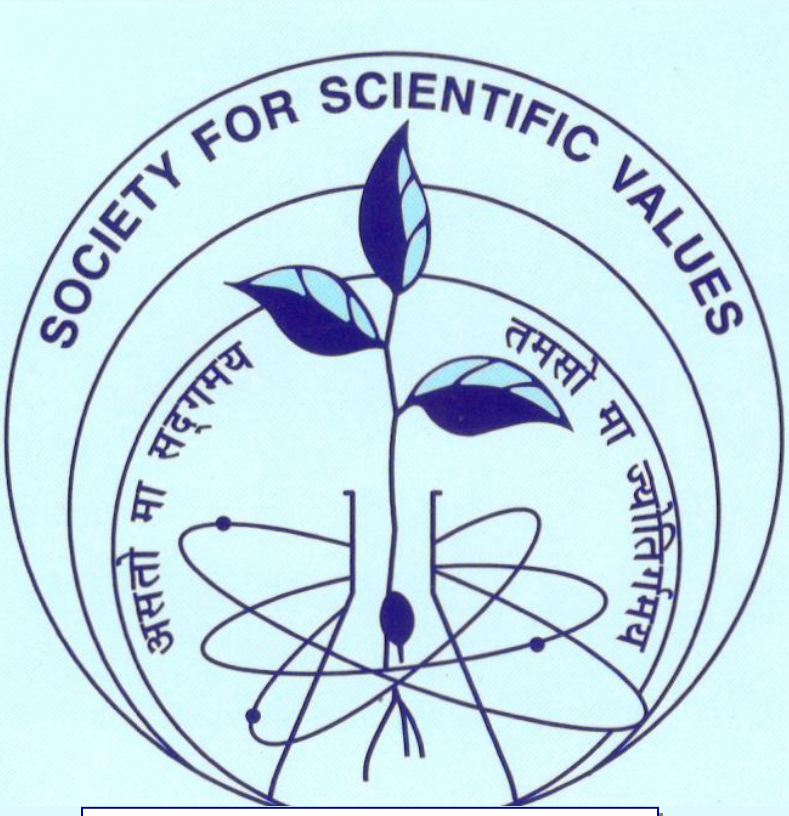
Society for Scientific Values

Ethics in Scientific Research
Development and Management
News And Views

Volume 12 June 2016 No. 1



Let Truth Prevail

Regd. Office: DST Centre for Visceral Mechanisms
V. P. Chest Institute
University of Delhi, Delhi

Editor
Dr. Santa Chawla
Ex- Chief Scientist, NPL
sntchawla@yahoo.com

Office bearers of the Society
(**Jan 2015 to Jan 2018**)

President
Prof. K. L. Chopra
(Ex-Director, IIT Kharagpur)
M-70, Kirti Nagar
New Delhi-110 015
Ph: (011) 25154114
E-mail:choprakl@yahoo.com

Vice-President
Dr. N. Raghuram
IP University, Delhi
&
Dr. Indra Mani
IARI, New Delhi - 110 012
maniindra99@yahoo.com

Secretary
Dr. R.K. Kotnala
Chief Scientist
National Physical Laboratory
Dr. K.S. Krishnan Marg
New Delhi-110 012
rkkotnala@nplindia.org
Ph: 45608599 (O)

Joint Secretary:
Prof. S.S. Major

Treasurer
Dr. Hari Kishan

Main objectives of the 'Society for Scientific Values'

1. **To promote objectivity, integrity and ethical values in pursuit of scientific research, education and management, and**
2. **To discourage the unethical acts in these areas**

Website : scientificvalues.org

Contents

Editorial

News & Views, after a hiatus of three years, is coming again in the electronic form from this issue. We do hope that a larger audience interested in the values that the Society upholds, will benefit from the content of the newsletter.

There have been unethical practices in the scientific community in this period and SSV has raised its voice against such incidences. This issue brings some relevant news, interview of SSV president to media and letters written to the authorities of important scientific organizations for redressal of scientific misconduct.

It is increasingly felt by the society members that imparting education on ethics and scientific conduct to young students is must to develop them as responsible citizens and men of integrity in their professional life. If educationists and academicians take up this issue, it will be a great help to our society.

Santa Chawla

SSV activity highlights in the current period

Minutes of the 21st General Body Meeting
(Held at National Physical Laboratory on Jan 28, 2015)

The 21st GBM was held on Jan 29, 2015, at 3.00 pm in NPL for electing new EC members for the period 2015-18.

The President welcomed the members and presented a report on the activities of SSV during the year 2014. A summary of the report is as follows :

1) SSV was represented in the following national activities:
a) One day (April 23) National Seminar on Plagiarism Issues was organised by JNU for 500 librarians. Talks were given by Dr. Kotnala, Dr. Raghuram and Prof. Chopra
b) IIT Kharagpur Alumni Association in Chennai organised an Essay Competition on Ethical Values in Science among 60 high school students in Chennai under its program of "Mindskool". The essays were evaluated by the IITM faculty and some SSV members. The four best essays were presented before students and teachers of the 60 schools in a one day (July 12) seminar held at IITM.The seminar was addressed by the convenor (Prof Subhramaniam of IITM) ,Director ,IITM, Prof Chopra, Dean of students of IITKGP, and others. Besides the students,the teachers who attended the function were very happy and appreciative of this unique seminar on the subject of Ethics. The selected four students were invited by IITKGP to spend a week in IITKGP.
c) Central University , Jammu organised a one day (Oct 29) National Seminar on Scientific Writing . Prof Chopra was invited to address the seminar.
d) A Yahoo Reporter ,Rohit Anani, has interviewd Dr Kotnala , Dr Indra Nath and myself .His article on SSV "who will stop plagiarist" has appeared
On yahoo website with the link: https://in.news.yahoo.com/who-will-stop-the-plagiarists-093145581.html

