# Policies on Good Scientific Practice and on Conflicts of Interest and Commitment

## Preamble

The following guidelines and regulations for good scientific practice are intended to contribute to avoiding scientific misconduct, thus promoting the quality of scientific work. However, the honesty and fairness required from scientists neither can be exclusively based on guidelines and regulations, nor can such a framework generally prevent misconduct in scientific work. Accusations of scientific misconduct can also not be judged exclusively on the basis of general guidelines and regulations; any adequate investigation must, above all, take the circumstances of each individual case into consideration.

Other detriments to good scientific practice may arise from conflicts of interest or commitment. Conflicts of interest occur, for example, when an individual might influence the Institute's activities in improper ways in response to external interests, when personal gains from external activities may unduly influence decisions, or when improper advantage might be given to personal or professional associates. Conflicts of commitment occur when an individual's external activities, however valuable in themselves, interfere or appear to interfere, with obligations to the Institute.

## Good Scientific Practice

### *General Guidelines*

Good scientific practice must meet the following requirements:

1. Research must be carried out according to commonly agreed scientific standards. In particular, it has to reflect the current state of the art, be objective, provide a clear specification of assumptions, sources of data, and contributions by other researchers.
2. For experimental work, an exact documentation of scientific procedure and results is mandatory, since the reproducibility of results is a fundamental feature of such research. Primary data must therefore be secured and stored for the duration of ten years. For model-based work, model specifications and methods of analysis have to be sufficiently documented, ideally in a peer-reviewed publication or its official supplement.
3. Results must be consistently and critically questioned. This also involves openness toward criticism and doubt expressed by other researchers and colleagues, provision of careful, impartial and unprejudiced expertise on the work of colleagues, as well as refusal to provide such expertise in case of prejudice.
4. In accordance with disclaimers as set out in IIASA's Scientific Publications Policy, no presentation of results should attempt to claim an opinion on behalf of IIASA or its National Member Organizations.
5. Scientific results shall be communicated to the scientific and broader community in the form of publications.
6. Absolute honesty with regard to the contributions of partners or competitors shall be guaranteed. Any obstruction of the scientific work of competitors shall be avoided.
7. Young academics (e.g., undergraduates, graduate students, and postdoctoral researchers) have a right to scientific guidance. In addition to training them in methodological skills, the Institute shall convey to them the ethical background for conducting scientific work, for cooperation with other scientists, and for the responsible handling and publishing of research results.
8. Especially in the employment and appointment of personnel, as well as in the evaluation of research achievements, originality and quality shall always be given preference over mere quantity.

The Institute recognizes its responsibility to nurture an environment of mutual respect, tolerance, and ethical behavior according to the general principles outlined above. In this regard, IIASA is committed to providing scientific staff and other personnel with guidance on the principles of good scientific practice. In addition to the present document, other salient information is contained in IIASA's Staff Rules and Regulations and Appendices, and in IIASA's Handbook, in particular concerning IIASA's policies on copyright, patents, scientific publications, software, and approval procedures.

### *Authorship in Scientific Publications*

Any scientist who has made a substantial scientific contribution to the design, implementation, or publication of a scientific project is entitled to coauthorship in the resultant publication.

A mere technical cooperation in the sense of data collection, the procurement of financial means, or the general leadership of the research unit carrying out the research project do not justify coauthorship. The same applies to proofreading of a manuscript without substantially contributing to its contents.

The consent to coauthorship entails the responsibility of the coauthor to ensure that the publication meets scientific requirements. This applies primarily to the area to which the coauthor has contributed. The coauthor

shall be responsible for the correctness of his or her own contribution and for ensuring that this contribution has been included in the publication in a scientifically justifiable way.

Each coauthor is required to agree to the contents of a manuscript's final and published version. For this purpose, each coauthor must be given the opportunity to review and comment on each of a manuscript's submitted versions.

If individual scientists are not named as coauthors in a publication although they have made a substantial scientific contribution, they shall approach the first or corresponding author, and if this is not successful, the leader of the respective research unit of the Institute.

