

THE 2021 ANNUAL MEETING OF AFRICAN SCIENCE ACADEMIES (AMASA 2021)

PREDATORY ACADEMIC PRACTICES

24 November 2021 | 1200-1400 UTC

WEBINAR



iap SCIENCE
RESEARCH
HEALTH
the interacademy partnership



**The 2021 Annual meeting
of African Science Academies
(AMASA-2021)**

PREDATORY ACADEMIC PRACTICES

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nasac@nasaonline.org.

NASAC secretariat

Jackie Kado, *Executive Director*

Design and Layout

Irene Ogendo, *DTP Consultant*

Printers

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THE NETWORK OF AFRICAN SCIENCE ACADEMIES (NASAC)

NASAC was established on 13th December 2001 in Nairobi, Kenya, under the auspices of the Inter Academy Panel, currently known as the Inter-Academy Partnership (IAP). NASAC is an independent consortium of 28 science academies in Africa. Through its membership, NASAC facilitates the discussion of scientific aspects of challenges of common concern, make statements on major issues and provide mutual support to the academies. Drawing from this, NASAC specifically aims to provide credible science advice to governments and regional organizations on pertinent issues to Africa's development. NASAC's networking capacity serves as an effective resource for communicating appropriate thematic information, as well as coordinate efforts among different sectors and stakeholders in academia, policy and society. NASAC aspires to be the voice of science and is the affiliate network for InterAcademy Partnership in Africa.

The membership of NASAC consists of duly established national science academies in Africa that are merit-based, independent, non-governmental, non-political and non-profit scientific organizations. Through its members, NASAC seeks to enhance collaboration and knowledge sharing among scientists by using evidence-based research to African development policy in the domains of social, natural and economic sciences. NASAC aspires to make science

academies in Africa vehicles of positive change for science itself, policy and societies. In so doing, academies ensure that science contributes to realizing Africa's full potential and sustainable development.

NASAC is dedicated to enabling and inter-connecting African science academies to contribute to science, technology and innovation, to make the voice of science heard by African and global decision and policymakers, and to establish a culture of science in the continent.

As an independent consortium of science academies, NASAC continues to unite and strengthen its membership to address challenges on the African continent using scientific knowledge and innovative expertise. Specifically, NASAC has continued to provide advice to regional bodies and organizations on science-related issues of importance to Africa's development through its membership. It has also enhanced the capacity of academies in Africa to improve their role as independent science advisors to governments and to strengthen their national, regional, and international functions. In turn, this has assisted the scientific community in the continent to set up national independent academies or associations of scientists where such bodies do not exist. The main goal of NASAC has remained the promotion of scientific excellence so as to create a culture of science in Africa.

NASAC aspires to be an authoritative voice of the science community in Africa. It is therefore only as strong as its members and has remained relevant since its inception by:

- I. Facilitating, through financial or technical support, the formation of science academies in countries where none exist.
- II. Offering science academies a platform for interaction and collaboration with their counterparts worldwide.
- III. Linking scientists and enhancing the voice in science through their national academies.
- IV. Strengthening existing academies through provision of capacity enhancing resources that facilitate their operations as well as offer training opportunities to their officials and staff members.
- V. Championing and facilitating effective networking of science academies by harnessing their collective strengths and enhancing their impact at national and continental levels.

For more information on NASAC, please visit www.nasaconline.org or contact the secretariat at nasac@nasaconline.org.



WEBINAR OBJECTIVES

1. To raise awareness of predatory journals and conferences in the region.
2. To help researchers practice due diligence to minimize their (and their students') risk.
3. To discuss the threat of predatory practices and why addressing them is so important.
4. To preview some of the recommendations of the IAP study on predatory academic practices.

Moderators:

Jackie Kado, NASAC Executive Director

Tracey Elliot, IAP Project Director, Predatory Academic Practices Project

Information on the IAP study:

This information can be found at: [Combating Predatory Academic Journals and Conferences \(interacademies.org\)](https://www.interacademies.org)

WELCOME AND INTRODUCTION



By **Professor Norbert Hounkonnou**
President of the Network of African Science Academies (NASAC)

In his remarks, Prof. Hounkonnou thanked all participants for joining the virtual event. NASAC, he said, is one of the four regional academy networks of the 80 academy partnerships, it is the affiliate network for IAP in Africa working with other three regional networks: EASAC in Europe, IANAS in the Americas, and AASSA in Asia. NASAC is also a consortium of 28 merit-based academies in Africa and aspires to make the voice of science heard by policy and decision-makers within Africa and worldwide. Academies, he said, are typically independent, highly committed institutions that recognize and promote excellence and achievement. By definition, academies are merit-based with members peer-reviewed and selected from among the leading scientists predominantly in their countries. They are vital civil society institutions that work together on wide-ranging public policy issues free of vested political and commercial interests.

Twenty-seven (27) countries in Africa have well-established and renowned national academies that all work together with NASAC on issues of vital national and regional importance. In addition, he said, there are 15 young national academies in Africa for early career researchers who are committed to science-serving society. Many of the NASAC members work closely with their respective young academies.

AMASA 2021, he stated, will focus on *“the issues of our time – the omnipresence of predatory academic practices in our science world which without making needed efforts to fight it, will ruin and destroy the whole academic system”*. As mentioned in a paper published in nature in 2019¹, predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by misleading information, deviation from best editorial publication practices, a lack of transparency, and/or the use of aggressive or indiscriminate solicitation practices. Predatory journals and conferences abound in universities and research institutions and *“make so many victims among researchers particularly in the least developed countries - where publish or perish culture is important.”* And how many publications a scholar has produced became a major criterion for publishing career advancement.

The Webinar, he said, will help NASAC communicate the information to raise awareness of the danger of these practices, to reflect on appropriate ways for minimizing the risk, to preview some of the recommendations of the IAP Strategy on the topic, and to better prepare the actors to combat the phenomenon. We thank you and look forward to your valuable

¹By Agnes Genevich, as Assistant Professor at the Telford School of Management, University of Ottawa, Canada

contributions to the discussion. And with those few remarks, ladies and gentlemen, I now call upon the rest of the session.

