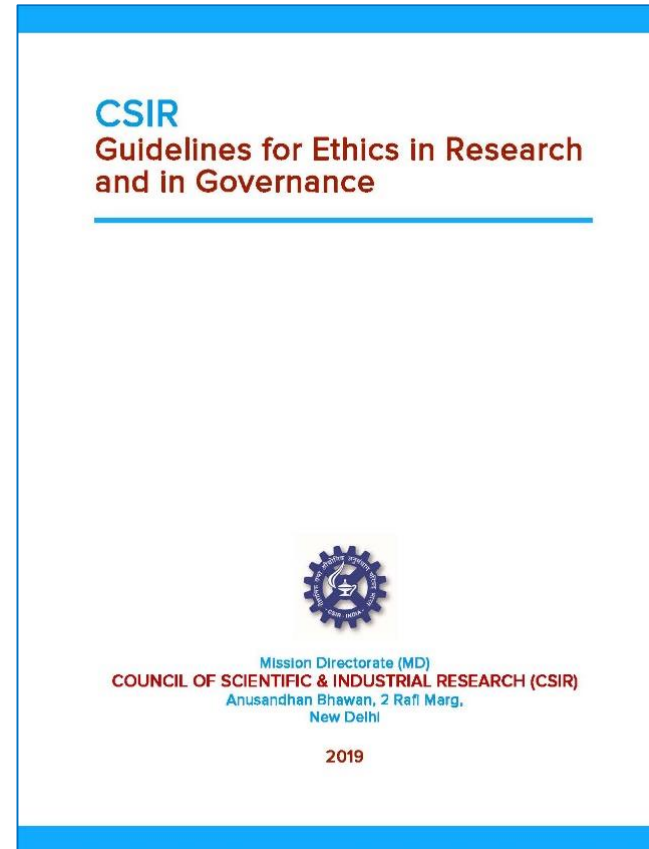
Dr. Rakesh K Mishra
Director, CSIR-CCMB



CSIR Guidelines for Ethics in Research and in Governance



1. Preamble
2. What is scientific misconduct
3. Good Science Practices
4. Gender issues
5. Dealing with Misconduct
6. Types of reports and related documents covered under this umbrella
7. Intellectual Property
8. Ethics in Governance and Conflict of Interest (Col)
9. Other Recommendations
10. Personal Ethics/introspection
11. EMR grants and CSIR grantees
12. Grievance Redressal Mechanism: Appointment of Ombudsman



13. Whistle Blowers and his/her identity and Protection
14. Acknowledgments
15. References
 - Appendix – A:
 - A.1 Authorship Guidelines
 - Appendix – B
 - B.1-Standing Publications, Ethics and Scientific Vigilance Committee (SEC)
 - B.2-Standard Operating Procedure (SOP) for dealing with Scientific Misconduct
 - B.3-Table 1: Levels of misconduct and suggested advice on action to be taken
 - Appendix – C:
 - Conflict of Interest Statement Form



CSIR Guidelines: Ethics, Misconduct, Review and Punitive Action

Categories of Scientific Misconduct
Embezzlement of ideas
Plagiarism
Falsification of data/result
Fabrication
Fraud
Redundant /Salami Publications
Non-compliance of Regulatory Guidelines
Inappropriate Authorship / Authorship
Withholding data for validation
Wrong versus Fraudulent paper
Conflict of Interest
Gender issues

Good Scientific Practice
Laboratory Records
Authorship
Plagiarism Check
Safe Laboratory Practices
Research involving humans and human biological material
Use of Animals in Research
Journals
Consultancy work
Collaborative work

Levels of misconduct and suggested advice on action to be taken
Category I: Simple Error/ Minor Transgression
Category II: Moderate Transgression
Category III: Major Transgression
Category IV: Severe Transgression



