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PROVIDING ACADEMIC HONESTY AND DATA RELIABILITY TO WOS INDEXED SOURCES

The article explores the peculiarities of ensuring academic integrity and data reliability in preparation for publication in sources indexed in Web of Science. The main stakeholders in the process of ensuring data integrity and reliability are identified. The main technical and ethical issues that arise in the organization of this process are highlighted. The publications in the Academic Review for the period of indexing this source in WoS are analyzed in terms of ensuring data reliability and the relevant policy is reviewed. The main aspects of ensuring academic integrity and data reliability in the format of “science-society” interaction are analyzed and the call of the Alfred Nobel University for the creation of a research quality assurance association in Ukraine, which would combine the efforts of the scientific community and society aimed at ensuring integrity and reliability, is formulated. The article describes in detail the initiative of the Alfred Nobel University to ensure academic integrity and reliability of data in publications indexed in scientific databases and outlines the conditions for participation in it. The ethical and technical problems of using artificial intelligence tools in the preparation of scientific publications are considered. The possibilities of counteracting academic plagiarism using artificial intelligence tools are analyzed. Recommendations are given on the use of artificial intelligence tools to improve the quality of research, especially when analyzing achievements in the chosen field and choosing a methodology. Recommendations for ensuring academic integrity in the use of artificial intelligence tools in the preparation of publications and the development of appropriate journal policies on this issue are formulated. A quantitative comparison of the time parameters of the preparatory cycle of the main publishers of scientific literature is carried out. The author presents the sign “*Perspicuitas et Fides*” (*transparency and reliability* – Latin), which will be used by the editorial board to mark publications in which the authors are responsible for ensuring the reliability of the original research data and open access to them. The current structure of scientific publications on the websites of leading scientific publishers is analyzed. The motivation of scientists to ensure open access to data was analyzed. An appeal was made to other colleagues who administer publications indexed in scientometric databases to join the initiatives of the Alfred Nobel University.

Keywords: *academic integrity, data reliability, Web of Science, artificial intelligence, plagiarism, anti-plagiarism, falsification and fabrication of data*

JEL classification: *C31, E61, F20*

У статті досліджуються особливості забезпечення академічної доброчесності та достовірності даних під час підготовки до публікації у джерелах, що індексуються у Web of Science. Визначені головні стейкхолдери процесу забезпечення доброчесності та достовірності даних. Висвітлено головні проблеми технічного та етичного характеру, що виникають при організації цього процесу. Проаналізовані публікації в «Academy Review» за період індексації цього джерела у WoS з точки зору забезпечення достовірності даних та проведено огляд відповідної політики. Проаналізовані головні аспекти забезпечення академічної доброчесності та достовірності даних у форматі взаємодії «наука-суспільство» та сформульовано заклик Університету імені Альфреда Нобеля до створення в Україні асоціації забезпечення якості досліджень, яка б поєднувала зусилля наукової спільноти та суспільства, спрямовані на забезпечення доброчесності та достовірності. Детально описано ініціативу Університету імені Альфреда Нобеля щодо забезпечення академічної доброчесності та достовірності даних у публікаціях, що індексуються у наукових базах даних, та викладено умови для участі у ній. Розглянуті етичні та технічні проблеми використання засобів штучного інтелекту під час підготовки наукових публікацій. Проаналізовані можливості протидії академічному плагіату за допомогою використання засобів штучного інтелекту. Надані рекомендації щодо використання засобів штучного інтелекту для підвищення якості дослідження, особливо під час аналізу досягнень в обраній області та вибору методології. Сформульовано рекомендації щодо забезпечення академічної доброчесності під час використання засобів штучного інтелекту для підготовки публікацій та розробки відповідної журнальної політики з цього питання. Проведено кількісне порівняння часових параметрів підготовчого циклу головних видавців наукової літератури. Представлено знак «Perspicuitas et Fides» (прозорість та достовірність – *лат.*), що ним редакція буде відмічати публікації, у яких автори відповідально забезпечують достовірність вихідних даних дослідження та відкритий доступ до них. Проаналізовано сучасну структуру розміщення наукових публікацій на сайтах провідних наукових видавництв. Проведено аналіз мотивації вчених щодо забезпечення відкритого доступу до даних. Зроблено звернення до інших колег, які адмініструють видання, що індексуються у наукометричних базах даних, щодо приєднання до ініціатив Університету імені Альфреда Нобеля.