By **Tracey Elliot** | *IAP Project Director, Predatory Academic Practices Project*

Ms. Elliot stated that the Webinar constitutes one of the four regional webinars that IAP will be running over the next few weeks, with the focus being on Africa.²

By **Jackie Kado** | *NASAC Executive Director*

Ms. Kado stated that one of the biggest goals in undertaking the study on predatory academic practices is to raise awareness of the vice and also create that niche for science academies to be able to do something about it; in this regard, NASAC’s partnership with IAP is crucial.

Survey of participants and results thereof:

The objective of the 60-second survey was to:

- i. Know who was present in the Webinar.
- ii. Their role and the academies they are affiliated to.

Poll Results:

Present at the Webinar	Percentage %
Research scientists	63%
Research mentors and supervisors	19%
Research funding	0%
Research governance, leadership or administration	9%
Librarians or indexers	22%
Publishers	6%
Where we come from	
East Africa	25%
West Africa	19%
South Africa	13%
North Africa	9%
Central Africa	3%
Are you a member or alumni of the National Academies, or an international merit-based academy?	
YES	50%
NO	50%

²Other similar webinars will be running in Europe, the Americas and Asia.

PRESENTATION ON PREDATORY ACADEMIC JOURNALS & CONFERENCES: RAISING AWARENESS & UNDERSTANDING



By **IAP Working Group Members**

The following are excerpts of the presentation which is a pre-publication preview of some of the findings.

About the Study

The two-year IAP Study was launched in May 2020³; its motivation being the increase that has been observed both in the scale and sophistication of predatory academic practices, and the potential long-term damage it will cause if left unchallenged⁴. The role of the study is to:

- Define and identify predatory and unethical practices in journals and conferences.
- Gauge their prevalence and impact.
- Understand the primary drivers of predatory practices.
- Examine the efforts that have been made to date to combat predatory journals and conferences in the various regions of the world.
- Provide concrete recommendations for addressing the problem.

The study speaks to the system as a whole – at least to key stakeholders – whose action can affect systemic change.

So firstly, let's run through some of the common features, noting however; that they are called different things in different countries, such as, trash, garbage, hijacked, dark and deceptive. They solicit articles from researchers through practices that exploit the pressure on researchers to publish and present their work.

Features of the so-called predatory journals and conferences include but are not limited to:

- Rapid pay to publish/present models without rigorous or indeed any peer review.
- Fake editorial boards or conference boards, even falsely list respective scientists or respective institutions.
- The use of fraudulent impact factors or metrics.
- The use of journals and conferences that are deceptively similar to legitimate ones.
- Aggressive spam invitations to solicit articles and abstracts including outside of a researcher's expertise.

³ It will report in early 2022

⁴This study is led by a group of experts from wide-ranging countries and disciplines who were nominated by IAP academy members and other sister networks. In Africa, the expert group comes from South Africa, Ethiopia, Egypt, and Benin. In Asia - from Bangladesh, Malaysia and Jordan. In the American Continent - from Mexico and Brazil. In Europe - from Sweden, Ireland, Italy.

Findings

As part of the study and to gauge the prevalence and the impact of these predatory practices, a survey of researchers was conducted⁵. At least 24%, nearly a quarter of all respondents had either published in a predatory journal, participated in a predatory conference, or don't know that they have. When asked why? The main reasons given were: lack of awareness; needing to advance their careers and convenience. This highlights the need for systemic and institutional change to reduce perverse incentives for using these predatory practices and prevent their normalization – and to improve legitimate publishing and conferencing good practice.

Over 90% of the survey respondents felt predatory practices should be combatted to preserve the integrity of and public trust in research and to ensure that research-informing policy is rigorous. The majority of respondents were concerned that poor and inaccurate research will fuel misinformation in public policy. Another concern was the risks of undermining the research enterprises as a whole, not least public trust in it, and widening the gaps still further between high and low-income countries. The survey brought to the fore that predatory journals and conferences may have infiltrated a wider demographic of researchers than previously thought – with researchers at all career stages needing to be on their guard especially in low and middle-income countries, and in some disciplines more than others.

A significant proportion of respondents as much as 14%, admitted that they have published in a predatory journal or participated in a predatory conference – the majority of them unknowingly. Using this 14% as a conservative estimate, and the survey sample as a rough proxy for the global research community, if extrapolated could equate to at least 1.2 million researchers and billions of dollars in wasted research costs based on figures in the UNESCO Science Report of 2021. This requires urgent attention.

A major issue regarding predatory journals has been how to characterize them, define them or mark them so that the academic community can avoid such publishers as much as possible. In the survey, the respondents highlighted a few markers of predatory journals all with the focus of invitation to publish that they spam the researcher with. More than 80% of the respondents said that these are typical features – like the invitation to submit a paper that is outside one's expertise; the conference/journal has an unusual combination of words in the name; the invitation is not very focused and the language is odd; they keep sending invitations over and over again and that is spamming. Most researchers have indicated that there is little in the way of institutional⁶ policy or guidance on how to recognize and avoid predatory journals and conferences.

There is nevertheless a range of self-help resources already available online to guide researchers especially concerning journals but less so on conferences. Examples include;

⁵Over 1,800 researchers from 112 countries responded to the survey providing a rich data set for analysis.

⁶The Ottawa Health Research Institute has developed a one-stop-shop of resources on predatory journals which went live in 2021. They have also produced a consensus definition of predatory journals and it reads as follows – Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and they are characterized by false use of the information, deviation from publication practices, a lack of transparency, and/or use of aggressive and indiscriminate solicitation practices.

- AuthorAID.
- Cabells (paid-for subscription services).
- The Directory of Open Access Journals (DOAJ)⁷.
- Cabells helps to keep the community aware of the growing threats and to keep academia protected from exploitative operations.
- Think. Check. Submit. This is a widely used resource for helping one check journals.
- Think. Check. Attend. Helps scholars to judge their academic credentials and conferences.

Conclusion

One of the key conclusions of the study was that most definitions and tools do not account sufficiently for complexity – it can be rather difficult to distinguish between fraudulent, low quality, questionable and unethical practices in publishing and conferencing. At least 10% of the survey respondents indicated that they didn't know if they had used predatory outlets. IAP has since developed a tool or a spectrum of predatory behaviours as a more nuanced approach to help researchers assess the risk.