David Baltimore and Thereza Imanishi-Kari



**The Nobel Prize in Physiology
or Medicine 1975**

**Associate Professor, MIT
in 1968**



**Associate Professor at
Tufts University**

**Assistant Professor,
MIT in 1981**

A **1986 Cell paper** co-authored by six including Baltimore and Imanishi-Kari: *“The expression of endogenous genes mimicking the idiootype of the transgene suggests that a rearranged gene introduced into the germ line can activate powerful cellular regulatory influences”*

June 1986: Margot O'Toole (researcher) – problems with reproducibility of experiments and accused Imanishi-Kari of fabricating the data

Cell paper - Subject of research misconduct allegations

1991: Charged by the Office of Scientific Integrity for falsifying data and barred from receiving research grants for 10 years

1996: The U.S. Department of Health and Human Services (HHS) (then newly constituted) reviewed the case again

1996: Following the investigations, Imanishi-Kari fully exonerated of charges



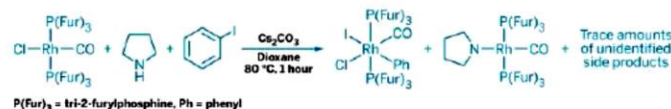
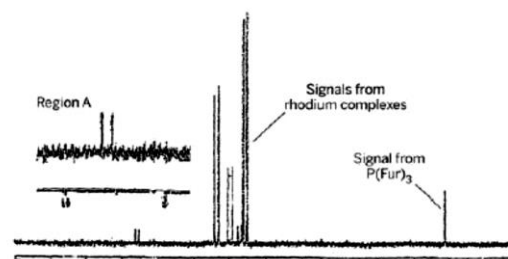
Dalibor Sames and Bengu Sezen



Bengu Sezen

- Fabricated NMR:

- Duplication of methylene chloride signal
- Duplication of triphenylphosphine signal
- Presence of correcting fluid on published spectra



Source: W. G. Schulz, *Chemical & Engineering News*, 08.08.2011, 89, 32, 40 - 43

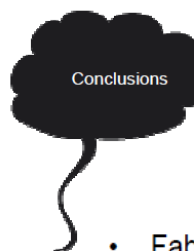


Pr. Dalibor Sames

- Bengü Sezen's misconduct proven after being trapped by a co-worker
- Neglected lab notebook handling

- 1996 – Awarded PhD degree (University of Arizona)
- 1998 – Assistant Professor (Columbia University)
- 2003 – Associate Professor (Columbia University)

9 awards



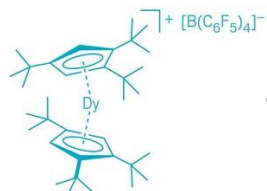
- Fabricated results.
- Falsified NMR.
- Lousy record keeping.
- Lack of experiment reproducibility.
- Scientific misbehaviour in the lab.

- Such groundbreaking experiments should have been reproduced by someone else.
- Pr. D. Sames was way too confident in B. Sezen's results.



David P. Mills and Richard A. Layfield

Mills and Layfield groups in adjacent floors at University of Manchester, UK
Papers published - Synthesis of the same molecule - done in exactly the same way



Dysprosocenium

- Single-molecule Magnet Controversy

Molecular magnetic hysteresis at 60 kelvin in dysprosocenium

Conrad A. P. Goodwin¹, Fabrizio Ortu¹, Daniel Reta¹, Nicholas F. Chilton¹ & David P. Mills¹

A Dysprosium Metallocene Single-Molecule Magnet Functioning at the Axial Limit

Fu-Sheng Guo, Benjamin M. Day, Yan-Cong Chen, Ming-Liang Tong, Akseli Mansikkamäki, and Richard A. Layfield*

Credit: *Nature/Angew. Chem. Int. Ed.*

“could offer a way to dramatically shrink data-storage systems”

24 Feb 2017: Mills told Layfield on plans of preparing a dysprosocenium complex but did not disclose how...

Same day, Layfield emailed his researcher on the dysprosocenium complex

March 2017: Mills' team synthesized its dysprosocenium and deposited crystal str. at Cambridge Crystallographic Data Centre; Nature Paper accepted in June and published in August 2017

Early May 2017: Layfield's group made the Dy(Cpttt)₂Cl precursor and structure deposited in Cambridge database on May 23, 2017; Paper in Angew Chem Int Ed submitted in May and published in June 2017

Complaint filed by Mills; Investigation proceeds

Layfield committed two forms of research misconduct –

1. Fully aware of Mills research...intention of beating Mills to publication in order to obtain the credit for the discovery; and
2. Author's disclosure: “must inform the editor of other manuscripts accepted, submitted, or soon to be submitted that have a bearing on the manuscript being submitted.”



