USE OF GENERATIVE AI IN SCIENTIFIC RESEARCH AND PUBLICATIONS

The ability of Generative Artificial Intelligence (GenAI) to produce new content such as text, images, sound and code makes it attractive for use in scientific studies.
But can GenAI be used in scientific research and publication activities?

GenAI's ability to generate new content does not imply that it understands the real world and the social relations, norms or contexts of the problem it is addressing.
GenAI's data sources are not a complete reflection of the real world, but only a partially filtered representation of it.

The validity, accuracy, meaningfulness and objectivity of the content produced depends not on GenAI's human-like understanding of the world, but on how well the data provided to it represents the real world, its objectivity, timeliness and size.
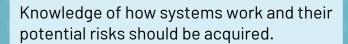
RISKS

- The potential for the generated information/data to be incorrect or biased
- Unauthorized use of content produced by someone else and the risk of plagiarism
- Deepening discrimination against vulnerable groups due to biased and limited data
- Collection, storage, transfer, use and reuse of personal data in violation of the legislation

image by freepik

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SUGGESTIONS

Knowledge of how systems work and their potential risks should be acquired.

The scope and terms of use of the service offered must be read.

Entering or sharing original ideas, methods, or documents on GenAI systems may have unintended consequences, such as making the information available to others.

Personal data should be anonymized or masked outside GenAI systems. It should be noted that data privacy protection has both ethical and legal dimensions.

The accuracy, objectivity, and reliability of information obtained from GenAI should be checked, and the risk of plagiarism should be considered.

It should be made clear which functions of GenAI are used at which stages of the research and to what extent.

It should be noted that GenAI can be used as a tool in the process of scientific research and publication, but cannot be held authorized and responsible for the identification, execution, accuracy and oversight of the main components of the process.