IAP defined predatory practices as practices in scholarly publishing that prioritize self-interest at the expense of scholarship. This makes it possible to distinguish fraudulent or deceptive journals from low-quality ones as well as recognize that there may be low-quality ones in need of support rather than being termed as predatory. But also to recognize reputable quality journals could be criticized for prioritizing self-interest at the expense of scholarship.

What can be done to minimize the risk?

- Practicing due diligence.
- Using the spectra and other available guides such as Think. Check. Submit and Think. Check. Attend.
- Familiarize oneself with the common and most reliable traits of predatory practices.⁸
- If a journal claims that it is indexed in a reputable index e.g. Scopus, Web of Science then check, if not true – AVOID.
- Check if a journal is listed in the Directory of Open Access Journals (DOAJ); if it is, the journal is less likely to be problematic because it is vetted. Similarly, if a journal is a member of the Community of Publication Ethics (COPE) where it must follow COPE's publication Ethics then it is more likely safe.
- If an institution has its lists of acceptable and unacceptable journals or subscribes to Cabells predatory reports, use them with caution and consult other available resources.
- Researchers should also seek advice from their mentors/supervisors.
- Stopping to knowingly publishing in, or citing, predatory journals and presenting in predatory conferences.

⁷This is a community-curated online directory that indexes and provides success to high-quality open-access peer-review journals.

⁸If they meet more than two of these, it should ring alarm bells and so avoid.



What one can do minimize other risks:

- For research supervisors or mentors - the need to increase their understanding, raise awareness, and practice due diligence.
- For an academy member - encourage the academy to mainstream good publishing and conferencing practices, creating disincentives to using fraudulent ones.
- For a Higher Education Institution (HEI) - introduce publishing and conference good practices into Continuous Professional Development (CDP) and integrity courses.



PANEL DISCUSSION

The objective of this discussion was for panellists to give their perspectives and insights they have on what can be done – as a region or as a nation – to combat the vice of predatory academic practices as well as provide recommendations on what academies can take on.

Panellists:

1. **Victorien Dougnon**, Member of the working group, Benin.
2. **Oyewale Tomori**, Nigerian Academy of Science, Nigeria.
3. **Susan Veldsman**, Co-Chair of the IAP working group, South Africa.
4. **Rabab Rashwan**, Member of the working group, Egypt.
5. **Harriet Mayanja-Kizza**, Makerere University, Uganda.
6. **Edmond Sanganyado**, Zimbabwe Young Academy, Zimbabwe.
7. **Asfawossen Asrat Kassaye**, IAP Working Group member, Ethiopia.
8. **Khalid El Bairi**, Cancer Biomarkers Working Group, Oujda, Morocco.

Feedback by Panellists

1. Victorian Dougnon

Mr. Dougnon provided an overview of what the African inputs were to the study. The following are excerpts of his report:

In Africa, the respondents who work represented 14.9% who completed the survey. In sub-Saharan, 91% (254 of 278) were representing 24 countries and in North Africa, 9% (24 of 278) representing 5 countries. Researchers from the following countries participated: Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Egypt, Kenya, Mali, Morocco, Nigeria, Rwanda, Senegal, Togo and Tunisia.

Perceptions of Predatory Practices in Africa – *Do you believe predatory practices are a serious problem on the rise or not a problem in your country of work?* 87% of respondents in Africa indicated that predatory journals or conferences in Africa are already a serious problem or on the rise of work (83% globally). Africa had the highest proportion of respondents who selected that it was a serious problem - about 48% compared to 39% globally. 97% of Africa-based researchers selected that predatory practices should be combatted (compared to 94% globally).

Prevalence of predatory practices in Africa: Africa has the highest level of people who publish in a predatory journal without knowing it before doing it. There are also a number of people

who have not published in a predatory journal to their knowledge because it is a kind of struggle to determine a predatory journal.

Conferences vs. Journals: Conferences are not so well known in Africa since close to zero the number of people participated in a predatory conference without knowing it was a predatory conference at the time. People who participated in a predatory conference to their knowledge – had the highest level of people who responded “No”.

2. Oyewale Tomori

In his remarks, Prof. Tomori stated that it disturbed him when researchers stated, *“I don’t think it’s a problem or I have never attended something to my knowledge”* in reference to predatory practices in Africa. He felt that they spoke in ignorance.

On predatory practices he gave the following recommendations:

- Changing the term from predatory journals to fraudulent journals.
- Fraudulent scientists/researchers are the ones who give life to these so-called predatory journals. List out actions or deterrents that can stop such researchers – “if you starve the demand probably the supply will die off.”
- People in top positions, like Vice-Chancellors, should be meticulous in looking at all information and tell the signs of the kind of journals they are dealing with.
- IAP and NASAC to raise awareness on predatory practices to research scientists, young academics.

3. Susan Veldsman

The following are excerpts of her presentation:

Analysis of the research output of South Africa found that its researchers don’t publish as much in predatory journals.

South Africa, she said, is in a peculiar position in the sense that it drives intended and unintended consequences. Examples of unintended consequences – when researchers publish in accredited journals, their universities get subsidies on an annual basis – from 2012 to 2019 R16 billion has been disbursed for this purpose where researchers publish in accredited journals; this has resulted in both intended and unintended consequences. Intended in the sense that research productivity has risen mammoth like from 2005 up to 2020; this is a good driver. But the unintended consequences lead to unethical behaviours by authors and editors which is highly problematic.

The whole funding issue through accredited journals is driven by the Research Agro-policy within South Africa. From 2022, South Africa will have a Publications Quality Framework Policy where all dubious activities and unethical practices will be monitored.

4. Rabab Rashwan

Ms. Rashwan spoke on the administrative effort that is being done regionally and internally. The Academy of Scientific Research and Technology in Egypt is a part of these procedures –

it's a transparent, non-biased organization – it does not have any researchers; it instead has administrators thereby working freely and in a transparent way.

She stated that academies can affect these practices; in the case of Egypt, the academy formed a National Publishing Ethics Committee which was consoled with a membership of very high top-level management from universities, from the research centres, from the National Committees of research ethics, among others. The academy also agreed with the Supreme Council of Universities to evaluate the journals for promotion committees – which is local and of course not indexed in Scopus or the Web of Science but the local journals. The local, she said, is a bit big expression which includes the journals that are not indexed in Scopus or the Web of Science but it's already in any country.