2) On invitation of the following institutions , institutional seminars on Scientific & Ethical Values were delivered by Prof Chopra : IITP ; NITP IARI; MangaloreUniversity;IIEST-Kolkata;IIT, Gandhinagar ; IITM;BBIT, Kolkata ; Amity University, Gurgaon ; Vel Tech University, Chennai
3) Prof Chopra briefed the GBM on several important cases of plagiarism and scientific misconduct which he has invesigated., The details of these cases (whichever and whenever considered appropriate) will be posted on our SSV website

Following the presentation by the President, the GBM discussed various issues faced by SSV . Some decisions taken were as follows :

1. It was agreed that younger members from different parts of the country be inducted to nurture the objectives of SSV. Members also agreed to enhance the number of EC members from 8 to 12

2.After an extensive discussion ,it was agreed that a Seminar on the ethical and societal issues related to GM Food be held soon at IARI, Dr Indramani Mishra was requested to convene the Seminar.

3. It was agreed that our Website and News & Views need to be strengthened considerably. The new EC will discuss ways and means to do so

4.The nomination of following new members by the President of SSV was considered and approved for membership of SSV :

i}..Dr. N Ravi Chandra Raju | Postdoctoral Research Fellow
Centre for Organic Photonics & Electronics (COPE) | School of Chemistry & Molecular Biosciences, The University of Queensland, St Lucia | Brisbane, QLD 4072, Australia, r.nagiri@uq.edu.au | +61733467995 (off.) | +61415197326 (mob.) http://www.physics.uq.edu.au/cope/node/2

Ii}.Dr. Ramesh C. Gaur, JNU Librarian,
Tele+91-11-26742605, 26704551,Fax : +91-11-26741603 Mobile : 9810487158, Email rcgaur@mail.jnu.ac.in , rcgaur66@gmail.com

.

5. The GBM elected the following office bearers and EC members of the Society for the period Jan 2015 to Jan 2018.:

President : Prof. K. L. Chopra
Vice President : Dr. N. Raghuram & Dr. Indra Mani Mishra.
Secretary : Dr. R. K. Kotnala
Joint Secretary: Prof. S.S. Major
Treasurer : Dr. Hari Kishan
***Immediate past President (Ex-Officio member)* Prof. P. M. Bhargava**

Members:

Dr. Vikram Kumar
Dr. Indra Nath
Dr. Santa Chawla
Prof. B.V. Reddi
Dr. J.C.Sharma
Prof. Uttam Pati
Dr. Akhila Anand
Dr. Rakesh Singh
Prof.B.D.Malhotra
Ms.Shubhrima Ghosh

Special Invitees
Prof. P. N. Srivastava
Prof. Bimla Buti
Dr. P. N. Tiwari

Minutes of the 92nd EC-SSV Meeting

The 92nd meeting of the Executive Council, SSV was held at National Physical Laboratory on March 10, 2016, which was attended by the President Prof. K. L. Chopra, the Secretary Dr. R. K. Kotnala and EC members Dr. Santa Chawla, Dr. Hari Kishan and Ms.Shubhrima Ghosh. Prof. K. L.Chopra welcomed the EC members and expressed his grave concern on the working of SSV due to very poor participation of EC /SSV members in any activity of SSV.

1. Following the agenda, the Minutes of the 91st EC meeting were approved.

2 . The progress of the SSV Face Book (FB) being taken care by Ms Shubrima Ghosh was discussed in detail. It was decided that Ms Ghosh does not need any permission from the President/ Secretary to post any news or information related to scientific/academic unethical values/ misconduct published in a public media. She was advised to post on FB the names of the present SSV executive committee members, a brief history and objectives of the SSV and a summary of Conferences/Seminars related to Ethical issues in Science and Technology. Miss Shubharima informed members that the FB visibility of our recently launched SSSV-FB site was good.

3. Prof. Indra Mani expressed his desire to hold a seminar on ethical issues in IARI during April 2016. The EC welcomed and offered to participate in it.

4.The President requested Dr. Santa Chawla to take over editorship of News and Views in e-form. She agreed to do so provided members provide appropriate material for the purpose.

5. Dr. Santa Chawla was requested to author a manual for students and faculty on ethical issues related to the S &T activities in general. SSV agrees to pay for the publication of the manual.

6. Prof Chopra briefed the EC on several serious cases of plagiarism.

6.1 NEERI-CSIR Nagpur, Scientists in NEERI have plagiarised several papers. After a very long delay, the Director NEERI acknowledged the existence of such cases of plagiarism but declined to take any action. EC requested President to take up the case with the DG-CSIR.

6.2 Some NIPERs are headless with no Governing Bodies. The GOI Secretary had chaired the meeting for selection of Directors for the NIPER. The shortlisted candidates include those who have been charged with serious corruption/plagarisation cases. On this point Prof. Chopra has written to the Secretary but no reply has been received. Under such circumstances members requested Prof. Chopra to write a letter to the Minister/Prime Minister.

6.3 Prof Chopra informed the EC that the VC, Pondicherry Central Univ charged with several plagiarism cases has exhausted all legal sources and is expected to be dismissed soon after a prolonged inquiry by MHRD/UGC.for over one year.

6.4 Also, the case of corruption by Prof S. Duttagupta,the VC of Vishwa Bharti, Shantineketan has reached its logical conclusion after two years of arguments and he has now been dismissed.

6.5 The president mentioned that he has received anonymous calls to investigate the enormous growth of TERI needs from corruption point of view. The EC decided not to get involved with this case at present.

