PROCEDURE ON RESEARCH MISCONDUCT

Definitions

The following definitions apply in this procedure:

"Allegation" means a written report submitted by the Notifying Party, except as stated in article 5.3.4., stating the nature of a suspected Research Misconduct.

"CSI" means the Commission of Scientific Integrity.

"Investigation" means a formal presentation, examination and evaluation of all relevant facts to determine whether misconduct has occurred, the severity of the alleged misconduct and its impact, and the recommendations for specific actions to be taken to address the misconduct.

"Investigation Team" means imec's Research Integrity Officer, the appointed Members of the CSI as further defined in article 6.1 and the Chair.

"Notifying Party" means the individual issuing the Allegation. It is not required that this individual has a personal interest in the matter.

"Research Misconduct" means Fabrication, Falsification, or Plagiarism in proposing, performing, or reviewing research, or in reporting research results. It also includes Questionable Research Practices. Research Misconduct does not include honest error or differences of opinion.

- a. Fabrication is making up data or results and recording or reporting them.
- b. *Falsification* is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
- c. *Plagiarism* is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
- d. Questionable Research Practices are other research practices that do not conform with generally accepted standards of research practice (e.g. ghostwriting, questionable authorship, improper data management, incorrect citing of peers, duplicate publication, etc.)

"Respondent" means the researcher to whom the report relates or who, in the course of the commission's investigation, becomes part of the subject of that Investigation.

1. PURPOSE

The procedure on Research Misconduct is part of the effort to maintain the integrity of research practices at imec. It serves first and foremost to provide support and remediation for the Respondent. If Research Misconduct is established, this procedure may give rise to the initiation of a disciplinary or legal procedure in accordance with the applicable regulations.

2. SCOPE

This procedure is applicable to all individuals who are engaged in research at imec.

3. RESPONSIBILITY

Individuals who become aware of a possible incident of Research Misconduct can report the information in the manner described in this procedure.

It is the policy of imec to require the highest ethical standards in its research; to inquire into and, if necessary, investigate and resolve promptly and fairly all instances of alleged or apparent misconduct; and, as appropriate, to comply in a timely manner with requirements for reporting cases of possible misconduct.

The main focus of imec's policy on research integrity is on proactive prevention. On the one hand by stimulating 'good research practices'; on the otherhand by improving the general quality culture, within but also outside our own organization. To this end, imec has installed a Commission on Scientific Integrity (CSI) which is responsible for monitoring compliance with this policy on research integrity. This Commission is also responsible for the assessment of specific complaints relating to research integrity.

This policy addresses only Research Misconduct as defined herein. Other misconduct such as reckless disregard for accuracy, failure to supervise, and other serious deficiencies - but not within the definition of Research Misconduct - may constitute breaches of other ethical and professional standards and shall be addressed by other commission such as the Committee of Ethical Conduct, the IP Portfolio &Litigation (IPPL) team etc.

This document guarantees the independent handling of complaints regarding conduct that could be construed as problematic from the standpoint of scientific integrity. Each Notifying Party handling in good faith enjoys all protection required.

Imec endorses the ethical code drawn up by the Royal Flemish Academy of Belgium for Science and the Arts and the European Code of Conduct for Research Integrity, drawn up by the European Science Foundation (ESF) and All European Academies (ALLEA). Imec also endorses the policy and procedures of the VCWI (Vlaamse Commissie Wetenschappelijke Integriteit), which is part of the KVAB (Royal Flemish Academy for Science and Arts of Belgium).

4. MEMBERSHIP COMPOSITION OF THE COMMISSION OF SCIENTIFIC INTEGRITY OF IMEC (CSI)

The CSI consists of:

- o The Chair:
- The Research Integrity Officer (RIO), the person responsible for the scientific integrity reporting desk, who acts as the Secretary of the CSI;

The Members:

- o one representative of Silicon Technologies and Systems (STS);
- o one representative of Smart Electronics (SE);
- o one representative of ICLink;
- o one representative of Smart Applications (SA);
- o one member with legal expertise and advisory competence, without voting right.