In closing she stated that laws and regulations are extremely important in the efforts towards curbing predatory journals and conferences, *"because in the cyber world, it's not easy to control everything by practice, we should have a law, we should have something like regulations, corporations and cooperation on the level of a county or a local one, a national one, regional, and of course globally."*

5. Harriet Mayanja Kizza

Ms. Kizza gave her experience with predatory conferences whereby she was invited as a speaker for a meeting in East Asia; she went ahead and registered online and was asked to pay her participation/registration fee. Upon following up on the reason she had to pay and yet was an invited speaker went unanswered. The trail finally went cold, and the communication ended. The challenge, she said, is getting to know the genuine from the predatory ones.

The challenge, she said, is that some people are willing to publish in predatory journals including new private universities who do not seem to mind, they encourage this to progress faster so they can get registered by regulatory bodies and become full-fledged universities and even encourage their lecturers to get promoted because you need a number of senior lecturers or professors. Of course, there is a publish or perish syndrome that sees desperate academician hopefuls who tend to perpetuate the problem. Some pretend and say they don't if it's predatory and then say it's cheaper, the turnaround time is quicker, and they will be able to get their promotion faster. Some journals get published in record time while researchers seek to want their work to be more google-abled while others want to use it to apply for research funding grants because they need a good CV in their publications.

Way forward:

- University and academic institutions - robust systems to advise and weed out predatory journal publications at the universities.
- Have easy access to pre-check software like plagiarism systems.
- The need for more training on predatory practices at universities.
- The need for researchers to be made more aware of international systems.
- For researchers to be in the know that some sites support predatory journal lists as genuine.

6. Edmond Sanganyado

The following is Mr. Sanganyado personal experience on predatory practices.

"In 2011, I submitted a manuscript to the African Journal of Food Science which was published by academic journals. The work was a culmination of an international collaboration I had which included researchers from Zimbabwe, Sweden, and Belgium. We used state-of-the-art equipment to address some critical food security challenges and I earned several awards in my local city because of that research. 10 years later, the manuscript has earned a modest 10 citations but its greatest impact was its inclusion as part of the evidence in the development of a European Union food policy. I wish that was the end of the story. Shortly after publishing the manuscript, I came across a blog called Scholarly Open Access which was run by Jeff Rebiere, a librarian at the University of Colorado – Jeff Rebiere kept a list of what he called potential predatory journals and publishers. And to my surprise, the publisher of my cherished manuscript was on the list. At first, I was ashamed that how I could not know that the African Journal of Food Science was a predatory journal? I noticed that I saw signs when I was submitting the manuscript - like grammatical errors in titles and things like that. But my shame quickly turned to anger - I was angry at the publisher because I believed they had cheated me; I was angry at the senior faculty at my university because some of them had published in that same journal – I was just angry. But after a little while, my anger turned into introspection – isn't it fair that a single article I published in 2011 is the power to destroy my credibility as a researcher today even though I have published more than 50 papers in the so-called high impact sector journals to date? Isn't fair that a librarian in Colorado is the final say in the credibility and authenticity of my research in analytical chemistry? But that's not all. Using the Inter-Academy Partnership spectrum of predatory publishing practices, it seems the journal doesn't have the typical outright fraudulent journal it borders on the questionable journal but it's still considered a predatory journal. African researchers are systematically exploited in the scientific publishing process using subjective measures of quality and sometimes outright discrimination. How many Africans are editors at the so-called reputable journals? Why is it important? Because most submissions by Africans, if the journals are deemed regional or lacking quality yet the regional journals are often considered predatory."

Academies, he said, need to evaluate their local journals because just relying on someone else's expertise where there is little knowledge on what is happening in the said countries is a challenge. He wondered how many journals that are published in Africa are indexed by Scopus or Web of Science. A recent study by Natasha Robinson from the University of Oxford found that there are less than 0.01% of the 23,000 journals indexed by Scopus – only 0.01% are from Africa. Most of the journals indexed by Scopus, which are considered African Journals, are published by Taylor & Francis and Wiley. This goes to show that Open Access journals that are not indexed in these two databases are often deemed predatory.

In closing, Mr. Sanganyado stressed that *"we cannot combat predatory practices without decolonizing scholarly publishing and reforming how we assess research excellence when appointing, promoting, and rewarding an individual."* Sadly, in Africa, predatory publishing is

encouraged in a way because what is incentivized is the number of publications, the citation count, rather than the quality of the research that an individual has done.

7. Asfawossen Asrat Kassaye

On the issue of international indexing by Scopus, DOAJ, etc. Kassaye stated that researchers need not to specifically rely on these kinds of lists, let alone the likes of Cabells since predatory journals or publishers are becoming more sophisticated and some of them are making it to these reputable lists. They need to carry out more research and follow due diligence about the journal that they are submitting their article to; they need to use self-help tools. He emphasized that, for example, DOAJ cannot be 100% problem-proof and the same applies to Scopus and others.

8. Khalid El Bairi

Mr. Bairi shared his experience as an editor in senior international journals.

"I work as an academic editor for various publishers that are respected in the field they are well-indexed. So as you know, this job is free of charge, we are not paid for our job, we spent a good amount of time to do peer review and to invite reviewers. And so as you know, this is the standard of academic publishing. So one thing that is disturbing me about academic publishing is that there is no real definition of predatory journals. Because in the journal, for example, in which I'm working for as an editor – despite the fact that we are working for them for free and doing a great job but later when we want, for example, to publish in these journals, they don't accept to waive the fees. They insist that we have to pay the fees of open access if you are an editor that works for them. So this is unethical for me and it seems to me that all publishers are predatory, they are using academic editors to make money. These are money-making machines, unfortunately. Yes, we understand they are good journals that conduct peer review, etc., but even if these journals are conducting peer review and if you check their instructions to editors, etc., you will see the same prices even if they conduct peer reviews. As an editor, I say to all that I work for free for these journals but I don't benefit from waivers from these journals and they ask us to pay if we want to publish in these journals. So this raises questions about ethical things, about publishing in journals, etc. so I think we have to extend the discussion to these good journals that do not accept to waive fees for authors and academic editors because this is challenging for young scientists, particularly in Africa."