7. The President asked EC members to bring to the notice of SSV their personal involvement in activities related to ethical issues in S&T.

The President mentioned that he has recently addressed the faculty and students of IIT Guwahati and IITM on such issues. Also, the President was invited to deliver a Plenary lecture on Ethical Issues in the International Conf on Advances in Polymeric Materials -2016 held in Ahmedabad

News pertinent to SSV's cause

National

SSV President Prof. K.L.Chopra was interviewed on scientific values in Indian Science and News and Views reproduces the interview below.

Interview to Down to Earth by SSV President Prof. K.L.Chopra

"Top scientists misuse power, funds'

It seems like a lost cause but **Kasturi Lal Chopra** battles on. As president of the Society for Scientific Values (SSV), he leads the charge to clean up science in India which is plagued by rampant plagiarism and other scientific misconduct. It's a task that he has undertaken since the 1980s when, together with a small band of scientists, he formed the society to end the unethical practices. Chopra, 81, is an eminent physicist known for his pioneering work on thin films for which he holds four US patents. After stints at Defence Research Board of Canada and the Fritz Haber Institute in Berlin, he taught at IIT-Delhi. But the scientist is best known for reinventing the decrepit IIT-Kharagpur to make it the premier institute of its kind. In an interview to **Latha Jishnu**, he says the biggest hurdle to inculcating scientific values is government indifference. Excerpts

Photographs: Vikas Choudhary

What are the cases of scientific misconduct that have been brought before Society for Scientific Values (SSV)?

Plagiarism, fabrication or falsification of data, misuse of authority, conflict of interest, manipulation of awards, promotions, etcare within our purview. But, we are not able to handle most of these cases since it requires time and access to official records which no institution is prepared to share. Therefore, most of the cases SSV has dealt with so far relate to plagiarism and self-plagiarism.

How serious is this problem?

Plagiarism by Indians is a matter of serious concern, next only to that by China. About 100 journal papers by Indian authors are being withdrawn or retracted due to plagiarised content every year. SSV receives many complaints from interested whistle-blowers. We examine only those cases (about 15-20 a year) which are important and are accompanied by credible supporting evidence. We analyse the evidence, re-check if it is possible, and then write to the author(s) for their views. If we do not hear from the authors, which is most likely the case, we report to the heads of the institutions. Most heads (close to 80 per cent) do not respond despite reminders. Those who do, seek our help or advice to take some action, ranging from warning to dismissal, as happened in the cases of two faculty members of Pondicherry University and two directors of national research institutes.

SSV has no powers to impose penalties so what effect do your findings have?

If and when we are satisfied with our analysis of the case, we post it on our website with the hope that "Name & Shame" strategy will deter others.

But is this name and shame policy really working? Even the top scientists of India indulge in plagiarism and get away with it.

Nobody wants to admit there is a problem. We write to the heads of the institutions where scientists have been involved in plagiarism but usually they take no notice because it brings a bad name to their organisation. Most heads of academic and research and development (R&D) institutions behave the same way as government babus do. First ignore and then defy. Nevertheless, our persistence is working to some extent. Our science academies have now set up a joint committee on ethics. The University Grants Commission has advised universities to initiate credit courses in the area of ethical conduct of research.

Nobody wants to admit there is a problem. We write to the heads of the institutions where scientists have been involved in plagiarism but usually they take no notice because it brings a bad name to their organisation

Does the government or its institutions care about such issues?

I have written to the Ministry of Human Resource Development and Department of Science and Technology (DST) to set up an autonomous body for Scientific Values with quasi-judicial powers just as US President Bill Clinton set up the Office of Research Integrity. As usual, there was no response. The DST secretary told me his job is to only to provide funds to plant seeds of R&D.

So, who is accountable?

Accountability is of no concern to anybody in the government. The chairperson of the Scientific Advisory Committee to the Cabinet told me in the presence of his 80-member committee that SSV should be concerned only with teaching and nurturing ethical values and not become police. We have also suggested to the government that vigilance officers in all institutions could also be given the responsibility for R&D ethics. Again, no response. But accountability has to start with our education system, which is in a shambles. That and the lack of autonomy for institutions is a big problem.

But who do you believe should be responsible?

DST, as the funding agency, should be. There is so much misuse of power and funds by top scientists. But in its history not a single scientist has been blacklisted by DST. Let me tell you what happened

some years ago. We had invited the former secretary of DST to give a memorial lecture on accountability organised by SSV. He agreed and it was scheduled well in advance. But the night before the lecture, he called me to say he could not speak on accountability but would talk instead on spirituality from the Bhagvad Gita. His message was: if you are spiritual there would be no problem of ethics!

There seems to be a perverse incentive to reward scientists involved in cheating and plagiarism. This is almost a trend in public R&D institutions.

That's true but not always the case. Many scientists have been penalised. They have been demoted or removed for misconduct.

But more scientists have been rewarded than punished. There is the well-known case of plant developer K C Bansal who falsely claimed to have patents and was given a prestigious award. He was also rewarded with the directorship of National Bureau of Plant Genetic Resources thereafter.

Yes, that's a bad case. I have written several times to the director-general of Indian Council of Agricultural Research (ICAR) but have not got any response. ICAR is the worst in this regard.

The most shocking example is of C N R Rao, for long the chairperson of the Scientific Advisory Council to the Prime Minister, who was involved in five cases of plagiarism. Yet, he was given the Bharat Ratna last year. He is or was a member of SSV.

Our executive council took a serious view of the cases of plagiarism by Rao. SSV said that supervisors must take the responsibility for such scientific misconduct and that they have the responsibility to nurture ethical values among their students and collaborators. Rao is not an active member of SSV.

What is the outlook for our science?