Ключові слова: академічна доброчесність, достовірність даних, Web of Science, штучний інтелект, плагіат, антиплагіат, фальсифікація та фабрикація даних

JEL classification: C31, E61, F20

Introduction. Preventing publication from the falsified and fabricated data, providing with the academic honesty is of an undisputable importance for the development both the scientific publishing sphere and the science as such. Precise dissemination of novel research discoveries and achievements within the framework of existing knowledge lies at the heart of scientific advancement. Instances of scientific misconduct can profoundly impact both the scientific community and society at large. Speaking of scientific publishing sphere, the basic stakeholders in providing academic honesty and data reliability are scientists, editors, reviewers, and readers [12].

The key aspects of these stakeholders' role in the process of providing an academic honesty and data reliability could be outlined as follows:

• **Scientists:**

◦ Obviously, scientists should play a pivotal role in maintaining research integrity. They must adhere to rigorous research practices, including accurate data collection, analysis, and reporting. And could constitute a quite a problem because scientists frequently are on the pressure of deadlines, funding issues, loyalty to certain scientific paradigm *etc.* Let's mention in this instance that according to *Nature* 8% of Dutch scientists concede that they falsified and/or fabricated the data at least once during 3 years before Covid-19 pandemic [21].

◦ Keeping meticulous records of raw data is essential. If any falsification or fabrication is suspected, transparent access to these records is crucial for investigation. That issue is crucial for preventing publications from the falsified and fabricated data, and should

form a basement for the publishing policy, especially with sources which are indexed in various scientific metrics databases – see an example of corresponding Elsevier policy [5]. At the same time numerous ethical & commercial aspects could arise in that instance.

• **Editors:**

◦ Journal editors are “gatekeepers” who ensure the quality and validity of published research. At the same time, they are being subject of tremendous overload especially in case of high-impact sources getting involved into filtering of unimaginable number of submitted material of different quality. We will refer to the typical submission inflow and characteristic times spent by editors to process one entity for *Academy Review* established in 1993 by Alfred Nobel University. Nevertheless “gatekeepers” must scrutinize submissions thoroughly, checking for any signs of falsification or fabrication – see [23] for the description of *Springer* policy.

◦ Implementing plagiarism detection tools and image analysis software can help identify irregularities. Nowadays, the progress in AI-tools development unfortunately made academic plagiarism much easier providing with almost unlimited support in text re-writing. Technically this problem could be resolved by utilization of the advanced content-analysis tools [1], which at the same time requires such skills that are quite unique, and, therefore, expensive.

• **Reviewers:**

◦ Peer reviewers are posed to assess the scientific merit of manuscripts. They should be vigilant in detecting any discrepancies, manipulated data, or fabricated results. But there are at least two big intrinsic problems connected. Once peer reviewers must be independent from the publisher their motivation is a big question mark [7]. Besides even being motivated their confidence in specific field could not be sufficient especially when we consider advanced multidisciplinary topics [4].

◦ Reviewers play a critical role in upholding research integrity. At the same

time reviewers’ judgments can be subjective. Different reviewers may interpret the same content differently, leading to inconsistencies – see [20] for typical example in medical science. Also, unconscious biases (e.g., gender, institutional affiliation or belonging to certain scientific school) can influence reviewers’ decisions – look at (Elsevier, 2024) for the publisher policy preventing unconscious bias.

• **Readers:**

◦ Readers, including fellow researchers and the public, rely on accurate and trustworthy information. At the same time, they should critically evaluate published work and report any concerns about data integrity. Readers can help identify instances of plagiarism by comparing the work with existing literature (see a heartbreaking history of Japanese surgeon Yoshihiro Sato who allegedly committed suicide being caught on falsification/fabrication of data and results by readers from the United Kingdom and New Zealand in *Science* publication [14]. It is believed to be the biggest falsification/fabrication ever). If data seems suspicious or inconsistent, readers should raise questions. At the same time responsibility problem when readers being sheltered by anonymity could attack researchers based on their institutional affiliation or belonging to certain scientific school or even out of personal dislike could degrade readers role in providing an academic honesty and data reliability.

