

Directive S2023-01

6 January 2023

Code of Ethics for Researchers of the Institute of Organic Chemistry and Biochemistry of the CAS

Education, research, and innovation are the fundamental pillars of development in society. Faith in science stands on faith in the honesty of the researchers who produce scientific findings. Findings and their interpretation can be verified by the scientific community, but not by the general public, for whom new findings are primarily intended. In order for science to remain credible, it is essential that in their work researchers abide by basic ethical principles, namely honesty and integrity. The Code of Ethics for Researchers of the Czech Academy of Sciences summarizes in sections I–V the general principles of ethical conduct in science and thus promotes the strengthening of desirable moral standards in academic research.

The mission of the Institute of Organic Chemistry and Biochemistry of the CAS (hereafter IOCB) is to cultivate basic and applied research integrating disciplines of chemistry, biology, and physics. The goal is to acquire new and relevant findings in these domains and, where possible, identify practical applications for them. IOCB endeavours to conduct world-class scientific research and in so doing provide an example and guidance to other scientific institutions in the country. Arising from this endeavour are the ethical principles for researchers set forth in this code, and they are to be followed both within IOCB and without. Respecting these principles is conducive to maintaining a creative and friendly atmosphere at IOCB. All IOCB researchers are aware that their scientific pursuits are a contribution to a common work, and therefore they prefer cooperation over competition.

I. General Principles

In their work, researchers:

- a) shall adhere to the fundamental ethical principles and tenets set forth in this code; these namely include:
 - i. freedom;
 - ii. accountability;
 - iii. integrity, honesty, and impartiality;
 - iv. respect for others and mutual understanding;
 - v. fairness;
 - vi. openness and cooperation;
- b) shall not allow any conflict of interest to arise from their capacity at IOCB and their related activities or private interests, namely as pertains to the following:
 - i. personal gain of an unauthorized benefit in conflict with the fundamental principles of research;
 - ii. damage to the good name of IOCB, damage to relationships in the workplace or within the professional community;
 - iii. exerting influence or engaging in espionage on behalf of a foreign power;
- c) shall fully devote themselves to their research and demonstrate outstanding professional and

personal commitment; the total of their contractual workload shall typically not exceed 1.5 times the full-time equivalent;

- d) shall demand that their colleagues conduct themselves in alignment with these principles;
- e) shall not defend or cover up any conduct that contradicts the principles set forth in this code despite considerations of obedience or loyalty;
- f) shall regard science and research as an integral component of human culture and the foundation of innovation and shall defend them anytime they are called into question;
- g) shall speak out against unethical or inappropriate use of scientific findings;
- h) shall expand and deepen their knowledge and constantly strive to develop their expertise;
- i) shall maintain a critical stance towards their own findings and results as well as towards the results of their colleagues and shall remain open to discussion and substantive arguments;
- j) shall defend the freedom of scientific thought and expression as well as the exchange of opinions and information;
- k) shall reject the use of nonscientific methods and racist, religious, nationalistic, and political viewpoints in science;
- l) shall uphold the principles of impartiality and independence from ideological and political pressure and the interests of pressure groups;
- m) shall respect and uphold the principles of reliable, trustworthy scientific practice within the scientific community and shall reject any scientific misconduct or violation of the principles set forth in this code;
- n) shall not hesitate to notify the relevant authorities of any ethics violations in scientific research as soon as they learn of them.

II.

Principles of Ethical Conduct in Science

In their work, researchers:

- a) shall strive to expand the frontiers of scientific knowledge and make every effort to ensure that the practical application of their results benefits society;
- b) shall pursue their research in a manner that does not imperil society, the environment, or cultural values;
- c) shall adhere to the general principles defined in Section I when acquiring, selecting, and evaluating scientific data, while at the same time respecting the specific nature of their discipline;
- d) shall be accountable for accuracy and objectivity in their research and shall recognize the limits of the methods they use;
- e) shall, when publishing research findings and results pertaining to a particular problem, be accountable for the completeness, verifiability, and unbiased interpretation the data;
- f) shall save all primary data and documentation connected with substantial results for a period of time deemed typical in the respective discipline, unless doing so is precluded by other obligations or regulations;
- g) shall be accountable for the effective and efficient use of research resources and shall not duplicate research conducted elsewhere, unless it is required in order to verify, supplement, or compare results;
- h) shall present the scientific community with results of their research that are not subject to confidentiality and, following publication in the scientific press, shall work with the PR department to sensibly inform the general public about said results.

III.

Principles of Publishing Findings and Results

Researchers:

- a) may be credited as the author or coauthor of a publication if they have contributed to its creation, e.g. to the design and execution of studies and experiments, to the analysis, interpretation, theoretical elaboration, and modelling of data, or to the writing of the publication, granted they consent to coauthorship;
- b) shall acknowledge in all publications any scientific contributions made by others in earlier works pertaining to the studied problem, and in citing discoveries and findings by other authors shall provide clear references to relevant sources;
- c) shall also cite important works that contradict their own results and conclusions;
- d) shall take appropriate steps, such as having errata published or even retracting a publication, if the data in question is shown to contain a significant error;
- e) shall refrain from dividing results and findings into multiple publications in order to artificially increase their output;
- f) shall publish with the aim of presenting their results and findings to the scientific community and not solely for the purpose of amassing research outputs;
- g) shall publish their works in reputable scientific journals with rigorous review procedures that emphasize quality, not quantity;
- h) shall not engage in any ethically questionable publishing practices and shall not use ethically questionable publishing platforms (predatory journals, etc.);
- i) shall, as the corresponding author of a publication, be responsible for the accuracy and authenticity of the published data and the accessibility of laboratory logbooks and all primary data for a period of no less than 10 years (for collaborative, multidiscipline publications with multiple corresponding authors, they shall be accountable at least for the data from their field and from their team);
- j) shall reference their affiliation with IOCB only for publications that have been created, at least in part, at IOCB and only in cases where such a reference has been authorized by the group leader; in all cases where an author is currently employed by IOCB but has obtained the present results at another institution, IOCB may be listed only as 'present address'.