Leo Paquette



Professor, Organic Chemistry, Ohio State University

~1200 papers, 38 book chapters, and 17 books

Achieved the first total synthesis of the Platonic solid dodecahedrane in 1982

1992-1993:

- **Plagiarized material from a researcher's grant application in his own proposal for research support**
- **Included information from a grant proposal that he reviewed in the introduction of an ACS paper, without attributing it to the concerned author**

Actions

- **Debarred from**
 - **Receiving federal grants**
 - **Participating in the peer review of confidential scientific proposals**
 - **Serving on Public Health Service committees, boards and review groups for 10 years**
- **Research proposals submitted by him certified by the university**



Authorship

Authorship can refer to the creator or originator of an idea or the individual or individuals who develop and bring to fruition the product that disseminates intellectual or creative works

Minimum requirements for **authorship**:

- 1) substantial contribution to the work, and
- 2) accountability for the work that was done and its presentation in a publication.

It is important that authors know, understand, and adhere to the criteria for authorship within their respective disciplines.

Acknowledgements - Contributions not meeting the criteria of authorship, that includes supporting the study, general mentoring, collecting data, acting as study coordinator, and other related activities

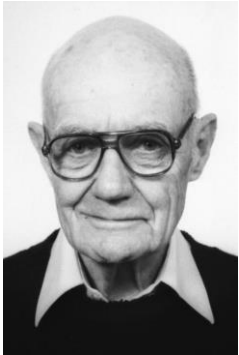
General Issues

- Omission of authors
- Inclusion of authors – unrelated to work, non-contributing
- Ghost author
- Guest, gift or honorary authors – No meaningful contribution to the design, research, analysis, or writing of a paper
- Prolific author
- Gender bias
- Insistence by sponsor

Authorship issues or disputes account for 2% to 11% of all disagreement in the scientific community



John Fenn–Yale Patent Dispute



The Nobel Prize for Chemistry in 2002: John B. Fenn shared with Koichi Tanaka and Kurt Wurthrich
Development of electrospray ionization for analysis of large molecules

1989: Fenn downplayed scientific and commercial value in response to Yale University's inquiry

1992: Patent applied for electrospray ionization mass spectrometry method filed – Fenn as assignee

Licensed the patent to Analytica, of Branford, Connecticut, - a company he cofounded; Analytica sublicensed rights to instrument makers

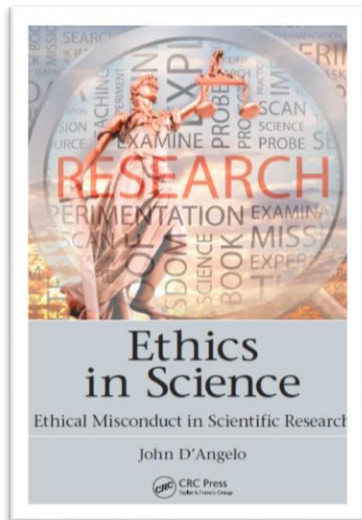
Fenn moved to Virginia Commonwealth University, when forced to retire by Yale

1993: Yale discovers the patent; licenses to a third party

1996: Fenn files lawsuit against Yale

2005: Fenn convicted of civil theft. Ordered to pay about \$1 million towards misdirected royalties and legal fees

As per Court verdict, Patent transferred to Yale





Other Inappropriate Research Practices

P-hacking

“hypothesizing after the results are known” (HARK)

“Expectancy Effect by Experimenters”

Fake reviewers; Buddy system

Stealing papers

Citation manipulation

Bias Gender, race, person, etc.