Reaction to Khalid El Bairi's statement

In reacting to the challenge experienced by *Khalid El Bairi*, Ms. Susan Veldsman, Co-Chair of the IAP working group, South Africa agreed with his statement. She stated that the IAP has been very pertinent in its investigations, *"and I think we are just framing it much broader in our report to say that the driver is money and making a profit etc"*. This, she said, is a typical example of one of those instances which have several issues attached to it. One is an author by fees and the price thereof which is highly problematic especially for developing countries. And secondly, editors cannot publish in the journals. But that fact also raises another question and especially, in this case, IAP recommends that researchers don't publish in their journals but if they do – they must be cautious and the policy within the journal will have to be very clear as to what happens if an editor submits his article to the journal.



SESSION DISCUSSIONS

This was an open discussion among all participants that sort to explore the following:

1. Ways to identify predatory journals and conferences.
2. What to do if you think you have been scammed by one.
3. Why they are thriving (root causes) and how to curb them.
4. The threat of predatory practices to global and African science, if left unchallenged.
5. Personal insights and experiences.
6. What academies can do to help.

The following were the key points that arose from the discussions:

Ways to identify journals and conferences

- The hallmarks of predatory behaviour of peer review of an enterprise are the very badly conducted peer review as a result of not getting the right and appropriate peer reviewers.

Why they are thriving (root causes) and how to curb them

- The drivers of predatory behaviour can be attributed to; (i) The commercialization of the profit-driven nature of publishing, and (ii) The publish or perish mode of thinking.
- On peer review systems, there is a lack of transparency and recognizing the role played by peer reviewers and rewarding them, by, for example, waiving their fees.
- Incentivizing peer reviewers by, for example, by publishing or recognizing their peer reviewer publications and making the peer review process transparent. This will not only improve the problem of predatory behaviour or fraudulent behaviour but at the same time, it will support the local journals so that they can become quality journals.
- Publication/APC fees are usually way beyond that of ordinary researchers, even with the benefit of a waiver on the fees. This puts off researchers and they instead fall back to other journals.
- One of the issues that fuel predatory journals is that they have sort of names that show that they come from high-income countries. Many journals from high-income countries have high-impact journals and when people start publishing journals from the western world, they are happy because they are publishing high-impact journals. But then for the impact, do we need to have this issue of high impact? *“As long as my article can be found in the journal, it doesn’t matter what the impact is.”*

- There is a need to have very strong African journals - for example, the East African Medical Journal. It, unfortunately, died as a result of everybody running to journals from Europe and the US because they are from high impact countries.

The threat of predatory practices to global and African science, if left unchallenged

- There is hesitancy to participate by African on peer-reviewing when a journal is in Africa - whether it is indexed in Scopus or a web of Science, however, when it is an international journal, there is active participation.
- When you send your article out to publish in some of the open access journals, you'll notice that sometimes or often they are rejected because they are from Africa even though they made use of high-tech equipment, followed standard procedures, they will look for flaws to reject your publication. The discrimination against African scientists is because the research carried out in Africa has more benefits to Africans.

Personal insights and experiences

- Listing in Scopus does not guarantee that it is accredited.

What academies can do to help

- Promoting local journals and fighting predatory publishers: There is a need to promote African journals to enable them to rise to international status and the need for active participation in peer-reviewing. The peer-review also needs to engage in training.
- Some of the good journals in Africa are not indexed in Scopus and unfortunately, such journals are grouped under predatory but in fact, they may not be predatory.
- Supporting local journals: Case of Ethiopian Academy of Science – It started supporting and accrediting local journals; the basic idea of that accreditation is by it trying to see the quality of the journal and developing a system which the Ethiopian Academy of Science has developed. This approach has since been taken up by the Ministry and now local journals are being accredited; if they are not accredited, they are not viable journals within the country.
- National academies need to support the local journals and bring them up to quality so that they can be competitive on the world stage which takes a long process to reach that stage.
- If the promotion committees or the academies deal with every journal from any region, from any part of the world, if it is not indexed, then we can concentrate more on the quality of the paper published or the journals themselves.
- *Recommendations for librarians and indexers:* Universities should prepare lists of predatory journals that have been flagged so that their staff can at least be aware of them.

Personal insights and experiences

- *"Either you make research or you don't make research. We have to face the fact that we are in an international competition and we have to align ourselves with the top scientists out there. It is a good idea to focus on a couple of local papers where we insist that it must be quality. We need to de-focus on predatory journals and focus on quality. Quality assurance is not something that scientists want, but I think they should focus on it rather than this predatory idea."* Jens Anderssen
- *Marking predatory articles: Experience shared by Khalid; "I had a previous discussion with the Scopus Advisory Board on the presence of this predatory literature that is available. I said that, "if you have predatory literature in your database then why are you not putting a mark on non-peer-reviewed articles so that the reader can know when they are doing bibliographic research that an article is not peer-reviewed and that it is a predatory journal?" but unfortunately, they didn't like that and they said that, "Okay, we are discussing at length about predatory journals but we cannot remove the literature from our database." But when I suggested putting this mark of predatory behaviour of literature, unfortunately, they did not accept - they said that "It is not a predatory board that advises that." So, this marking thing is something I don't like but it is now a solution to mark these predatory articles on their database."*
- *Pre-publishing on predatory journals and predatory practices: experience shared by Okoli Solomon. "When publishing, one question that we should ask ourselves is what is our driving force in publishing? Most of us as young researchers just want our work to be seen out there, we don't know much about the publishing company we want to be publishing with. When I started, I just wanted my work to be seen and it was only later in my career that I realized that most of my published work at the beginning of my career was actually in predatory journals. And the driving drivers were the costs because they were cheaper - and they were more accessible than the bigger journals. So where do we go from here? I look at my work and ask myself, "Can I retract this work because I feel ashamed of myself starting off with a predatory journal?" Now, I'm an associate editor in a medium-sized journal where my journals are being published and this journal is indexed in reputable databases. So I think we should ask ourselves the driving force in publishing to be able to cope with the incidence of publishing in predatory journals because they are everywhere."*

Question:

Can I retract a paper that was published in a predatory journal?