If we want to survive as a nation, if we want to become a knowledge power as the prime minister talks of, we need to transform our systems, starting with education. Otherwise we cannot become an ethical society."

Author(s): Latha Jishnu, **Issue Date:** 2015-3-31 (Interview Published in "Down To Earth" (http://www.downtoearth.org.in/content/top-scientists-misuse-power-funds)

National News

HINDU, Dec 20, 2015

'Vice-Chancellor plagiarised book'

DENNIS S. JESUDAS

Probe panel found she had written only one book, not three and published only one article

CHENNAI: A fact-finding team that examined charges against controversial Vice-Chancellor of Pondicherry University Chandra Krishnamurthy, now on compulsory wait, has concluded that she had published only one book and not three as claimed by her. Similarly, she had published just one article against her claim of 25 articles. The committee also did not find any evidence to prove that she had guided nine PhD students.

At the time of applying for the post of Vice-Chancellor, Ms. Krishnamurthy had claimed to have authored three books. However, during the inquiry it was established that she had published only one book, *Legal Education in India*, in which 98 per cent of the content was "plagiarised."

She had also claimed to have published 25 articles but only one was traceable (in open repository) and about 75 per cent of that was also plagiarised. Further, there was no evidence available for her claim to have guided nine Ph.D. students.

"No evidence is on record to authenticate that the V-C had the title of a 'professor' before her appointment as Vice-Chancellor of Pondicherry University," the report said.

"The aforesaid misdeeds/lapses constitute misrepresentation, gross misconduct, dereliction of duties and lack of commitment on the part of the V-C keeping in view the sensitive nature of the post held by her," the report said.

How misleading information could be to common public!

Dissecting Disinformation About Pesticide Residues

" WhatsApp is a wonderful tool to reach out to people.
WhatsApp is also an inexpensive tool to spread "**disinformation"** by the learned people among the learned people..!
Disinformation? What's that? You may wonder.
Disinformation is deliberate misinformation..!
It is intentionally false information designed to mislead people.
With *malafide* intent, of course.
Misinformation could be by mistake, can be excused. But the disinformation is deliberate, cannot be excused.
The other day the message was received through **WhatsApp**.

Pesticide percentage (%) in cold drinks released from IMA (Indian Medical Association) recently

1	**Thums up**	**7.2%**
2	**Coke**	**9.4%**
3.	**7 Up**	**12.5%**
4	**Mirinda**	**20.7%**
5	**Pepsi**	**10.9%**
6	**Fanta**	**29.1%**
7	**Sprite**	**5.3%**
8	**Frooti**	**24.5%**
9	**Maaza**	**19.3%**

It is very dangerous to the human liver…Results in cancer! Please pass it to all known persons in your contact.

The person who alerted to this **WhatsApp** message is a doctor.
I immediately replied saying **" *this is the most outrageous lie I have ever heard"*** and promised a detailed response .
Here is the promised –detailed- response that I sent over mail:
It is well established that the average sugar content in bottled soft drinks range from **9% to 12%.**
But, according to the disinformation spread through **WhatsApp** , the pesticide content in the soft drinks reaches **29.1%.**
In other words, the alleged pesticides content in the soft drinks is several times higher than the sugar content.
Thus, when a person sips any of the popular soft drinks, more pesticides enter his/her body than sugar!
Oops..!
This is not only ridiculous but malicious falsehood.
The sad reality in life is that falsehood spreads faster- especially in the **WhatsApp** era.

The original sin for all the stories linking soft drinks with pesticides in the minds of people of India goes to Ms. Sunita Narain, the Delhi based activist NGO heading Centre for Science and Environment known for earning millions(in dollars) simply by spinning and spreading myths surrounding pesticides.
In the year 2003, she released a sensational self-produced report that alleged heavy presence of pesticide residues in popular soft drinks sold in India. Her minions added further spice to that story by publishing news that farmers in India had started spraying Coca Cola on their crops for killing pests. They, thus ridiculed and maligned both Indian farmers and Indian agriculture in the print and electronic media.
After a while, it emerged that Sunita Narain's findings and allegations were deeply flawed as she did not do the mandatory confirmatory tests while doing the analysis using Gas Chromatography. A Parliamentary Committee pointed out this major omission, a year later. Of course, very few would know or remember the ignominious end that the story had.

The SSV's confrontations with Sunita Narain on the subject of pesticide residues is as follows:

In the year 2001, Sunita Narain released a report (her first in the field of pesticide residue analysis) claiming to have found **9.19 ppm** (parts per million) of Endosulfan residues in filtered water samples taken from Kasargod, Kerala. The maximum water solubility of Endosulfan is only **0.32 ppm**. How could she claim to have found a pesticide (in this case Endosulfan) **28 times higher** than its known solubility in filtered water samples?
Could she demonstrate her findings?
A reputed scientist met her and challenged her to demonstrate her own findings using Gas Chromatography.
She said, she would..!
Fifteen years later, she is yet to demonstrate her mystical findings.
But she has, in the meantime, achieved what she was paid to achieve. She has brought about a ban on Endosulfan purely by running an emotional campaign (sans science) in the print and the electronic media.
An investigative report in the magazine "**OPEN"** (March 2013) revealed that Sunita Narain's NGO received **Rs 67.7 crore (Rs 677 million)** as donations from outside India. Another report says that between 1998-2013 she received as much as **15.4 million USD** from Sweden (Source: SIDA report 2014:18). Ha-ha here is an activist who makes millions without knowing the ABCs of the pesticide analysis.
You see, in India where scientific illiteracy remains rampant, people like Sunita Narains perniciously influence the public mind through the popular media and misdirect the government policies too- especially in the field of environment and health where emotions play a major role.
Now, let me come back to the **WhatsApp**'s disinformation about pesticide residue in soft drinks citing a fictitious study by the Indian Medical Association (IMA).