IV.

Principles for Interacting with Students and Colleagues

Researchers:

- a) shall enrol students and colleagues in research based on an objective assessment of their intellectual, ethical, and personal qualities;
- b) shall, if heading a research team, be mindful of correctness and openness in mutual communication and shall eschew unjustifiably autocratic management methods;
- c) shall assess their students and colleagues based on the results they achieve, shall treat them fairly, shall refrain from having them do their own work for them, and shall not ask them to undertake activities that exceed their skills and abilities;
- d) shall provide their students with regular mentoring and feedback;
- e) shall, in a managerial position, reward their students and colleagues exclusively on the merits of their results and work ethic; under no circumstances may anyone be given preferential treatment or be disadvantaged on the basis of sympathy, antipathy, or personal relationships;

- f) shall not treat others in a discriminatory manner and shall not harbour prejudices based on race, gender, ethnicity, or religion;
- g) shall not engage in or encourage conduct that imperils the emotional or physical integrity of others (bullying, sexual harassment, or other forms of aggression);
- h) shall not abuse their senior standing or professional authority to engage in manipulation, intimidation, or blackmail;
- i) shall pass their knowledge, skills, and the principles of ethical conduct in science on to their students and colleagues through their words and actions;
- j) shall devote themselves to teaching their students and nurturing independent critical thinking and a strong work ethic while also respecting their students' right to freely express their opinions about ongoing research;
- k) shall support their students and junior researchers in pursuing professional growth and development of their scientific and publishing activities and contacts; researchers shall credit their students and junior researchers as coauthors of any publication they have made contributions to;
- l) shall draw the consequences of any unethical conduct on the part of their colleagues.

V.

Principles Governing Assessment, Evaluation, Review, Expert Opinions

Researchers:

- a) shall personally conduct any assessment or review task assigned to them;
- b) shall protect the intellectual property of the authors of manuscripts, project proposals, and reports submitted for review and shall refrain from using the data contained in such materials for purposes other than preparing an expert opinion; they shall not provide such materials to any third party;
- c) shall not intentionally prolong evaluation of works submitted for review in order to gain a personal advantage or to benefit any third party;
- d) shall refuse to prepare an expert opinion whose conclusions could be distorted by their own personal interests without first disclosing such information and shall refrain from engaging in any other activities that could give rise to a conflict of interest;
- e) shall prepare expert opinions with due diligence and only within their own field of expertise; they shall not succumb to any outside pressure that could influence their opinion;
- f) shall, in evaluation and review proceedings, use objective criteria and adhere to the rules stipulated by the submitter and demand the same of all other participants to such proceedings.

VI.

Procedure for Addressing Violations of the Principles of Good Scientific Conduct

Violations of the principles of ethical conduct in science namely include the following: fraud, forgery, plagiarism, falsification, misrepresentation, intentional deception, and theft in any phase of the scientific research process, from proposal to the publication of findings.

A possible violation of the principles of ethical conduct in science shall be addressed:

- a) directly within the organizational structure of the workplace and always one management level above the level at which the perceived violation has occurred; an ad hoc committee may

- be assembled at the respective level to address the matter;
- b) by the Committee for Scientific Integrity of the Czech Academy of Sciences if the matter has implications that extend beyond IOCB or if the involved parties are not satisfied with the conclusions reached in the workplace;
- c) in cooperation with all involved parties with steps taken to ensure the highest possible degree of privacy protection; all parties to the proceedings must be informed of the conclusions, and if a violation of the principles of ethical conduct is determined to have occurred, the parties must also be notified of the steps required to remedy the situation; in justified cases, the parties may refer to Art. 65 of the Statutes of the Czech Academy of Sciences or to the Czech labour code.

VII. Sources

This Code of Ethics for Researchers of the Institute of Organic Chemistry and Biochemistry is an expanded version of the Code of Ethics for Researchers of the Czech Academy of Sciences. The following documents were used to formulate the Code of Ethics for Researchers of the Academy of Sciences of the Czech Republic:

- Research Ethics Framework, Resolution of the Government of the Czech Republic No. 1005, dated 17 August 2005;
- The European Charter for Researchers, 2005/251/ES, Official EU Bulletin dated 22 March 2005;
- Good Manners in Science; A Set of Principles and Guidelines, Polish Academy of Sciences, Committee for Ethics in Science, 3rd (amended) edition, Warsaw 2001;
- Rules of Good Scientific Practice, adopted by the Senate of the Max Planck Society on 24 November 2000;
- Memorandum on Scientific Integrity, All European Academies, Amsterdam 2003 (On standards for Scientific Research and a National Committee for Scientific Integrity, KNAW, NWO, VSNU, 2001);
 - Singapore Statement on Research Integrity, 2010;
 - The European Code of Conduct for Research Integrity, 2011;
 - Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations, 2013.



Prof. RNDr. Jan Konvalinka, PhD.
Institute Director

Addendum I: General Guidelines for Addressing Ethically Problematic Situations at IOCB

Addendum II: Detailed Specifications for Archiving Primary Data and Laboratory Logbooks for the Various Scientific Disciplines Pursued at IOCB