The Chair is appointed by the Executive Board (EB) for a term of 4 years. Subsequent reappointments for further periods of 4 years are possible.

The Research Integrity Officer is also appointed by the EB for an unlimited term.

A Member is appointed by the EB, on the proposal of the Vice President of the different Units, listed here above, for a term of four years. Subsequent reappointments for further periods of 4 years are possible.

The EB may terminate the appointment before the end of the term:

- at the request of the Chair/ the Member
- due to unsatisfactory performance of the Chair or the Member

In accordance with article 7.2 below, in the event that the Chair and/or a Member is prevented from carrying out his/her duties due to a conflict of interest, or if the Chair or the Member is prevented from carrying out his/her duties for another reason, the EB shall appoint an ad hoc Chair or ad hoc Member tasked (depending on the situation) either with handling a specific report, or with reports filed during the period in which the Chair and/or the Member is prevented.

The term of 4 years starts at the date of notification of the appointment by the EB. In case the Chair and/or the Member will be replaced by respectively an ad hoc Chair and/or ad hoc Member for an unlimited period, the maximum period of replacement will be equal to the remaining term of the replaced Chair/Member.

5. ADMISSIBILITY

- 5.1. The CSI shall pronounce solely on the question of whether Research Misconduct has occurred. Other (aspects of) allegations fall outside the competence of the CSI. If possible, the CSI will refer the Notifying Party to the competent authorities within imec such as the Committee of Ethical Conduct or the IP Portfolio & Litigation (IPPL) team for conflicts of interests on intellectual property rights.
- 5.2. Allegations of possible Research Misconduct shall be submitted to the RIO.
- 5.3. In consultation with the Members, the RIO examines whether an Allegation is admissible.

The following conditions will be considered as admissible:

- 5.3.1. The CSI may only consider Allegations related to facts committed at a moment when the Respondent has a relationship with imec.
- 5.3.2. Allegations of possible Research Misconduct shall be submitted to the RIO within a reasonable term after the date of the facts that are subject of the Allegation or after the moment that the Notifying Party became aware of the facts. The CSI decides autonomously on what is a reasonable term, taking into account the severity of the facts that are reported and the lasting impact they still have at the moment of the reporting.
- 5.3.3. The CSI deals with the same facts only once, unless a new Allegation is filed by another Notifying Party who adds new elements to the case file. A Notifying Party behaves loyally. Without prejudice to article 6.4. with regard to the supplementation of an Allegation, new Allegations handed in by a former Notifying Party vis-à-vis one and the same Respondent are inadmissible if and to the extent that they concern similar facts as those in the initial Allegation, at least if the facts were known to the Notifying Party at the moment of the initial Allegation.
- 5.3.4. Allegations cannot be submitted anonymously. However, the EB, after having been informed by the CSI in accordance with Article 11.1, may, in exceptional cases with serious potential impact on the reputation of imec, charge the CSI to initiate an Investigation in response to anonymous Allegations. In such case, the procedure will be continued without a Notifying Party and the CSI ensures that the rights of the Respondent are not impaired as a result of the anonymous nature of the Allegation.
- 5.4. If an Allegation is not admissible, the RIO informs the Notifying Party accordingly. The Respondent is not informed. The decision on admissibility will be sent to the Notifying Party within 20 calendar days after the submission to the RIO.

6. INVESTIGATION TIMELINE

6.1. Within 30 calendar days after the decision that the Allegation is admissible the CSI decides whether an Investigation should be started or not. In the case the decision is to start an Investigation, the CSI appoints an Investigation Team. The RIO informs the Notifying Party of this and, in case of an Investigation, also of the membership composition of the Investigation Team.

The RIO points out to the Notifying Party that he/she has 15 working days, starting from the day following on the receipt of this notification by the RIO, to supply additional information for further substantiation of the Allegation. In that same period, the Notifying Party can make known any objections duly motivated to the membership composition of the Investigation Team.