The **WhatsApp** message cites the IMA just to win credibility in its bid to befool the people.
The IMA is a trade association of allopathic doctors. The IMA does neither have the infrastructure nor the expertise to do pesticide residue analysis.
The **WhatsApp** message claims that soft drinks contain **29%** pesticides.
The most potent cockroach killer widely used in India is **HIT.**
HIT contains two pesticides: A mixture of Implothrin **0.07%** and Cypermethrin **0.2%.**
Note the pesticide content in the **HIT** spray once again. It is less than**0.3%.**
Therefore, to claim or to believe that soft drinks contain **29%** pesticides is foolish naive
The Merriam –Webster dictionary defines the term "naivety" as:

- having lack of knowledge or experience
- deficient in worldly wisdom
- unchecked innocence
- unsophisticated

Scientific naivety is unforunately very strong in our society.
No wonder "disinformation and dissemination of disinformation" thrive well in our society.
Do remember this. The disinformation and dissemination of disinformation fetch millions of dollars - bring huge pecuniary gains- to activist NGOs in India- especially the likes of Sunita Narain. They are the unseen faces behind the **WhatsApp** messages of the kind dissected in this note.
" The greatest enemy of the truth is very often not the lie, deliberate, contrived and dishonest; but the myth, persistent, persuasive and unrealistic" said President John F. Kennedy in his speech at the Yale University, USA on 11th June 1962.
The disinformation is a toxic cocktail of both lie and myth. It is therefore more dangerous than the lie /myth.
We, the people of the Sovereign Socialist Secular Democratic Republic of India should be on the alert and guard against all kinds of disinformation.
There are many who demand that the foreign donors be held accountable/liable for the lies, myths and disinformation spread by the Indian activist NGOs.
There is merit in this demand."

Global news

"The black market in academic papers – and why it's spooking publishers

Sci-Hub, a free online repository of academic articles, is the subject of a battle at the heart of open access.

A colleague of mine recently posted a plea on an open forum asking for someone with access to please send her a copy of a journal article. This colleague works at one of the premier research institutions in the EU which has an annual budget of over €100m, yet she had to ask her connections on Facebook for access to a

scholarly article. Her university did not have access to this piece of literature that she needed to complete her research.

This story isn't unique. Many academics have to seek other means for finding articles rather than pay the minimum US$30 that most publishers charge to access an article.

Instead, a black market of scholarly papers exists that those in the know can access as easily as using a hashtag on Twitter: #ICanHazPDF. This system relies on academics helping each other. I post a request for a paper and in ten minutes a response with an attachment may come back to me. The original tweet is then deleted.

Other disciplines have set up listservs and private sites with similar goals: those in need can ask those with access and online journal articles or books are provided free of charge. "There is a cool network of psychology students who have shared stuff by request for a couple of years, its called the European Federation of Psychology Students' Associations and we were all friends helping friends," Aart Franken, a recent PhD graduate from Utrecht University in the Netherlands, told me.

Enter Sci-Hub

For the last few years, there has been a new player in town. Sci-Hub, a website developed in 2011 by Alexandra Elbakyan, a researcher from Kazakhstan, is a repository for over 48m papers which continues to grow every day. Elbakyan has been called a modern-day Robin Hood by some.

The publishing company Elsevier is currently suing Sci-Hub and Elbakyan in New York for copyright infringement. After Elsevier won a temporary injunction against the site in January, it reopened with a new domain name. Alicia Wise, Elsevier's director of universal access, said that for the company: "It's as if somehow stealing content is justifiable if it's seen as expensive … It's not as if you'd walk into a grocery store and feel vindicated about stealing an organic chocolate bar as long as you left the Kit Kat bar on the shelf."

But Sci-Hub has changed the way that many think of public access. Unlike previous systems, it keeps a copy of the requested paper on its server so that it doesn't have to go looking for it when someone else asks. Now instead of asking a group of your peers or sending out a hopeful tweet, anyone can go to Sci-Hub and see whether the paper is there. Within 30 seconds the site loads a PDF version of the requested article that Sci-Hub has accessed from Libgen – a search engine for scientific articles and books, which allows free access to otherwise paywalled content – or skimmed from the publisher.

An affordability problem

As an academic who publishes within the traditional journal system, it's worth looking at the normal scenario of scholarly publishing.

1. An article is written and submitted to a journal.

2. That article is accepted after revision and the author is asked to sign away copyright.

3. The author is given the chance to publish "open access" which requires the author or the university to pay – in the case of Elsevier, between US$500 and US$5,000. Other publishers have similar policies.

4. If the author cannot afford this fee, or their university refuses to pay it, or the grant that funded the research does not allow payment for publishing, the article is published closed and only those with subscriptions can access it. (Green open access, or the ability to self-archive the accepted version of the article in an institutional repository, is free of charge either immediately or after an embargo period depending on the publisher.)

This last point about affordability is the norm. Not many academics can afford to publish open access with top-tier journals, but for their careers, they can't afford not to publish in what are known as "high-impact" journals. As Katrin Becker, adjunct professor in computer science and game design at Mount Royal University, in Canada, told me:

Open access that requires authors to 'buy' the publication of their articles is wrought with problems, from silencing adjuncts and people without grants, to potentially influencing acceptance based on money rather than the quality of the research.

The difference between academic publishing and other types of creative work is in who owns the rights and who gets paid. Simply put, the author does not get money once the article is published in the journal, the academic editors and peer reviewers are not paid for reviewing these articles. The publisher gives nothing and gets everything.

Academics have the choice where to publish but once the article has been signed over we have no voice in the process – our only choice is to not choose specific publishers.

