



GUIDELINE OF INM – LEIBNIZ INSTITUTE FOR NEW MATERIALS (INM) FOR SAFEGUARDING GOOD SCIENTIFIC PRACTICE AND HANDLING ACCUSATIONS OF SCIENTIFIC MISCONDUCT

This guideline replaces the “Guidelines for safeguarding good scientific practice at the Leibniz Institute for New Materials” of July 16, 2003.

PREAMBLE

The basis for scientific work is the honesty of scientists towards themselves and others. This is the ethical standard and the basis for the rules of good scientific practice. Validating and applying these rules in practice is a key task for the sciences.

These recommendations define principles of good scientific practice, and describe the procedure for handling accusations of scientific misconduct.

INM as a member of the Leibniz Association is aware of its responsibility to communicate the standards and rules of good scientific practice to all scientists, in particular those working on theses/dissertations for the purpose of obtaining a qualification. The Management Board of INM therefore approved this guideline on December 2, 2016 following consultation with the Scientific Advisory Board. It is based on the “Recommendations of the Leibniz Association for safeguarding good scientific practice and handling accusations of scientific misconduct” of November 27, 2015.

§ 1 RULES OF GOOD SCIENTIFIC PRACTICE

(1) The rules of good scientific practice include in particular:

(a)

- ▶ to work *lege artis* (according to the rules of the art),
- ▶ to fully document all stages and results of an experiment or study, and securely store the records and primary data,
- ▶ to critically and consistently examine the validity and reproducibility of all experimental results and other research projects,
- ▶ to be stringently honest with regard to the contributions of collaborators as well as toward external funding providers,
- ▶ to observe the intellectual property of others and appropriately highlight all citations and appropriations in all publications,

(b) the appropriate supervision of scientists during the creation and academic evaluation of theses/dissertations for the purpose of obtaining a qualification,

(c) responsible collaboration within working groups and the responsible fulfilment of managerial tasks within these, including the appropriate supervision of the groups' members,

(d) the responsibility of authors of scientific publications regarding the content, including the representation of results and their discussion,

(e) to attach appropriate importance to originality and quality over quantity as performance and assessment criteria for promotions, appointments, hiring staff and the allocation of funding.

(2) Scientific publications should describe scientific results and how they were derived in a comprehensive and comprehensible manner. Results and texts published previously can only be made a part of later publications when clearly identified as such (duplicate publication) and only when absolutely required for the purpose of comprehending the context of the publication.

(3) Only those who themselves substantially contributed to the design of the study or experiments, to the generation, analysis and interpretation of data and to the formulation of the manuscript, and have agreed to its publication – i.e. assumed responsibility for it – should be named as the authors of an original scientific publication. A so-called honorary authorship is not permitted. These regulations should form the substance of a collaboration agreement, for example for major collaborative research projects.

(4) Primary data must be stored in an accessible format for a minimum of ten years. Data for which there are central, public repositories should be made accessible to the same.

§ 2 SCIENTIFIC MISCONDUCT

Scientific misconduct is deemed to have occurred when deliberate or grossly negligent misrepresentations are made, rights to intellectual property are violated or the research activities of others are impaired in a scientific context.

Alongside violations of scientific ethics, in particular through inhumane or misleading practices, scientific misconduct above all includes the following:

(1) Misrepresentation – in particular:

(a) the fabrication of data,

(b) the falsification of data (for example by selecting desired results or rejecting unwanted results or evaluation procedures without making this public, or by manipulating figures or diagrams),

(c) false information in publication lists or a funding application (including misrepresentations regarding the publishing body and forthcoming publications),

(d) multiple publication of data or texts without making this public.