◦ Readers also should be informed and aware contributes to maintaining the credibility of scientific literature.

Considering the fact, that modern science is directly influencing the social sphere, the society as a whole should be also treated as key gameplayer [22]. Being aware of the drawbacks related to the key these stakeholders of the providing process of an academic honesty and data reliability our opinion is that the attitude of the society with extremely low tolerance to the dishonesty and fraud could somewhat compensate these problems. The society role in preventing the publication of falsified and fabricated data is crucial. As informed citizens, we must actively engage in upholding research

integrity by advocating for transparency, questioning suspicious findings, and supporting rigorous scientific practices. By collectively valuing accuracy and ethical conduct, we contribute to maintaining the credibility and progress of scientific knowledge. The role of society in preventing the publication of falsified and fabricated data is paramount. As vigilant observers and consumers of scientific information, society plays a crucial part in upholding research integrity. By demanding transparency, supporting rigorous investigations, and promoting ethical practices, we collectively contribute to maintaining the credibility and reliability of scientific knowledge. The social culture of the academic honesty and scientific data reliability is facilitated through such initiatives like the Research Excellence Framework in the United Kingdom, the Excellence in Research Framework in Australia [8] emphasize not only scientific relevance but also the value generated for society which are now arising worldwide. Unfortunately, Ukraine is still lacking such an initiative.

In recent years, the emergence of large language models (LLMs) which originated from OpenAI's **ChatGPT success** has sparked considerable interest [3]. These models, including ChatGPT, Gemini, Claude use vast amounts of text data to generate responses that simulate human language patterns. However, their deployment has raised important questions about their societal implications and potential misuse. A collision of the academic integrity and artificial intelligence (AI) thoughtful utilization presents unique challenges in wide range of scientific and educational fields – from STEM education [11] till medicine [27], especially as AI technologies become more and more sophisticated. Correspondingly we need to refer to some basic strategies to prevent AI-facilitated academic dishonesty during the publication process [13]. Such strategies could be identified across the following patterns:

- *Awareness and Education:* through educating the researchers, authors, and reviewers about the potential impact of AI on

academic integrity [16], and through raising awareness about AI-generated content and its implications for scholarly work [24].

- *Algorithmic Detection:* through developing the AI tools that can detect plagiarism, paraphrasing, and other forms of academic misconduct (for example see [1] or [9]), and through the implementation of these tools during the peer review process to identify suspicious content. One could suggest that this trend will be empowered in the very nearest future through widening of the algorithmic tools proposition making them price-incentive or offering in free access.

- *Transparency and Attribution:* through encouraging authors to clearly attribute AI-generated content, and through ensure that AI-generated sections are appropriately cited and referenced at the level of journal policy (for example refer to the discussion on the Committee on Publication Ethics website [15]). The approaches to the AI-tools citation in science and education are developing quite intensively [25] ensuring the principles of transparency, responsible use, and adherence to ethical guidelines. *Elsevier, Springer, Wiley, Routledge, Taylor & Francis* journals, journals that offer open access on the Public Library of Science (PLOS) have started addressing AI in their author guidelines, emphasizing transparency and disclosure.

- *Ethical Guidelines for AI Use:* through establishing guidelines for using AI in research and writing (for example refer to one of Sage Publishing [19]) and through addressing the issues related to authorship, data sources, and transparency (see for example World Association of Medical Editors website [24]). Journal Policies and Best Practices By actively searching and staying informed, you can navigate this emerging area and ensure the integrity of your research.

- *Detection at the stage Peer Review:* via fostering collaboration among researchers, reviewers, and editors to identify potential AI-generated content, and including the AI experts in the peer review process to assess the quality and originality of submissions. This is very promising direction to our

opinion, nevertheless any references to such experience were not found yet.