The pursuit of knowledge

The open access movement has come out of the idea that publicly-funded research should be available to the public. As my colleague Grainne Conole,

former professor of education at Bath Spa, told me: “Research is about sharing and discussing our findings with peers, research shouldn’t be locked up in closed systems.”

There are thousands of open access journals but many of them are seen to lack the prestige that universities demand for researchers. We are stuck: academics can’t afford to read their own work but they can’t afford not to publish in these prestigious journals if they want to advance their careers.

Sci-Hub has provided a new path. It doesn’t fix the flawed system of academic publishing, but it does let those without traditional access read the scholarly articles they need to complete their degrees, work on their research projects, and keep up to date with their fields.

As Martin Weller, professor of educational technology at the Open University, told me:

Sci-Hub is a bit like distant thunder at a picnic for publishers. They ignored open access, then tried to discredit it, then tried to make extra money from it – but Sci-Hub may make them actually address the issue.

Dana Ruggiero, Senior Lecturer in Learning Technology, Bath Spa University

This article first appeared on The Conversation.

We welcome your comments at letters@scroll.in.”

Compiled by
Santa Chawla

SSV is continuously endeavouring for corrective measures against scientific malpractices and taking action against those who indulge in such activities. In pursuance of this, President SSV Prof. K.L.Chopra has written to the heads of major scientific bodies of India, namely Department of Science & Technology (DST) and Indian National Science Academy (INSA). We reproduce below the contents of these letters:

Letter to the Secretary, DST, Prof. A. Sharma, from President, SSV

Dear Prof Sharma :

1. While honouring good researchers with rewards of Fellowships such as JCB and Ramanna is laudable , it is not ethically correct to continue with such awards when the recipient is occupying a full time executive position. I have raised this issue with you earlier also. DST should set a good example by keeping such an award in suspension during the tenure of the person concerned in his/her executive position.

2. DST is a major funding agency for sponsoring R&D projects in the academia and R&D institutions in the country. It is unfortunate that DST has not yet insisted on the recipients to frame rules and regulations for responsible and ethical conduct of R&D in their institutions as suggested earlier by the Society for Scientific Values. I hope you will take a fresh look at this suggestion in view of the rapidly rising cases of scientific misconduct in India.

3. DST funds INSA, as also other Academies.It seems DST does not question how the funds are utilised. DST'nominee in the INSA council rarely questions its activities. The previous INSA President travelled a lot globally to sign innumerable agreements for collaboration with various academies including nearly non-existing/ non-performing ones in many Asian countries. DST spent a lot of money to hold two big conclaves of the so-called Asian Academies. And , now we have a new International Body of Asian Academies, obviously headed by the same President. With scarcity of funds , DST representative in INSA council should be asking questions on the responsible use of funds, not for our popularity but in the scientific interests of our country.

4. SSV has asked Indian Science Academies to consider withdrawing Fellowships from those Fellows who are known to have been involved in serious cases of scientific misconduct. It took SSV over a year to convince Indian Academy of Science that one of its Fellows has committed a serious case of plagiarism and that his Fellowship should be withdrawn. Ultimately under pressure, the Academy suspended the Fellowship for three years- not good enough but atleast some action at last. There are many similar cases of INSAFellows. Recently , Prof Duttagupta has been dismissed from the position of VC of VishwaBharti. He was removed from the post of Director, Bose Institute

funded by DST on very serious charges of misconduct. Shockingly thereafter, MHRD appointed him as Director , IISER, Kolkata and therefrom promoted him to the position of VC. of a prestigous Central University. SSV expects INSA to withdraw his Fellowship. I hope DST will support SSV on this issue.which would set a good example

5. I cannot help mentioning that despite support from the then minister of S&T (M M Joshi), SSV, a voluntary society, received a grant of only Rs 1 Lakh from DST only once and a bureaucratic full stop thereafter. Fortunately, SSV survives due to the generosity of its members.

I hope you appreciate SSV raising such issues of national concern. We do hope to see some appropriate actions by DST in due course.

Warm regards

Prof (Dr) K. L. Chopra (Padamshri)

Answer by the Secretary, DST to the President, SSV

Dear Prof. Chopra:

Thanks for your mail containing many important points. Actions on many of these has already started. I would update you personally on some of the initiatives which briefly include:

1. Tight conflict of interest forms to be signed by DST officers, referees of proposals, committee members and PIs.

2. Review of JCB fellow's (research) performance after 5 year term to decide on its continuation. This is the best course committee for JCB agreed to.

3. The new Asian Academy at INSA has been agreed to only for two years and should be self sustaining after that.

4. Earlier travels of INSA etc were before my time at DST but we will be careful. INSA being an autonomous body, too much meddling is also not appreciated by the scientists!

Thanks again for keeping the flag of ethics in the country flying high. Certainly need that.

Best regards,

ashutosh

Letter to the President, INSA, Prof. R Gadagkar from President, SSV

Dear Prof Gadagkar,

ScientificValues and Ethical Issues in S&T are increasingly becoming important for our Scientific Civilization.Consequently , UNESCO has set up three related Divisions to deal with such issues. An ICSU committee (Co-chaired by Prof Indira Nath, former Secretary Society for ScientificValues (SSV) and also INSA) has prepared a document on the subject. ICSU has invited its member Science Academies to prepare their own country specific documents. INSA set up an Ethics Cell .But , I am not yet aware if INSA has prepared any document so far.