Response by Susan Veldsman:

Through investigations and interviews from stakeholders this was found to be quite difficult. In the IAP Working Group, there were quite a number of incidences they tried to retract articles that fell to these practices. The internet has a very large and deep footprint that gets established in a matter of minutes once publishing and indexing online are done.



CLOSING REMARKS

By **Professor Nobert Hounkonnou** | *NASAC President*

Prof. Hounkonnou thanked NASAC and IAP for making the meeting a success. He also thanked all participants for their valued contributions during the webinar; this insight, he said, gives much confidence in combating predatory academy practices. Such a resolve, he stressed, needs to be fair, resolute, constant, and adaptable.

He urged academics to work towards stemming this vice that cuts at the core of ethical research and poses a security risk on the intellectual property of a scientist. Academies, he said, must advocate for the mainstreaming of publishing, conferencing, and peer-reviewing good practice into continuous professional development and research integrity across all academia. He confirmed, that as a network, will find avenues to continuously advocate at the regional stage for the reform of research, and evaluation while the academies advocate the same on the national stage.

In closing, he stated, *"We also need to decolonize our mentalities and work for Africa, and align with good international competitive standards."*

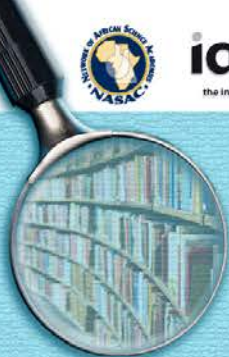
By **Tracey Elliot** | *IAP Project Director*

Ms. Elliot thanked all participants for making time to attend the webinar and actively participating and informed them about the following:

- The IAP Study report will be finalized early 2022; it will freely be available for everyone.
- Materials for the webinar will be made available online on NASAC and IAP web pages.
- With dissemination and outreach at its core, some researchers in different parts of the world including Africa, will be given small grants to help with the dissemination of these materials locally to raise awareness among the research community.
- The discussion on predatory practices will be continued after the Webinar.

By **Jackie Kado** | *NASAC Executive Director*

Ms. Kado thanked all participants for their active participation in AMASA 21 and for their positive review of the webinar content, the extent of learning, and what should be done for future initiatives. From the outcome of the webinar, she stated that a lot needs to be done to curb predatory practices starting with science academies who are members of NASAC. There is a further need to actively promote African journals if predatory academic practices are to be combatted successfully.



APPENDIX 1

Results of the Exit Poll

No.	Question/Responses	%
1.	Are you satisfied with the Webinar?	
	Very Satisfied	55%
	Satisfied	42%
	Somewhat satisfied	3%
2.	<i>Please select the statement that best applies to you as a result of this webinar</i>	
	My understanding of predatory practices is much improved and I feel better equipped to avoid them	73%
	My understanding and ability to avoid the practice is slightly better now	21%
	My understanding and ability to avoid predatory practices is unchanged	6%
3.	<i>For future webinars</i>	
	Need more explanation of predatory practices	3%
	Need tools and resources to avoid them	42%
	Need courses and how to address them	15%
	Need regional and global perspectives	18%
	Perspectives from other sources .e.g., publishing	21%



APPENDIX 2

Chat Messages

Jens Adersen: Is it not perfectly legal and acceptable for anybody to start a company and set up a journal?

Okoli Solomon Chieloka: Can I retract a paper published in a predatory journal?

Harriet Mayanja: Some newer “business model” academic institutions do not really mind about this. Is there any international system which addresses such issues at some Universities?”

Pamela Moussav: Some time it is the price (1000 dollars and more) in true journals that is difficult. We need to decrease the price for publication.

Khalid El Bairi: Thanks for the great topic. In fact, this was long awaited particularly for young researchers in LMICs. Currently, it is well known that predatory journals infiltrate indexing databases such as Scopus and PubMed. In the case of Scopus, it indexed hundreds of predatory journals in its database and later removed them but the non-peer-reviewed contents of these predatory journals still exist on Scopus, so how can we detect this when doing bibliographic research? I think it is time to ask Scopus advisory board to mark this predatory literature on their database to help researchers avoid reading and citing them. The IAP initiative may have an impact on this perspective. Thanks again!

Khalid El Bairi: DOAJ is not a good criterion because predatory journals can infiltrate this database. The predatory behaviour of journals should contain several parameters not only DOAJ and COPE memberships. These initiatives should verify with indexed journals if they conduct real peer reviews which is not performed by indexing databases unfortunately.

David Niyukuri (BCYS)/Burundi: What can be done for new emerging journals (e.g.: East African Health Research Journal) to ensure they get the required standards of academic journals?

Omena Bernard Ojuederie: I am a member of the editorial board of a good new journal for underutilised legumes which is 3 years old. Articles go through rigorous peer review before papers are accepted and published. How can good upcoming journals avoid being classified as predatory journals because they are not indexed in Scopus or Web of Science.

Khalid El Bairi: I am an academic editor in several good journals with triple indexing (Scopus, WoS, and PubMed) and published by prestigious Publishers such as Springer Nature, and as you know this job has no salary. We invest too much energy and time to conduct serious peer reviews for free to these for-profit journals. When we have an accepted paper in their open access journals, they ask us to pay the fees even if we are their editors that work for no charges. I think it is time to classify them as predatory as well. These Publishers are real predators so it seems to me that all of them are predatory. Thanks.

Omena Bernard Ojuederie: Thanks Dr. Edmond Sanganyado you actually spoke what I have in mind with regards to the discrimination against African research by most of the Open Access Journals. One often gets a rejection by African scientists if their research was only conducted in African even though hi-tech facilities were used and standard procedures adhered to.

Madeleine Markey: I work on the African Studies journals at Taylor & Francis. Regarding Editors publishing in their journals, we have seen this occasionally, when Editors have checked with us how this would work and they are contributing, for example, to a debate roundtable. It is always ensured that in the peer review system, the paper is assigned to a different handling Editor, so the submitting Editor has no oversight of the peer review for their own paper. It is essential that all papers be peer-reviewed by a minimum of two external peer reviewers, and that the submitting Editor has no involvement with their own paper.