Conceptual framework and methodology. The authors' approach to the process academic honesty and data reliability providing is rooted in genuine alignment with the concepts of openness and transparency of scientific publications. The latter are fully supported by *Academy Review* starting from 2009 when that source was initially indexed in Copernicus database. Right now, *Academy Review* is indexed in the Web of Science (from 2020), Index Copernicus International, included into DOAJ and UlrichsWEB.

Being indexed in the Web of Science means that more than 100 papers underwent quite thoughtful examination by editorial committee consisting of 18 well-recognized scientists from Ukraine, India, Poland, Serbia, Kazakhstan, and Moldova. The editorial board of the scientific journal *Academy review* adheres to the principles of publication ethics accepted by the international community, which are reflected in the recommendations of the Committee on Ethics of Scientific Publications (COPE). These principles are explicitly presented on the official website [2].

Established in 1994 *Academy Review* has a noble and ambitious intention to fill the gap in Ukrainian scientific literature in the field of economics. Now dealing with competitive submissions as Web of Science indexed source, we feel responsibility for providing the toughest world standards of quality and openness to the scientific society.

Respectively, we intend to analyze the current structure of scientific publications of the leading scientific publishers, as well as publishers' policy towards open data access. The motivation of young and well-established scientists to ensure open access will be structured and put into logical sequence.

Results. By examining the policies of leading scientific publishers such as *Elsevier*, *Springer*, *Sage*, *Routledge*, *Wiley*, *Taylor & Francis* one can conclude that these sources are encouraging authors to provide the primary research data but leave some space for freedom in questions of granting access to it. The logic of such approach is the

following: the publisher may ask an author to provide the access to the primary data if necessary for checking the

All the biggest players of the scientific publications market for approximately decade are making an overstress on the online publication considering the webpage of the separate article as primary instance. Formats of the paper representations are rather similar for majority of the leading scientific publishers and typically they include the following standardized sections: title, detailed information on authors, abstract, full text, references, data availability, code availability and references (see Fig. 1 containing a partial screenshot of *Springer* presenting an article [10]).

Please pay attention to the fact that a full text is subject of subscription while data and code access are treated as open-source. Quite frequently software developers publish codes on the platforms like <https://github.com> obviously promoting themselves but simultaneously helping other professionals to resolve different tasks obtaining priceless feedback on their projects. Opening data (and sometimes full-text publications) for free access young scientists are seeking co-operation especially when the research funding is insufficient.

Let's summarize on benefits young scientists could get by favoring the of open data approach:

Enhanced Research Visibility and Recognition: Sharing data openly increases the visibility of their research output, allowing them to reach a wider audience and gain recognition within their field. This can be particularly advantageous early in their careers when establishing a reputation is crucial. That's why young scientists feeling hardships with publishing their research results in high-impact sources are so active to use platforms like <https://www.researchgate.net/> gaining the additional influence by sharing the data and main findings.

Collaboration Opportunities and Networking: Open data facilitates collaboration with established researchers and peers, expanding their network and opening doors to new research opportunities.

Abstract

Moving beyond the direct support all alone by a human teacher or an Artificial Intelligence (AI) system, optimizing the complementary strengths of the two has aroused great expectations and educational innovation potential. Yet, the conceptual guidance of how best to structure and implement teacher-AI collaboration (TAC) while ensuring teachers' instructional roles to support students learning remains limited. This study, therefore, aims what (1) curriculum, (2) teacher-AI interaction, (3) learning environment would be required as well as how TAC would evolve by reflecting teachers' views. Through in-depth interviews with 20 Chinese leading teachers in AI in Education (AIED), the study found that teachers aimed to improve students' subject-matter knowledge and build their capacity as the desired goals for TAC and these can be carried out by data-driven problem-based learning and case-based reasoning in tandem with growth-focused and reflective assessment. While teachers highlighted that developing teachers' data literacy and collegiality with AI are essential, they expected AI to be equipped with Technological Pedagogical and Content Knowledge (TPACK) knowledge and conflict resolution skills. In addition, teachers expressed that Internet of Things (IoT)-based classrooms, systematic AIED curriculum, school-based continuing professional development, research-practice-policy partnerships as well as creating a continuous learning and AI-ready culture are significant. Furthermore, teachers envision TAC would develop into three stages: (1) teachers as passive AI recipients, (2) teachers as active AI users (3) teachers-AI as constructive partners. These findings build a more holistic and in-depth understanding of the AIED and offer implications for the educational AI design and teachers' education.