Indian Acad of Sc prepared a brief document when it was confronted with the well known KUNDU case of plagiarism brought to its attention by SSV (an Honorary Society founded and nurtured by many prominent INSA Fellows which include three Ex Presidents of INSA).Sadly , IASc refused to accept the proof of plagiarism by KUNDU etal as provided by SSV. When SSV conclusions were supported by other scientists from IISc, IASc decided to punish its Fellow, Dr Kundu, by withdrawing its Fellowship for a period of 3 years- a too mild a punishment in the view of SSV

Cases of plagiarism , self-plagiarism, and misconduct among Fellows of INSA are not uncommon. Regrettably , however,INSA has not yet taken a stand on policy issues related to the Fellows of the most respected National Academy. who have been charged with plagiarism and misconduct in their positions. Are INSA Fellows beyond any public scrutiny ?

The most recent case of Prof Sushant Duttagupta is too glaring for INSA to ignore. Duttagupta was appointed Director of the prestigous DST sponsored Bose Inst in Kolkata and was later removed by the DST on charges of sexual harrasment against him in the Institute. Shockingly ,thereafter he was appointed Director of IISER, Kolkata . He had some problems there too. Thereafter,he was appointed the VC of the prestigous Central Univ , Vishwa Bharti in Shantiniketan where he ran into several cases of misconduct which were serious enough for his dismissal. The President, as the Visitor of the University,wanted Duttagupta to be allowed to resign. But, the MHRD insisted on his dismissal in view of the gravity of the charges of misconduct. After a prolonged bureaucratic hassles , Duttagupta has finally been dismissed recently. Should INSA accept such disgraced Fellow to continue to be called the Fellow of our National Academy ? Should INSA not set a good example of exemplary ethical values expected of Fellows of all science academies in the country to follow ?

As both a Fellow of INSA and as the President of SSV , I urge you, the President of INSA, to take up this grave matter in the next INSA Council

Meeting and provide the Fellowship with a clear views and decision on such cases as also guidelines for adherence to a code of ethical conduct in S&T .

I look forward to hearing from you in due course.

Regards

Prof (Dr) K. L. Chopra (Padamshri)

Answer by the President, INSA to the President, SSV

Dear Prof. Chopra,

Thank you for your message. I appreciate your concern. I am happy to inform you that INSA, IASc and NASI have together set up an inter-academy panel. This panel is preparing guidelines for the ethical conduct of science and guidelines for administrators to deal with complains about misconduct. These guidelines will be discussed and approved by the three councils and will be made widely known. I hope all of this will happen in the very near future.

With best regards,
Raghavendra

The article published as Guest Editorial in CURRENT SCIENCE, VOL. 110, NO. 6, 25 MARCH 2016, 955, is being reproduced with permission for the readers of SSV

Ethics and Indian science

Sunil Mukhi
Indian Institute of Science Education and Research,
Dr Homi Bhabha Road, Pashan,
Pune 411 008, India
e-mail: sunil.mukhi@gmail.com

On the international scene, the practice of scientific ethics has evolved rapidly in the last couple of decades. Today, one sees a sustained and proactive effort to inform, advise, guide and caution members of the academic fraternity, coupled with a credible investigation and redressal mechanism that operates whenever misconduct is suspected. For our research to command respect in the world outside, we Indian scientists must display a similar degree of evolution in our thinking and actions. While we all agree with the principle that the academic workplace has to be an ethically strong environment, we have been somewhat complacent about its implementation. It is increasingly urgent for us to take this step in a forthright and professional manner. The global evolution towards proactive monitoring of ethics has many causes, one of which is the increased possibility for committing fraud. After all, the internet is an invaluable resource for an intending plagiarist. The flip side, of course, is that it also provides the resources to detect plagiarism through the use of software. Other reasons for this evolution include a rapid increase in the number of academic researchers, journals and publications, as well as an era of heightened expectations. These have led to intense competition for resources, fame and money, and in the same proportion, to more frequent malpractice. Finally, there has been a welcome improvement in the standards of what constitutes fairness in academia.

Less than a century ago, women were banned outright from faculty positions in many universities around the world, but today any sort of discrimination against women is rightly forbidden in several countries.A search for ‘ethics’ on the website of world-renowned universities such as Princeton1, Oxford, Ecole

Normale Superieure, Tokyo University, or just any reputed university in a developed country, readily brings up a detailed ethics document. This sets out what practices the institution considers to be ethical and unethical, and prescribes guidelines to be followed by faculty, staff and students. Some of the issues covered in such documents are laboratory safety, plagiarism and publication ethics, management of data, sharing of facilities, human and animal ethics, conflict of interest and the ethics of science management. Procedures for redressing the complaints as well as appropriate punitive actions are carefully spelt out. In contrast, web searches at Indian science institutions and universities reveal a somewhat disappointing scenario, with the vast majority of institutions providing no ethical guidelines at all (human/animal ethics is an exception, as explained below). A few institutions offer rules and regulations addressed exclusively to students that include brief warnings about plagiarism and related matters. Only a tiny fraction has formulated comprehensive guidelines covering diverse areas such as those listed above. Similarly, most of the various science, engineering and medical academies in India do not seem to have a comprehensive ethics document. Mention must be made here of a voluntary organization in India called the Society for Scientific Values2, committed to 'promote integrity, objectivity and ethical values in the pursuit of science'. This is a welcome initiative; but because it has no official mandate, it cannot substitute for the responsibility of institutions where scientists work, or of the academies which are quasi-official bodies. One area where Indian institutions have shown considerable diligence is in the detection of plagiarism and duplication in essays, term papers and theses produced by students. Nowadays, in a number of institutions these documents are run through specialized software that scans them for evidence of malpractice, and this is very much to our credit. While the monitoring of studentoutput is important, ethical requirements cannot be addressed solely to one segment of the community; rather they must be applied at all levels. In particular, the senior- most office-bearers in every institute, such as Deans, Directors and Vice-Chancellors, have a special responsibility to maintain a high standard of ethics in their own functioning. In developed