- 6.2. Withdrawal of the Allegation by the Notifying Party shall not constitute grounds for halting the Investigation.
- 6.3. The Investigation Team will commence the Investigation only after the time period referred to in article 6.1 has elapsed. In the event that the Investigation Team decides to invite additional experts as stipulated in article 7.3, the RIO informs the Notifying Party of that fact, who has than 7 working days, starting from the day following on the receipt of this new notification by the RIO, to raise objections he/she may have concerning the added advisers.

6.4. If the Notifying Party raises an objection, in accordance with article 6.1. and / or article 6.3., the CSI will examine which actions need to be taken on an case by case basis. The CSI will inform the Notifying Party of the changes of the Investigation Team, if any, that have been decided.

7. INVESTIGATION TEAM AND APPOINTMENT OF ADDITIONAL ADVISORS

- 7.1. The Investigation Team is composed of the Chair, the RIO and at least two Members of the CSI with expertise in the domain of the Investigation. The Investigation Team enjoys complete independence when handling an Allegation.
- 7.2. Notwithstanding the foregoing, a Member of the CSI having any conflicts of interest whatsoever regarding the Allegation to be discussed shall not participate in the work of the Investigation Team and shall himself or herself take the initiative to inform the CSI of that fact. The same applies to the Chair. If such a case arises, he/she shall turn over the tasks to an ad hoc Chair, to be appointed by the EB in accordance with the provisions stipulated in article 4.
- 7.3. In consultation with the Members, the CSI may invite an imec expert from a relevant discipline, or, in the absence of expertise or in the event of a conflict of interest, an external expert to advise the CSI without participating in the actual decision making process. The RIO shall verify that no conflict of interest exists regarding the solicited expert in relation to the report.

8. CONDUCT OF THE INVESTIGATION

- 8.1. If the Investigation Team can decide, based on the original Allegation and any additional documents supplied by the Notifying Party (as described in article 6.1) that the case is unfounded, it informs the Notifying Party hereof.
- 8.2. If the Investigation Team cannot decide that the case is unfounded based on the original Allegation and additional documents, the Investigation Team will invite the Notifying Party to further elucidate the case, in writing and/or verbally, depending on the situation.
- 8.3. If the Investigation Team decides that the case is well founded, it shall also invite the Respondent to be heard in principle, first in writing and then verbally, if necessary. If required for the Investigation, there might be decided to suspend the employment contract of the Respondent.
- 8.4. The Investigation Team shall take care to complete its Investigation within a term of six (6) months. Notwithstanding the foregoing this term can exceptionally be extended after having informed the EB and by a motivated notification to the Notifying Party and the Respondent.
- 8.5. The Investigation Team can hear other persons to the extent that this is considered useful for the Investigation. This can take place both before and after having heard the Notifying Party and/or the Respondent.

- 8.6. In conducting all Investigations, the Investigation Team shall:
 - 1. Use diligent efforts to ensure that the Investigation is thorough and sufficiently documented and includes examination of all reasonably available research records and evidence relevant to reaching a decision on the merits of the Allegations;
 - 2. Interview each Respondent, Notifying Party, and any other available person who has been reasonably identified as having information regarding any relevant aspects of the Investigation, including witnesses identified by the Respondent and record or transcribe each interview, provide the recording or transcript to the interviewee for correction, and include the recording or transcript in the record of Investigation;
 - 3. Pursue diligently all significant issues and leads discovered that are determined relevant to the Investigation, including any evidence of additional instances of possible Research Misconduct, and continue the Investigation to completion.
- 8.7. After Investigation, the Investigation Team shall inform the CSI of the conclusion. A final Investigation report will be drawn up by the CSI.