### *Scientific Misconduct*

Examples of scientific misconduct include:

1. Deliberate or grossly negligent misrepresentation in a scientifically relevant context; essential are the circumstances of each individual case. This includes:
    a. invention of data;
    b. falsification of data, e.g., by deleting undesired data without indicating such deletion or by manipulating an illustration or figure;
    c. gross negligence with regard to the obligation of data storage;
    d. deliberately giving wrong information in a job application or funding application;
    e. recommending work of other scientists for publication or funding without having reviewed the work.
2. Violation of intellectual property of other scientists. This includes:
    a. unauthorized use under pretence of authorship (plagiarism);
    b. exploitation of other scientists' research approaches and thoughts after having served as a reviewer of their work;
    c. pretence or acceptance of undeserved scientific authorship or coauthorship;
    d. unauthorized publication of and/or granting third parties unauthorized access to any work, insight, hypothesis, doctrine, or research approach that has not yet been published by the author.
3. Deliberate or grossly negligent obstruction of the research activities of other scientists (including damage to, destruction, or manipulation of test arrangements, equipment, documentation, hardware, software, chemicals, or other devices a scientist may need for the implementation of his or her research project) and careless or dishonest attempts to damage the scientific reputation of others.

### *Shared Responsibility in Misconduct*

Shared responsibility in misconduct may, *inter alia*, result from:

1. Participation in the misconduct of others;
2. Knowledge of fraud committed by others;
3. Coauthorship in fraudulent publications;
4. Gross negligence in the supervision of work involving scientific misconduct.

### *Implementation Guidelines*

Any observation of an instance of scientific misconduct should be reported to the Directorate as soon as possible. The report should be in writing stating all relevant evidence. The Directorate will treat such reports as confidential.

Upon receiving a report of scientific misconduct, the Directorate will conduct a preliminary assessment of the seriousness and credibility of the charges. If the charges are deemed serious and credible, the Directorate will appoint, after consultation with the Staff Association Committee and the Internal Research Committee, an ad hoc committee to further investigate the charges. The committee should consist of at least three researchers of the Institute, and the chairperson of the committee should be a senior researcher.

The committee shall examine, in a free assessment of evidence according to the principle of truthfulness, whether scientific misconduct is evident. In the cases it is entrusted with, it shall examine all incriminating and exonerating evidence. For this purpose, the committee can request meetings with the person(s) charged with scientific misconduct and with others who may provide evidence related to the alleged scientific misconduct. In all cases, the person(s) charged with misconduct should be presented with the evidence in writing and will be invited to respond to the charges before the committee. The meetings of the committee are not public and strict confidentiality of the proceedings will be ensured. Throughout the proceedings, the person(s) charged with scientific misconduct can decide to be accompanied by an internal or external person of their trust.

Following the conclusion of the investigation, the committee shall decide, if possible within a period of four weeks after being constituted, whether the charges of scientific misconduct are justified. If the committee concludes that scientific misconduct is evident, it shall report the results of its investigations to the Directorate in writing and suggest possible consequences. After reading the committee's report, the person(s) charged with misconduct may decide to complement it in writing. If the committee concludes that scientific misconduct is not evident, or if it considers the scientific misconduct to be negligible, it shall close the proceedings and inform the Directorate accordingly.

Following the conclusion of an investigation, the Directorate will ensure that persons who were innocently involved in the proceedings shall be protected from further discrimination with regard to their personal reputation, scientific integrity, or career development. Notifying persons shall be protected likewise, independently of whether their concerns were substantiated.

If the committee has found evidence for scientific misconduct, any Institute internal consequences of scientific misconduct shall be determined by the Directorate after having examined the committee's recommendations. In this decision, the protection of scientific standards and the rights of all persons directly or indirectly concerned, the nature and severity of the scientific misconduct, as well as the necessity of prosecution shall be taken into consideration.

## Conflicts of Interest and Commitment

IIASA recognizes that, while IIASA employees' primary and dominant professional commitment in their role as employees ought to be to the Institute, outside activities may be acceptable, and even welcomed, under certain circumstances. For example, consulting activities or other external professional activities and responsibilities, both public and private, often serve not only the employee but also the Institute and its fields of endeavor. The policy below on conflicts of interest and commitment is primarily concerned with formal outside employment and activities that may be in conflict with the interests and mission of the Institute. The aim of the policy is that the Institute receives sufficient information to arrive at a reasonable decision as to the appropriateness of proposed activities. This policy equally applies to all Institute personnel at all levels.

### *Conflicts of Interest*

Conflicts of interest arise, for example, when an individual might influence the Institute's activities in improper ways in response to external interests, when personal gains from external activities may unduly influence decisions, or when improper advantage might be given to personal or professional associates.