Oyewale Tomori: Edmond, you raised important issues about DECOLONISING ourselves, not just from journals, we are predated upon by fraudulent groups in every aspect of our life. We need to free ourselves by diligent adherence to quality and high standard of performance.

Eka Braide: One push factor for publishing in predatory journals in many African Universities is the emphasis on a number of publications rather than on the quality of publications for promotion. Another factor is higher scores for 'Oversea' journals. Eka Braide, President Nigerian Academy of Science.

David Niyukuri (BCYS)/Burundi: Regarding DECOLONISING ourselves, sometimes we do not want to submit our paper in a journal (African) where editors have like 80% of their own publications in questionable journals!

Rabab Rashwan, ASRT Egypt: Eka, for the last point raised, it is very important to make all non-indexed journals on the same evaluation process regardless of the region.

Madeleine Markey: On peer review, some journals are starting to include stated policies and requirements about having at least one peer reviewer from the country or region of focus. For example, Critical African Studies has the following policy: "Reviewers are selected according to their expertise in the area of the submitted paper and we seek to have at least one reviewer from the country or region that is the focus of the article."

Madeleine Markey: Similarly, on citation practices, an example policy: "Please reflect on your citation practices and ensure that you have cited African authors and, in particular, authors from the country or countries you are writing about."

Teketel Yohannes – Ethiopian Academy of Sciences EAS: The Ethiopian Academy of Sciences does evaluation of local/National journals based on criteria set based on international standards and the Ministry of Science and Higher Education did the Accreditation. In 2020, 32 journals were evaluated and 16 were accredited. In 2021 we are working on the evaluation of 38 journals.

Khalid El Bairi: I think we should continue discussing this topic between us by creating a working group on predatory publishing in LMICs (why not). The talks were great and we have the power to make some recommendations to be published. Here is my email if you are interested: k.elbairi@ump.ac.ma (Khalid El Bairi from Morocco).

APPENDIX 3



List of Participants

NAMES	COUNTRY	ORGANIZATION
Dr. Le Quoc	Vietnam	108 Military Central Hospital
Prof. Souhaib Aammou	Morocco	Abdelmalek Essaadi University
Ms. Lucia Steele	Italy	AboutScience
Ms. Huda Iqbal	United Arab Emirates	Abu Dhabi University
Dr. Omar Abbas	United Arab Emirates	Abu Dhabi University
Ms. Rabab Rashwan	Egypt	Academy of Scientific Research and Technology (ASRT)
Dr. Gashaw Kebede	Ethiopia	Addis Ababa University
Prof. Masresha Fetene	Ethiopia	Addis Ababa University
Dr. Sha'aibu Samuel	Liberia	AFENET
Dr. Hamed Helal	Egypt	Al-Azhar University
Mr. Mohamed Darwish	United Arab Emirates	American University of Ras Al Khaimah
Dr. Ganiyu Oseni	Nigeria	Aminu Kano Teaching Hospital, Kano
Dr. Ghada Abady	Egypt	Animal production research institute
Dr. Manju Babu	Bahrain	Bahrain Polytechnic
Prof. Jens Enevold Thaulov Andersen	Botswana	BIUST
Dr. Leonard Omadang	Uganda	Busitema university
Mrs. Menchie Armillo	United Arab Emirates	Canadian University Dubai
Dr. Khalid El Bairi	Morocco	Cancer Biomarkers Working Group, Oujda, Morocco
Mr. Souleymane Sogoba	Mali	Cellule de Planification et de Statistique du Secteur Développement Rural
Dr. Josiline Chigwada	Zimbabwe	Chinhoyi University of Technology
Dr. Martin Evans	United Kingdom	Coventry University
Dr. Mónica Carrera	Spain	CSIC
Mr. Pep Rotllant	Spain	CSIC
Ms. Priyansha Gupta	India	CSIR-NIO, DONA PAULA, GOA, INDIA
Prof. Shaymaa Kassab	Egypt	Damanhour University
Dr. Moahammed Ahmar Uddin	Oman	Dhofar University
Mr. Lovel Fornah	Sierra Leone	EBK university
Iryna Kuchma	Lithuania	EIFL
Mrs. Rima Kupryte	Lithuania	EIFL
Samir Hefnawy	United Kingdom	Emerald Publishing
Mrs. Sophie Allieu	Sierra Leone	Ernest Bai Koroma University of Science and Technology
Dr. Randa Hanie Awadeen	Egypt	Faculty of Pharmacy - Mansoura University