(2) Violating intellectual property rights – in particular:

(a) with regard to a legally protected work created by another party, or to another party's substantial scientific findings, hypotheses, models or research approaches:

- ▶ the unauthorized appropriation or other utilization of passages of text without appropriately crediting the author (plagiarism).
- ▶ the exploitation of research approaches and ideas without consent, in particular as reviewer,
- ▶ the untruthful claim to or unjustified acceptance of scientific authorship or co-authorship, as well as the refusal of a justified co-authorship,
- ▶ the falsification of content or
- ▶ the unauthorized publication of, and provision to third parties of access to, a work, finding, hypothesis, model or research approach that has not yet been lawfully published;

(b) claiming the (co-)authorship of another person without their consent.

(3) Impairing the research activities of others (including damaging, destroying or manipulating research set-ups, devices, documents, hardware, software, chemicals or any other materials required by another party for conducting an experiment).

(4) The destruction of primary data when this represents a violation of legal requirements or recognized principles of scientific work. This also applies to unlawful failure to destroy data (in particular personal data).

Joint responsibility for scientific misconduct can result inter alia from participating in the misconduct of others, gross negligence with regard to supervisory duties, or the co-authorship of forged publications.

§ 3 OMBUDSPERSON

(1) The scientific staff of INM elect from the ranks of post-doctoral scientists an ombudsperson to be the point of contact regarding inconsistencies, suspicions and disputes for a period of three years. All doctoral students are eligible to vote, but students who have not yet completed their master's degree are not eligible to vote. The term of the employment contract for candidates for the office of ombudsperson who are on temporary contracts must cover at least the period of office. A candidate may be re-elected once. The ombudsperson is not allowed to be a member of the Management Board. The Management Board is responsible for implementing the secret ballot.

(2) The ombudsperson provides the staff of INM with confidential advice on matters of good scientific practice and on questions relating to possible scientific misconduct. He or she attempts to mediate in conflict situations. The ombudsperson reports to the Management Board of INM annually on their work. All personal information is anonymized at this point.

(3) The ombudsperson investigates accusations of scientific misconduct against staff members and former staff members of INM.

§ 4 INVESTIGATION BY THE OMBUDSPERSON INTO ACCUSATIONS OF SCIENTIFIC MISCONDUCT

(1) Accusations of scientific misconduct must generally be addressed in writing to the ombudsperson.

(2) The investigation of anonymous complaints is at the discretion of the ombudsperson. In principle, an appropriate investigation requires that the name of the informant be known.

(3) The name of an informant is to be treated confidentially. The disclosure of the informant's name to the accused may be necessary in isolated cases if the accused cannot otherwise appropriately defend themselves. However, an informant's name may only ever be revealed if they do not thereby suffer any disadvantages in terms of their own future scientific and professional career.

(4) The ombudsperson confirms the receipt of a complaint to the informant within one week of receiving it.

(5) The ombudsperson reports to the Management Board of INM on the action he or she has taken. All personal information is anonymized at this point. If members of the Management Board of INM or the ombudsperson themselves are involved in the process that is the subject of the accusation of scientific misconduct, the ombudsperson shall pass on the complaint to the centralized ombudsperson of the Leibniz Association.

(6) The ombudsperson conducts a preliminary investigation. For the purposes of this preliminary investigation, the ombudsperson should at least hear the accused and, where appropriate, the informant.

- (7) The ombudsperson can hear additional persons and commission external expert reports. The ombudsperson can seek advice from the centralized ombudsperson of the Leibniz Association.
- (8) As a result of the preliminary investigation, the ombudsperson decides whether to discontinue the enquiry or whether it is necessary to pass on the enquiry to the Management Board of INM for further investigation.
- (9) The ombudsperson informs the informant in writing of the result of the preliminary investigation.
- (10) The ombudsperson informs the Management Board of INM in writing of the result of the preliminary investigation and its justification.
- (11) If the ombudsperson discontinues the enquiry, the Management Board of INM deliberates on the decision and its justification at its next board meeting (following receipt of the information). In the event that the Management Board of INM disagrees with the decision to discontinue the enquiry, it can decide to set up a committee of enquiry.