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Data availability

N/A

Code availability

N/A

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**Fig. 1. An example of scientific paper contemporary presentation at leading publishers – [10] at <https://link.springer.com/article/10.1007/s10639-023-12109-5>
Source: <https://doi.org/10.1007/s10639-023-12109-5>**

• *Skill Development and Employability:* Engaging with open data practices equips young scientists with valuable data management, analysis, and sharing skills, making them more competitive in the international job market.

Also, one could agree about certain motivators pushing the young scientists towards open data policy:

• *Open Science Movement:* Growing up in a digital age, young scientists are often more receptive to the principles of open science and view open data as a natural and expected part of the research process. Young scientists are actively

driving a cultural shift towards open science, advocating for open data policies, and encouraging their peers to embrace data sharing. Open data aligns with their desire to explore innovative research approaches and engage in interdisciplinary collaborations, breaking down traditional borders in science.

• *Technological Advancements:* Familiarity with online platforms and tools for data sharing (some of them will be mentioned later discussing main publishers' policy towards data access) makes the process more accessible and manageable for young researchers.

- *Funder Requirements*: in majority of cases the young scientists are reliant on grants and fellowships, which increasingly require or at least encourage open data sharing.

- *Social Responsibility and Impact*: Many young scientists are motivated by a sense of social responsibility and a desire to see their research have a positive impact on society. Open data facilitates knowledge translation and broader societal benefits. And our strong belief is that journal policy should also make an emphasis on that.

At the same time there are some issues which could be challengeable for the young scientists:

- *Lack of Resources and Support*: Early career researchers may face limitations in terms of resources, infrastructure, and guidance for data management and sharing. Considering that our future intent is to provide with proprietary platform providing robust, reliable, and secure data placement and access.

- *Career Concerns*: Some young scientists might worry about being scooped or losing control over their data if they share it openly. Considering that our future intent

- *Data Sensitivity and Ethical Considerations*: Sharing data openly may raise ethical concerns or privacy issues in certain research areas. Considering that *Academy Review* is planning to provide authors with comprehensive assistance with such issues.

If we move to the basic motivation of the well-established scientists the main reasons are dictated by need of acceleration and improvement of the research quality:

- *Acceleration of Discoveries*: Open data facilitates data reuse and integration across different studies, enabling scientists to build upon existing knowledge and accelerate the pace of discovery. This can lead to breakthroughs in various fields. For *Academy Review* it is important due to our positive attitude for multidisciplinary research.

- *Enhanced Collaboration and Innovation*: Open data fosters collaboration among researchers across disciplines and geographical boundaries. Sharing data

encourages new perspectives, stimulates innovative research ideas, and leads to the development of novel methodologies. For *Academy Review* it is important due to our ambitions to facilitate the international research.

- *Increased Reproducibility and Transparency*: Open data allows other researchers to independently verify and replicate findings, strengthening the reliability and validity of research. This promotes trust and confidence in scientific results. Also, an open data increases the visibility and impact of research findings, attracting potential collaborators and leading to greater citation rates.

- *Enhanced Collaboration and Innovation*: Open data fosters collaboration among researchers across disciplines and geographical boundaries. Sharing data encourages new perspectives, stimulates innovative research ideas, and leads to the development of novel methodologies.

- *Reduced Duplication of Effort*: Open data allows researchers to identify existing datasets relevant to their work, avoiding unnecessary duplication of data collection efforts. This saves time, resources, and funding which obviously is important to contemporary situation of Ukraine suffering from consequences of the war conflict.