countries this concept tends to be obvious, but in India, it is often met with a certain hesitation and discomfort. The unfortunate truth is that there have been notable cases of academically unethical practices at high levels in India, including guest authorship and plagiarism, as well as conflicts of interest involving friends, relatives, funding agencies and private companies. These violations, more than an occasional slipshod act of plagiarism by a young student, severely damage the ethical environment and thereby the credibility of Indian science. There is a specific area of science for which ethical guidelines are commonly found in India, namely biomedical research, and testing on humans and animals. Presumably, this area faces several sensitive, ethical questions due to the nature of the subjects involved. The codification of such guidelines surely constitutes a commendable initiative by the relevant community and one must also commend the Government of India which has, for example, set up the Committee for the Purpose of Control and Supervision of Experiments on Animals under the Ministry of Environment, Forest and Climate Change and hosts a detailed website3. However, being specific to one area of research, such initiatives do not address the need for a more wide-ranging set of guidelines covering all aspects of academic ethics. Some of our institutions appear to confuse ethical guidelines with ‘codes of conduct’ or ‘honour codes’. These differ both in style and substance: ethical guidelines are objective, rationally presented and widely applicable, while codes of conduct in India tend – in the best of cases – to preach and sermonize (in the worst cases they are fairly draconian!) to students and sometimes faculty. For example, the ‘code of ethics’ of a leading Indian university advises its faculty to ‘Be aware of social problems and take part in such activities as would be conducive to the progress of society and hence the country as a whole’. This sort of content-free advice does little to advance the cause of academic ethics. For comparison, it is worth examining – just to pick one example – the ethics document of the University of North Carolina, USA4, which is divided into the following sections: some causes of academic misconduct, violations and sanctions, ethical issues in research, ethics in scholarship, ethics in teaching, university policies affecting graduate

student research, and finally a bibliography containing no less than 16 technical references. Thus a change is urgently required in our country. While each society has different sources for its ethical principles, rooted in the intermingled strands of history, religion, philosophy and cultural practice, the very claim that science is universal commits scientists to accept principles that are global in nature and appropriate for modern science. Such principles must, first and foremost, recognize and highlight the goals of science itself, and address themselves to how these goals can be furthered with honesty and integrity. They should communicate the rationale of academic ethics in a spirit of openness and equality, address specific issues with due attention to detail, and focus on actions rather than individuals. A clear distinction must be made between practices merely encouraged or deprecated, and those that are categorically required or forbidden. Minimal and explicit lines must be drawn to demarcate the latter. Procedures for the fair and impartial investigation of violations must be laid down and followed. While necessarily it is for the head of an institution to take the final decision following an ethics investigation, she/he should remain independent of the investigating committee and not attempt to influence the investigation process in any way. In addition to the preparation of ethical guidelines and the formation of an investigative committee, institutions also need to introduce regular sensitization and training programmes for students, faculty and staff. There are many degrees of ethical misconduct, and some of the lesser ones are nowadays recognized as ‘accidental’ or ‘inadvertent’. Institutions must work hard towards their prevention. Investigations of ethical misconduct have often revealed that if the perpetrator had been better informed, misconduct could have been avoided. In summary, the key to implementing ethical standards is a proactive approach towards information, sensitization, investigation and – hopefully in rare cases – punitive action. The driving force for this must come from institutional heads, whose duty it is to maintain the integrity and image of their institution, while the actual implementation requires concentrated effort as well as professionalism and objectivity. Only if the scientific community supports

a greatly intensified effort in this direction can India succeed in its aspiration to be a global leader in science.

1. http://www.princeton.edu/pub/rrr/index.xml
2. http://www.scientificvalues.org
3. http://cpcsea.nic.in/Auth/index.aspx
4. http://gradschool.unc.edu/academics/resources/ethics.html

Executive Council of SSV
(Jan 2015 to Jan 2018)

President — **Prof. K. L. Chopra** (Former Director, IIT Kharagpur)

Vice President: — **Dr. Indramani Mishra** (Scientist, IARI, New Delhi) & **Dr. Raghuram** (IP University, Delhi)

Secretary: — **Dr. R. K. Kotnala** (Scientist, NPL)

Jt Secretary: — **Prof. S.S. Major**

Treasurer: — **Dr. Hari Kishan (**Retired Scientist, NPL)

Executive council Members

Dr. Vikram Kumar
Dr. Indra Nath
Dr. Santa Chawla
Prof. B.V. Reddi
Dr. J.C.Sharma
Prof. Uttam Pati
Dr. Akhila Anand
Dr. Rakesh Singh
Prof.B.D.Malhotra
Ms.Shubhrima Ghosh

Special Invitees

Prof. P. N. Srivastava
Prof. Bimla Buti
Dr. P. N. Tiwari

Membership of the Society for Scientific Values

Scientists who wish to join the efforts of the Society to promote ethics (support right and oppose wrong) in scientific research, development and management and, who meet the following requirements are welcome to become the member of the society.

1. He/she should have allowed his name to apppear as an author in only those publications in which he/she was actively involved, in data collection, theoretical formulation, design and construction of apparatus, field trips, mathematical derivation and calculations, statistical analysis and interpretation of results, as distinct from administrative support and providing funds or facilities.

2. He/she should have never plagiarized or made false claims or indulged in or supported and encouraged any kind of unethical activity in science.

3. He/she should agree to withdraw from the Society if he/she ceases to adhere to the requirements 1 and 2 above.

A scientist who wishes to become member should send his brief biodata to the President or Secretary of the Society. A member of the Society may also send biodata of such scientist for the membership. Non-scientists who have promoted ethics in their profession can also become member of the Society.