9. INVESTIGATION REPORT

- 9.1. An Allegation is considered to be <u>unfounded</u> if the CSI finds no grounds to establish that the scientific integrity of the Respondent is compromised. In this case, the CSI draws up <u>a reasoned statement of non-questionable research conduct</u> from a scientific integrity perspective.
- 9.2. An Allegation is considered to be <u>well-founded</u> if the CSI accepts that the research integrity of the Respondent is compromised. In the case of well-founded Allegation, a distinction is made between <u>minor misconduct</u> and <u>serious misconduct</u>. Minor misconduct is conduct that can be remedied in principle under the supervision of the CSI. Serious misconduct is conduct that compromises the research integrity of the Respondent to such an extent that remediation under the supervision of the Chair is not considered sufficient and the CSI therefore considers it necessary to inform the EB of its findings so that the EB can consider taking further steps.
- 9.3. If the CSI accepts that there has been serious misconduct, it draws up <u>a reasoned statement</u> <u>establishing serious misconduct</u> from a scientific integrity perspective. Such a statement shall include a follow-up recommendation for the EB.
- 9.4. If the CSI accepts that there has been minor misconduct, it draws up a <u>reasoned statement establishing minor misconduct</u> from a scientific integrity perspective, and informs the Head of Unit and the Department Head of the Respondent. Where necessary, the statement includes a proposal stipulating what the CSI considers to be appropriate remediation, stating a term within which the remediation must be implemented. The Chair shall monitor whether the Respondent is complying appropriately with the proposed remediation. If the Chair, finds that the outcome of the remediation is insufficient, he/she shall proceed to draw up a <u>reasoned statement establishing serious misconduct</u> from a scientific integrity perspective.

- 9.5. If the CSI decides that it is impossible, despite all possibilities afforded by this procedure, to assess whether the Allegation is well-founded, it shall consult with the EB. If it is decided after consultation that no further reasonably useful Investigations can be conducted, the CSI draws up a <u>reasoned statement for ending the Investigation without result</u>.
- 9.6. Each draft of a reasoned statement is sent by the RIO to the Notifying Party and to the Respondent. The Notifying Party and the Respondent have a right to send a reply to the RIO within a period of 14 calendar days, calculated from the day following the receipt of the Investigation report from the RIO. If they do reply, the Chair shall discuss their replies with the CSI, after which a final reasoned statement is drawn up. If the final statement differs from the draft, it is again communicated to the Notifying Party and the Respondent, but they can no longer exercise a right of reply. For each notification of a statement, the RIO shall draw attention to the confidential nature of the statement. The CSI may always formulate recommendations to the Notifying Party and/or the Respondent and include these recommendations in the draft of the reasoned statement, irrespective of the nature of the statement (non, minor or serious misconduct or statement for ending the investigation without result).
- 9.7. A final reasoned statement of serious misconduct shall also be sent to the EB, who decides on the opportunity of further steps outside the framework of this procedure, such as initiating a disciplinary procedure in accordance with the applicable procedures or initiating legal proceedings against the Respondent.

10. CONFIDENTIAL NATURE

10.1. To the extent allowed by law, imec shall maintain the identity of the Notifying Party and the Respondent securely and confidentially and shall not disclose any identifying information, except to: (1) those who need to know in order to carry out a thorough, competent, objective and fair research misconduct proceeding; and (2) the CSI, as it conducts its review of the research misconduct proceeding and any subsequent proceedings.

To the extent allowed by law, any information obtained during the research misconduct proceeding that might identify the subjects of research shall be maintained securely and confidentially and shall not be disclosed, except to those who need to know in order to carry out the research misconduct proceeding.

In conducting an Investigation into Allegations of misconduct, imec shall protect, to the maximum extent possible under the law, the privacy of individuals who, in good faith, report apparent misconduct.