- *Improved Data Quality and Curation*: Publicly available data encourages scrutiny and feedback from the research community, leading to improved data quality and curation practices. This ensures the long-term value and usability of research data. *Academy Review* just making breakthrough into *Web of Science Emerging Sources Collection* obviously needs to improve its impact which in turn should be done via a result of

- *Transparency in Research Funding*: Open data allows funding agencies and the public to track the outcomes and impact of research investments, promoting accountability and responsible use of research funds. Again, it is very important to Ukraine which is substantially dependent on international grant funding of scientific projects especially in social and economic sciences.

Also an open-data policy of scientific publication is bebefacios for the society as metioned in the introduction. The aspects of the open-data policy impact on the society are following:

- *Empowering “Citizen Science”*: Open data policy via granted access to the social research results motivates members of society to participate in future research and contribute to data collection and analysis to simplify large-scale projects. Also, many scientists believe in

the ethical responsibility to share data for the benefit of society and future generations.

- *Economic Benefits*: Open data can stimulate innovation and economic growth by creating new opportunities for data-driven businesses and services. Respectively this can lead to job creation and technological advancements.

The technical approaches utilized by main scientific publishers for providing the open data access are generalized in the table 1.

Table 1

Approaches to the data reliability providing at the most important scientific publishers

	General Principle	Specific Approaches	Data Citations	Compliance with Funder Mandates
Springer	Flexibility in data sharing practices, acknowledging that data sharing requirements can vary between disciplines and specific research contexts	Open Data Repositories A dedicated platform, “Research Data Support,” where researchers can upload and share their data	Promotes citing datasets using appropriate persistent identifiers (e.g., DOIs) to ensure proper attribution and facilitate data discovery	Encourages authors to comply with any open data mandates or requirements imposed by research funders.
Elsevier	Require authors to include a data availability statement within their manuscripts.	Open Data Repositories Authors can include their data as supplemental material alongside their published article	Encourages authors to cite datasets using appropriate persistent identifiers (e.g., DOIs) to ensure proper attribution and facilitate data discovery	Authors are expected to comply with any data sharing mandates or policies established by their research funders or institutions
Sage	Strongly recommends that authors share the data underlying their research findings to enhance transparency, enable verification, and facilitate further research advancements	Data as supplemental material alongside their published article If data are hosted in a third-party repository with restricted access, authors should clearly explain the access conditions and provide contact information for data access requests. Encourage or require authors to develop data management plans outlining their data management and sharing strategies	Emphasizes the importance of citing datasets using persistent identifiers (e.g., DOIs) to ensure proper attribution and facilitate data discovery	Assists researchers in fulfilling the growing number of funder and institutional requirements for open data sharing
Wiley	Requires authors to include a data availability statement within their manuscript	Institutional repositories Generalist repositories like Zenodo or Dryad Discipline-specific repositories	Promotes the use of persistent identifiers (e.g., DOIs) for datasets to ensure proper attribution and enable easy data discovery	In situations where data cannot be openly shared, authors should provide a clear explanation and consider using data sharing agreements to facilitate controlled access to the data for qualified researchers.

Source: compiled by authors based of respective publishers’ editorial policy

So, one can conclude that *Elsevier* is most strict in its approach to the open-data policy, while *Springer* is most advanced in providing with proprietary platform for the research data storage which could be very attractive from the comfort and security point of view. *Sage* is most supportive assisting researchers with data-sharing responsibility & requirements while *Elsevier* lives it to the authors' personal responsibility. All the companies have a uniform strict approach to the data citations which is very important because sometimes the very process of data accumulation could be of independent value apart from the research which was made on that data basis. Most typical examples of that in social sciences and economics are the large-scale surveys (usually the main funding condition of such research would be a free unrestricted access to the data collected) or observations made during prolonged period when consistency of corresponding results' publication had been lost and complete dataset became an intellectual property of the researcher.

It should be noted that nowadays a lot of publishers from Southern-Eastern Asia (Malaysia, Indonesia, Singapore, South Korea, China) are duplicating such policy quite frequently combining the toughest approaches.