Not securing permissions and authorizations related to Copyrighted material

Predatory journals

Infringement – IPR and non-IPR materials

Breach of Agreement/MoU

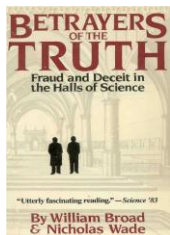
Breach of privacy and data policies

Not securing ‘Free and Prior Informed Consent’

- Human studies
- Oral traditional knowledge – knowledge holders, communities, etc.

Not securing statutory approvals and other permissions

- Ethics for animal and human studies, gene-editing, etc.
- Concerned bodies/agencies (ICMR, NBA, DCGI, NGT, PWD, CPCB, etc.)
- Organizations concerned
- Sponsors



The eminent English physicist Lord Rayleigh submitted a paper from which his name had been inadvertently omitted. According to his son and biographer, “The Committee ‘turned it down’ as the work of one of those curious persons called paradoxers. However, when the authorship was discovered, the paper was found to have merits after all.”¹⁸ More systematic studies of bias in the referee system have produced mixed results.



Similar issues also reported with research proposals and grant of projects/funding

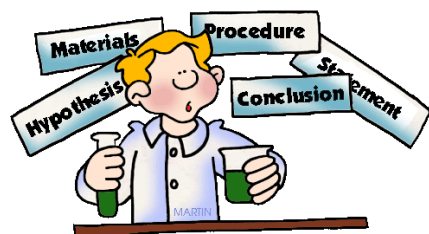
...and several more



Retraction Watch Database: Reasons

Author Unresponsive	Date of Retraction/Other	Falsification/Fabrication of Image	Misconduct – Official	Plagiarism of Data
Bias Issues or Lack of Balance	Unknown	Falsification/Fabrication of	Investigation/Finding	Plagiarism of Image
Breach of Policy by Author	Doing the Right Thing	Results	Misconduct by Author	Plagiarism of Text
Breach of Policy by Third Party	Duplication of Article	Forged Authorship	Misconduct by	Publishing Ban
Cites Retracted Work	Duplication of Data	Hoax Paper	Company/Institution	Results Not
Civil Proceedings	Duplication of Image	Informed/Patient Consent –	Misconduct by Third	Reproducible
Complaints about Author	Duplication of Text	None/Withdrawn	Party	Retract and Replace
Complaints about	Duplicate Publication through	Investigation by	No Further Action	Rogue Editor
Company/Institution	Error by Journal/Publisher	Company/Institution	Nonpayment of	Sabotage of Materials
Complaints about Third Party	Error by Journal/Publisher	Investigation by Journal/Publisher	Fees/Refusal to Pay	Sabotage of Methods
Concerns/Issues About	Error by Third Party	Investigation by ORI	Notice – Lack of	Salami Slicing
Authorship	Error in Analyses	Investigation by Third Party	Notice – Limited or No	Temporary Removal
Concerns/Issues About Data	Error in Cell Lines/Tissues	Lack of Approval from Author	Information	Transfer of
Concerns/Issues About Image	Error in Data	Lack of Approval from	Notice – Unable to	Copyright/Ownership
Concerns/Issues about	Error in Image	Company/Institution	Access via current	Unreliable Data
Referencing/Attributions	Error in Materials (General)	Lack of Approval from Third Party	resources	Unreliable Image
Concerns/Issues About Results	Error in Methods	Lack of IRB/IACUC Approval	Objections by	Unreliable Results
Concerns/Issues about Third	Error in Results and/or	Legal Reasons/Legal Threats	Author(s)	Updated to Correction
Party Involvement	Conclusions	Manipulation of Images	Objections by	Updated to Retraction
Conflict of Interest	Error in Text	Manipulation of Results	Company/Institution	Upgrade/Update of
Contamination of Cell	Ethical Violations by Author	Miscommunication by Author	Objections by Third	Prior Notice
Lines/Tissues	Ethical Violations by Third Party	Miscommunication by	Party	Withdrawal
Contamination of Materials	Euphemisms for Duplication	Company/Institution	Original Data not	Withdrawn (out of
(General)	Euphemisms for Misconduct	Miscommunication by	Provided	date)
Contamination of Reagents	Euphemisms for Plagiarism	Journal/Publisher	Paper Mill	Withdrawn to Publish
Copyright Claims	Fake Peer Review	Miscommunication by Third Party	Plagiarism of Article	in Different Journal
Criminal Proceedings	Falsification/Fabrication of Data			