§ 5 COMMITTEE OF ENQUIRY TO INVESTIGATE ACCUSATIONS OF SCIENTIFIC MISCONDUCT

- (1) The Management Board of INM can set up a committee of enquiry to investigate the accusations of scientific misconduct. It selects its members and invites them to cooperate. At least one member must possess the necessary professional expertise to fully understand the scientific facts of the enquiry and must not be a member of the staff of INM. The rules governing conflicts of interest for experts of the German Research Foundation apply. The committee of enquiry appoints a chairperson from among its members.
- (2) The ombudsperson of INM is a non-voting member of a committee of enquiry.
- (3) All voting members of the committee of enquiry have an equal vote.
- (4) The committee of enquiry conducts its sessions orally and in private. In its first session, it agrees upon the rules of the enquiry.
- (5) The Management Board of INM provides the committee of enquiry with organizational support.
- (6) All data and documents requested by a committee of enquiry must be made available to it by the staff of INM and the Management Board of INM.
- (7) The members of the committee of enquiry, the members of staff of INM involved in the committee's work, as well as all those involved in or informed about the enquiry, are obliged to maintain confidentiality.
- (8) The committee of enquiry uses reasonable discretion to investigate whether scientific misconduct has occurred. It listens to the accused and the informant, and determines the context of the conduct forming the subject of the complaint. The committee of enquiry can question further persons, as well as commission experts and consult them in an advisory capacity.
- (9) As a rule, the investigation conducted by the committee of enquiry should be completed no later than six months following the committee's constitutive session.
- (10) The committee of enquiry can decide to discontinue the enquiry.
- (11) The committee of enquiry writes a report which either justifies the discontinuation of the enquiry or which determines that scientific misconduct has occurred.
- (12) If the committee of enquiry comes to the conclusion that scientific misconduct has occurred, i.e. if the majority of the committee of enquiry's members believe that there is sufficient proof of scientific misconduct, the report must in particular:

- ▶ determine whether such conduct is the result of gross negligence or whether it is deliberate, and
- ▶ assess the gravity of such scientific misconduct.

(13) The report also documents what further actions the committee of enquiry recommends (the involvement of additional institutes and bodies, the handover of the case to the centralized ombudsperson of the Leibniz Association, the initiation of appropriate measures, etc.).

(14) The report is submitted to the Management Board of INM. At its next meeting (following receipt), it will deliberate on the report and, if necessary, decide on further measures.

§ 6 CONCLUSION OF THE ENQUIRY

(1) Based on the report submitted by the committee of enquiry, the Management Board of INM decides on the required measures in the event that scientific misconduct has occurred, or decides to discontinue the enquiry. The Management Board of INM can decide to take the following measures against the person or persons involved:

- ▶ written or verbal reprimand,
- ▶ exclusion from INM's internal competition for research funding for a period of one to five years (depending on the gravity of the scientific misconduct),
- ▶ demand for (an) incriminated publication(s) to be withdrawn in whole or in part, and for erroneous data to be corrected (in particular through the publication of an erratum),
- ▶ withdrawal of the passive voting right on committees of INM for a period of one to five years (depending on the gravity of the scientific misconduct).

(2) If the Management Board of INM determines, on the basis of the report of the committee of enquiry, that the scientific misconduct may result in the withdrawal of academic titles, it forwards the enquiry to the awarding university.

(3) The report submitted by the committee of enquiry and the decisions made by the Management Board of INM respectively represent the conclusion of the enquiry within INM.

(4) The Management Board of INM is responsible for initiating any disciplinary consequences or proceedings under employment law, civil law or criminal law.

(5) The fundamental reasons which have led to the discontinuation of the enquiry or to the decision by the Management Board of INM regarding the implementation of measures must be related to the person or persons involved, as well as to all informants, by the ombudsperson.

(6) The Management Board of INM decides whether to make public its decisions and the reports of the committee of enquiry in each individual case, giving consideration to whether a legitimate public interest exists.

Adopted by the Management Board of INM on December 2, 2016.

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