It is difficult to get the data on various stages duration of a review-revisions process, but in majority of cases submitters indicate typical time frames for each part of it – see Table 2, which was built based on submitters' comments editorial policy of the leading scientific publishers (the names assigned to the stages correspond to the current state of material processed). Typical durations indicated in the table 2 are generalized based on evidence provided by different submitters discussing these issues at different professional forums. It should be noted that publishers are reluctant to indicate durations of each stage explicitly because it is definitely influenced by several factors, including field of science, author reputation, volume, methodology used, peers' involvement *etc.*

Table 2

Typical duration (in weeks) of various stages of a review-revisions process

Stage contents	Duration
Submitted to Journal (technical quality checking)	1,5
Editor Invited (Conditional – this step may not occur)	1,5
With Editor	3
Under Peer Review	3
Required Reviews Complete	3-6
Decision in Process	Loop back to stages 4-5 possible
Completed – Accept	Could be completed at stage 6
Total	12-15

Source: compiled by authors based of submitters' evidence of several publishers' editorial policy.

In reality that cycle is depending also on various individual factors added to the above-listed could vary in the range of 44-123 days (6-18 weeks) as different sources indicate.

The specifics of a review-revisions process at *Academy Review* and existing policy towards academic honesty and data reliability was discussed with prof. Anatolii Zadoia, the deputy chief editor of the journal. The MP3-recording of this discussion made

in the Alfred Nobel University building at 21 of March 2024 using dictation machine Sony ICD-PX820 [26] stored at virtual drive by the link https://drive.google.com/file/d/1BShD-ZoX4Avn8oBMYh9d3X1u_iFhsw5a/view?usp=sharing is inseparable part of this paper.

Discussion. The results of qualitative analysis of the most influential scientific publishers' policy towards open data access and considering scientists' motivation to

ensure open access led to conclusion that substantial changes to *Academy Review* publishing policy should be made in the very nearest future which would intend to regularize the issues connected with research data access.

We see the guiding principle of these changes being incrementality providing submitters with all the necessary support and explanation of new requirements with specific focus on the young scientists. Our goal is to meet high standards of the most influential scientific publishers referred in the Table 1. As it was mentioned we favor a variant of dedicated platform creation for the research data placement and are ready to support researchers in resolving issues with funders' and institutional requirements for open data sharing. At the same time, we recognize the fact that data sharing requirements can vary between disciplines and specific research conditions. Changes to the journal policy will emphasize on the importance of citing datasets using persistent identifiers (DOIs first of all) to ensure proper attribution and facilitate data discovery.

To mark the start of this process Alfred Nobel University is introducing the special sign (see Fig. 2) which testifies for mutual responsibility of the publisher and authors for providing academic honesty and data reliability and proofs the research quality.

That sign includes an outline of the University main building, the date of its foundation, the symbolic image of the Alfred Nobel Planet, the monument installed in the University Memorial Park in 2008 honoring

all the Nobel Prize winners from 1901 and the Latin motto "Perspicuitas et Fides" which means "Transparency & Reliability" in English.

That sign is a kind of reward which would be given to those authors who volunteer in giving free access to the research data used in preparing the papers for *Academy Review* run by Alfred Nobel University from 1994 being indexed in the Web of Science from 2020. In case of author consent, the publisher will create a virtual drive and will generate a read-only links to it which will be included into the paper as hypertext link and QR-code to provide comfortable access for both on-line and hard-copy readers and the paper will be marked by the sign "Perspicuitas et Fides". Again, it should be noted that providing the open data access is not an obligation considering existing data-sharing requirements stated by research funders or related to certain research fields. Correspondingly the sign "Perspicuitas et Fides" will just mark an authors' alignment with the values declared by leading scientific publishers and commitment with *Academy Review* journal policy towards open-data concept. Opening the free access to the record of discussion with *Academy Review* deputy chief editor [26] this article will also be awarded by the sign "Perspicuitas et Fides".