Misconduct Prevention, Correction and Redressal Mechanism



**Ethics Officer
and Safety
Officer**

Periodic workshops and courses be conducted on Scientific Ethics and Safe Lab Practices



**Standing
Publications,
Ethics and
Scientific
Vigilance
Committee (SEC)**

Conduct training, ensure scientific audit, respond to external parties, advice/guide Director/DG, CSIR



**Scientific
Investigation
Board (SIB)**

Investigate scientific misconduct



Ombudsman

Grievance redressal mechanism



Suggested SOP for dealing Misconduct



- **Complaint from 'identified' individual received. Anonymous complaints not to be entertained * .**
- **Director (for individual laboratory) / DG-CSIR (for CSIR Hqs) refer matter to SIB**
- **SIB investigates the matter and suggests punitive action commensurate with the offence done**
 - **Minor, moderate and major penalties (excepting those below): Be imposed on the accused directly by the Director for the laboratory and DG, CSIR for the Hqs**
 - **Major and severe transgressions involving penalties such as Deferred promotion/ Deferred increments/ Reduction to lower stage/ Compulsory retirement / Removal from Service: Be dealt as per extant CSIR rules and regulations, by CSIR administration with the approval of Competent Authority**

**In the larger interest of CSIR, the DG may initiate an inquiry in cases where any anonymous complaint is accompanied by factual and verifiable data for a particular case.*



Additional Points from the Guidelines

- **Workshops:** Periodic workshops and courses be conducted on Scientific Ethics and Safe Lab Practices. A dedicated Ethics Officer and Safety Officer to be appointed at each Lab and HQs
- **Laboratory Records:** Keep proper records of each experiment, details of materials obtained from sources and how used, procedures, analysis and other related material
- **Archival of Data:** All primary data including field records related to publication to be deposited with the institute's knowledge resource centre with appropriate security for IP. Both soft and hard copies to be kept.
- **Gender Issues:** National and institutional guidelines must be followed
- **Whistle Blowers:** People who inform authorities of wrong doings; protection be ensured by CSIR Hqs.
- **Ethics in Governance and Conflict of Interest (Col):** In every decision making process, all concerned members to necessarily sign a Conflict of Interest Statement. Those with conflict may recuse themselves from the Committee proceedings.



Compliance Sought:

1. Nomination of Ethics Officer, Safety Officer
 2. Constitution of SEC, SIB at lab level
- } Details to be made available on every lab/CSIR website
3. Ensuring every scientist, technical officer, project staff and students have read the Guidelines
 - Declaration may be signed by each – certifying that one has understood the matter and shall abide by the Guidelines
 4. Ensure heightened awareness – including student seminars, quiz, talks, etc.
 5. Extensive trainings – Quarterly, if required
 6. Proactive measures – Corrective and Preventive Actions (CAPA) based on issues observed till date and regular audits
 7. Expedite implementation of e-Lab Notebooks
 8. Mentors for Students and Faculty



...only one case to surface every few months or so for the *public credibility of science* to be severely damaged.

*CSIR
INDIA*

....*Betrayers of the Truth*
– *Fraud and Deceit in the Halls of Science*
By *William Broad and Nicholas Wade*

Exercising Research Integrity – A Mandatory Conduct!
Scientific Misconduct Should and Will be treated Seriously!

Thank you