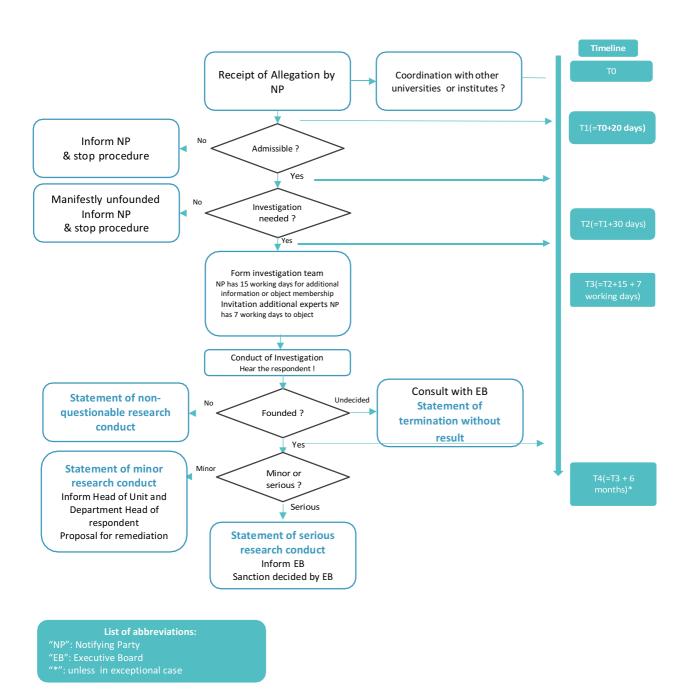
- 10.2. In issuing an Allegation, the Notifying Party accepts the confidential nature of the procedure. In principle, the name of the Notifying Party is not shared with the Respondent except in those cases where the Notifying Party gives consent or the CSI establishes that it is necessary to disclose the name of the Notifying Party to the Respondent in order to perform an effective Investigation.
- 10.3. Failure of the Notifying Party or the Respondent to respect the confidentiality of the procedure will be considered as substantial breach of the confidentiality obligations and may result in disciplinary action being taken, possibly including termination of employment contract depending on the gravity of the case.

- 10.4. Confidentiality can be breached only if and to the extent that the proposed remediation implies necessary public disclosure (e.g.: publication of a retraction note, informing the academic institution where a staff member is at present/also active, certain results of a disciplinary procedure, etc.).
- 10.5. The same applies if the facts to which the Allegation relates have become publicly known independent of the procedure and imec feels itself obliged to respond publicly. In such a case, the CEO or a person delegated by him shall be informed of the content of the Allegation and shall be responsible for external communication.

11. FINAL PROVISIONS

- 11.1. The Chair shall keep the EB informed of the Investigation reports.
- 11.2. In case Allegations are made which point to an employee of a University and/or another research institute or funding organizations as respondent, the RIO will inform the research integrity officer of that research institute/university/organization. It will be decided in mutual consent who will take the lead of the Investigation. When making such arrangements, it will be an important factor whether the Respondent is enrolled on imec's payroll or on the payroll of the concerned research institute/university. All involved institutions will be informed of the Investigation reports ensuing from the Investigation, but the management of the employer of the Respondent shall have an important vote in the potential sanctions and measures taken.
- 11.3. To the extent that rules imposed by and/or contractual agreements with external funding bodies are not reconcilable with this procedure for handling problems related to scientific integrity within imec and reports related to research supported by these funding bodies, these deviating regulations shall have priority over the regulations in this procedure.
- 11.4. As imec endorses the code of the VCWI (Vlaamse Commissie Wetenschappelijke Integriteit) that is part of the KVAB (Royal Flemish Academy of Belgium for Science and the Arts), the CSI of imec, as well as the Notifying party or the Respondent are entitled to apply for a second opinion with respect to Research Misconduct. The VCWI is empowered to give advisory opinions in accordance with the VCWI code (see http://www.kvab.be/vcwi/pdf/VCWI-reglement.pdf) when requested to do so by the CSI, the Notifying party or the Respondent. The request for second advice should be sent to the VCWI within 30 calendar days after the date when the CSI has sent its report to the parties. These opinions are non-binding, but the CSI will take them into account when taking the decision whether a Research Misconduct is considered well-founded or unfounded.
- 11.5. These regulations will be periodically evaluated by the CSI. If it deems it necessary, the CSI will formulate proposals for amendments to these regulations.

12. FLOWCHART



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