Conclusions. Thus, summarizing the results of the analysis of the efforts aimed providing academic honesty and data reliability to the sources indexed in the most influential scientometric bases, the following conclusions can be drawn:

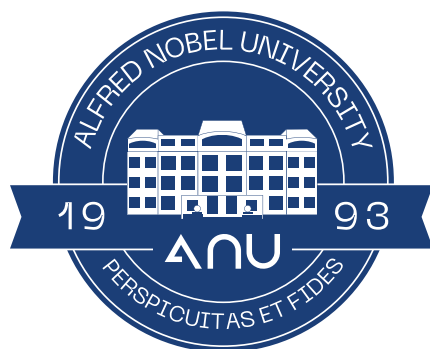


Fig. 2. The sign "Perspicuitas et Fides" (Transparency & Reliability) introduced by ANU

1) AI-tools utilization during scientific writing becomes a new challenge to the academic honesty as AI technologies become more and more sophisticated providing writers with almost unlimited power for texts generation which could easily pass through the conventional plagiarism checkers,

2) there are three main directions of coping with that challenge which presumably are characterized by a different impact:

a. *Awareness and Education*: through educating the researchers, authors, and reviewers about the potential impact of AI on academic integrity,

b. *Algorithmic Detection*: through developing the AI tools that can detect plagiarism, paraphrasing, and other forms of academic misconduct (which seems to be the most efficient),

c. *Transparency and Attribution*: through encouraging authors to clearly attribute AI-generated content, and through ensure that AI-generated sections are appropriately cited and referenced at the level of journal policy, including peer reviewers into that process.

3) editorial policies are strongly pushing the authors to share the data underlying their research findings to enhance transparency,

enable verification, and facilitate further research advancements while allowing for some flexibility in data sharing practices, acknowledging that data sharing requirements can vary between disciplines and specific research contexts,

4) the journal cycle could be very prolonged especially when including attempts towards eliminating AI-based misconduct so editorial policy should include some conditions aimed on deeper peer-reviewers' engagement into the process.

As further directions for the *Academy Review* editorial policy development and improvement, the following should be mentioned:

1) the changes will be made introducing new requirements to data access based on the dedicated platform developed by Alfred Nobel University,

2) seminars will be proposed to educate prospective submitters on the issues of open access to the research data and AI-tools utilization during the scientific writing with an emphasis on the young scientists,

3) the sign "Perspicuitas et Fides" will be expandingly used to celebrate authors who are willingly aligned with the open data concept.

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PROVIDING ACADEMIC HONESTY AND DATA RELIABILITY TO WOS INDEXED SOURCES

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JEL classification: *C31, E61, F20*

The article explores the peculiarities of ensuring academic integrity and data reliability in preparation for publication in sources indexed in Web of Science. The main stakeholders in the process of ensuring data integrity and reliability are identified. The main technical and ethical issues that arise in the organization of this process are highlighted. The publications in the Academic Review for the period of indexing this source in WoS are analyzed in terms of ensuring data reliability and the relevant policy is reviewed. The main aspects of ensuring academic integrity and data reliability in the format of “science-society” interaction are analyzed and the call of the Alfred Nobel University for the creation of a research quality assurance association in Ukraine, which would combine the efforts of the scientific community and society aimed at ensuring integrity and reliability, is formulated. The article describes in detail the initiative of the Alfred Nobel University to ensure academic integrity and reliability of data in publications indexed in scientific databases and outlines the conditions for participation in it. The ethical and technical problems of using artificial intelligence tools in the preparation of scientific publications are considered. The possibilities of counteracting academic plagiarism using artificial intelligence tools are analyzed. Recommendations are given on the use of artificial intelligence tools to improve the quality of research, especially when analyzing achievements in the chosen field and choosing a methodology. Recommendations for ensuring academic integrity in the use of artificial intelligence tools in the preparation of publications and the development of appropriate journal policies on this issue are formulated. A quantitative comparison of the time parameters of the preparatory cycle of the main publishers of scientific literature is carried out. The author presents the sign “*Perspicuitas et Fides*” (*transparency and reliability* – Latin), which will be used by the editorial board to mark publications in which the authors are responsible for ensuring the reliability of the original research data and open access to them. The current structure of scientific publications on the websites of leading scientific publishers is analyzed. The motivation of scientists to ensure open access to data was analyzed. An appeal was made to other colleagues who administer publications indexed in scientometric databases to join the initiatives of the Alfred Nobel University.

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