It is important that the Institute avoid conflicts of interest that could influence the judgment of an individual in conducting his or her work at IIASA. The following guidelines help to ensure this:

1. Individuals shall neither seek nor receive instructions from any government or other authority external to the Institute.
2. Acceptance or continuation of remunerative outside employment requires prior approval by the Directorate (or Council Chair in the case of the Director), except when such employment is in activities unrelated to the work of IIASA and does not infringe on the overall time spent for IIASA activities.
3. Individuals are not to hold office in any organization whose aims or activities are closely related to those of the Institute unless approved by the Directorate (or Council Chair in the case of the Director).
4. Individuals having occasion to deal officially with matters involving a company, partnership, or other business concern in which they have an interest must disclose the nature and degree of that interest to the Directorate (or Council Chair in the case of the Director).
5. No IIASA employee shall be placed in the position of being involved in (including being present at) making evaluations, hiring decisions, or salary recommendations for members of their own immediate families or households.

### *Conflicts of Commitment*

Conflicts of commitment arise when an individual's external activities, however valuable in themselves, interfere with the obligations to the Institute.

IIASA researchers often hold positions in other academic or research institutions. For some, the other institution is their home institution, as is the case for academics on sabbatical leave from their university or for researchers on nine-month university contracts visiting IIASA during the three other months. For others, IIASA is their home institution and another institution may provide part-time employment.

IIASA generally encourages such joint appointments. A concern is the possible conflict of commitment of the time and effort that the researcher spends at each institution. For example, it is a clear conflict of commitment if a researcher with a 100% appointment at IIASA also holds a concurrent 100% appointment at another institution.

At IIASA, the percentage of commitment translates directly into the average number of days researchers are expected to work at or for IIASA. For example, 5 days per week for 100%, 4 days for 80%, 1 day per week for 20% employment. At other institutions, especially universities, it is not always clear how the percentage of employment translates into the number of days required to spend at the institution. For example, a 50%

employment at a university may require teaching one course per semester and to be physically present on one day per week. When determining a possible conflict of commitment, IIASA will consider primarily the contractually obligated average number of days per week of work at or for IIASA via-a-vis the obligations toward the other institution. The following guidelines help to ensure this:

1. If a researcher has an IIASA contract for less than 100%, he or she is obliged to spend at or work for IIASA for the average number of days per week that corresponds to that percentage. For example, a research with an 80% employment at IIASA is obliged to spend at or work for IIASA an average of four days per week and can therefore engage in a contractual obligation that requires him or her to spend one day per week working for or at the other institution.
2. In all cases, percentages, days spent at IIASA, and the amount of remuneration should be in a reasonable relationship.
3. Activities carried out within an employee's consultancy leave do not constitute a conflict of commitment.

### *Implementation Guidelines*

Individuals are required to report on their interests in, commitments toward, or affiliations with other organizations immediately upon assuming a position at IIASA. It is their responsibility to update such information in a timely manner as changes occur. The information must be provided in a memorandum to the Director, or at his decision, to the Deputy Director (or Council Chair in the case of the Director), stating the relationship of the organization to IIASA; the amount of time devoted to the outside organization; the possible direct or indirect cost to IIASA and, if applicable, provisions for cost sharing, remuneration, and reimbursement; and the benefit to IIASA and to the individual of the outside affiliation. Any contract with the other organization and any memoranda of understanding between the researcher and his or her supervisor at the other organization should be attached to the memo. All disclosed information shall be treated as confidential.

Any observation of an instance of conflict of interest or commitment should be reported to the Directorate as soon as possible. The report should be in writing stating all relevant evidence. The Directorate will treat such reports as confidential. It is the Directorate's responsibility to protect all notifying persons, and all innocently involved suspected persons, from discrimination with regard to their personal reputation, scientific integrity, and career development.

Any intentional inaccuracies in the information provided by the individual, or failure to comply with this regulation, will lead to disciplinary action within the framework of IIASA's internal regulations and in accordance with Austrian law. The individual can protest the disciplinary action to the Directorate. In situations where no agreement can be reached between the individual and the Directorate, the case is to be brought to the attention of the Council Chair for final arbitration.

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Segments of the section on "Good Scientific Practice" were adopted from a related document by the University of Vienna, while the section on "Conflicts of Interest and Commitment" was adopted and extended from IIASA's existing policy.