NAMES	COUNTRY	ORGANIZATION
Irena Njezic	Serbia	Faculty of Veterinary Medicine
Mr. Tomaž Krpič	Slovenia	FDV, UL
Dr. Julian Schmoke	United States of America	Federal Student Aid
Dr. Okoli Chieloka	Nigeria	FMARD
Lemonde Bouafou	Côte d'Ivoire	French National Research Institute for Sustainable Development
Dr. George Thomas	Switzerland	Frontiers
Mrs. Joanna Błasiok	Poland	Gdansk University of Technology
Mrs. Nino Pavliashvili	Georgia	Georgian Integrated Library & Information System Consortium 2017
Ms. Natali Giorgobiani	Georgia	Georgian Integrated Library Information System Consortium
Dr. Manu Rathee	India	Health University
Ms. Sophia Nordt	United States of America	InterAcademy Partnership (IAP)
Tracey Elliott	United Kingdom	InterAcademy Partnership (IAP)
Ms. Susan Veldsman	South Africa	InterAcademy Partnership (IAP)
Dr. Taniya Purkait	India	ICMAB-CSIC
Mrs. Hind Al Yaqoobi	Oman	IMCO
Dr. Marian Andriana	Republic of Moldova	Imsp scm Gh.Paladi
Miss Judith González Lavín	Spain	INCAR-CSIC
Katarina Meglić	Serbia	Institut za nuklearne nauke Vinča
Dr. Jana Valuchova	Slovakia	Institute of Inorganic Chemistry SAS
Dr. Santiago Ramon-Maiques	Spain	Instituto de Biomedicina de Valencia
Dr. Teresa Stoepler	United States of America	InterAcademy Partnership (IAP)
Ms. Hamideh Memari	Iran	Iran ISSN National Centre, National Library and Archives of Iran
Miss Novsheena Rasool	India	Lust Awantipora Pulwama
Mr. Rolex Erik	Uganda	Kampala University
Dr. Florence Oringe	Kenya	Kenyatta University
Ms. Naila Akram	Saudi Arabia	King Saud University, Saudi Arabia
Dr. Yukiko Morita	United Kingdom	King's College London
Dr. Oluwakemi Thonda	Nigeria	Kings University Odeomu
Dr. Ibraheem Abdul-Azeez	Nigeria	Lagos State University
Ms. Ksenija Savic	Serbia	Library of the Faculty of Civil Engineering, University of Belgrade
Mr. Raymond Tumwesigye	Uganda	Lira university
Prof. Harriet Mayanja-Kizza	Uganda	Makerere University
Silvenus Konyole	Kenya	Masinde Muliro University of Science & Technology
Ms. Judith Nabukenya	Uganda	Mbarara University of Science and Technology
Dr. Imane Belkourati	Morocco	Mci santé animale
Mr. Obinna Ajah	Nigeria	Michael Okpara University of Agriculture, Umudike
Mr. Jonthan Bvunzawabaya	Zimbabwe	Midlands State University
Ms. Sara Nagy	Egypt	Minia University
Dr. Hudson Kigen	Kenya	Ministry of Health, Kenya
Dr. Henry Jonathan	Oman	Modern College of Business and Science
Dr. Irene Minja	Tanzania	Muhimbili University of Health and Allied Acienes (MUHAS)
Maryam Amour	Tanzania	Muhimbili University of Health and Allied Acienes (MUHAS)

NAMES	COUNTRY	ORGANIZATION
Mr. Michael Perera	Oman	National University of Science and Technology, Oman
Prof. Igle Gledhill	South Africa	Network of African Science Academies (NASAC)
Ms. Jackie Kado	Kenya	Network of African Science Academies (NASAC)
Prof. Norbert Hounkonnou	Benin	Network of African Science Academies (NASAC)
Mr. Vitalie Lacubitchii	Republic of Moldova	Nicolae Testemitanu State University of Medicine & Pharmacy
Dr. Omena Ojuederie	Nigeria	Kings University, Nigeria
Ms. Safa Al-Abdali	Oman	Nizwa collage of technology
Mr. Philip Gana Malgwi	Nigeria	Posterity Consult
Dr. Glenhill Duong	United States	Purdue University
Mrs. Namujuzi Teddy	Uganda	Makerere University
Dr. Janneke van Dijk	Zimbabwe	SolidarMed Zimbabwe
Prof. Sahar El-Shatoury	Egypt	Suez Canal University
Mrs. Rania Azad	Iraq	Sulaimani Polytechnic University
Ms. Nitasha Devasar	India	Taylor & Francis
Dr. Vincent Ojeh	Nigeria	Taraba State University Jalingo
Mrs. Madeleine Markey	United Kingdom	Taylor & Francis
Mr. Stephanas Galinnya	Uganda	Uganda Christian University
Mrs. Sylvia Muriuki	Kenya	United States International University - Africa
Dr. Pamela Moussavou	Gabon	Université Sciences et Techniques de Masuku
Dr. Victorien Dougnon	Benin	University of Abomey - Calavi
Miss Innocenter Amima	New Zealand	University of Auckland
Muhammad Taqiyuddin	New Zealand	University of Auckland
Miss Soukayna Alami	Hungary	University of Debrecen
Prof. Jacques Doumbé	Cameroon	University of Douala/Cameroon
Miss Yuliyana Todoorva	Bulgaria	University of Economics - Varna
Prof. Jean-Pierre Mufusama	Congo	University of Kinshasa
Mr. Mutwale Paulin	Democratic Republic of Congo	University of Kinshasa
Mr. Yves-Dady Botula	Democratic Republic of Congo	University of Kinshasa
Prof. Sogo Matlala	South Africa	University of Limpopo
Mr. Mwajim Bukar	Nigeria	University of Maiduguri
Dr. Vidushi Neergheen	Mauritius	University of Mauritius
Dr. Hamilton Oporum	Nigeria	University of Port Harcourt
Mr. Moses Vincent	Nigeria	University of Port Harcourt
Prof. Olufemi Adesope	Nigeria	University of Port Harcourt
Prof. Judicaël Obame	Gabon	University of Science and Technology of Masuku
Ms. Syeda Farzana	Oman	University of Technology and Applied Sciences
Mr. Guillem Perarnau	Spain	Universitat Politècnica de Catalunya (UPC)
Ms. Jacqueline Owigo	Kenya	United States International University - Africa
Dr. Ross MacDonald	Qatar	Weill Cornell Medicine
Mr. Masimba Makoni	Zimbabwe	Women's University in Africa
Mr. Khalil Swelam	Egypt	Zag University
Dr. Kolawole Odubote	Zambia	Zambia Academy of Sciences
Prof. Oyewale Tomori	Nigeria	Nigerian Academy of Science (Nigeria)



Appendix 4

Webinar Agenda

12.00-12.10 **Welcome and Introduction**

Professor Hounkonnou, NASAC President, and Susan Veldsman, Co-Chair of IAP Study.

Moderators:

Jackie Kado (NASAC Executive Director) and Tracey Elliott (IAP Project Director) - lead pre-webinar "live" poll of participants.

12.10-12.35 **Introducing predatory journals and conferences: Learning from the IAP study**, led by IAP Working Group members [pre-recorded].

12.35-13.50 **Panel discussion: Predatory academic practices in the African research community.**

- Up to five-minute interventions each on personal insights and/or national contexts, and response to the IAP study.
- **Professor Victorien Dougnon**, IAP Working Group member (Benin).
- **Rabab Rashwan**, IAP Working Group member (Egypt).
- **Susan Veldsman**, IAP Working Group Co-Chair (South Africa).
- **Professor Asfawossen Asrat Kassaye**, IAP Working Group member (Ethiopia).
- **Professor Oyewale Tomori**, Nigerian Academy of Science (Nigeria).
- **Dr. Harriet Mayanja-Kizza**, Ugandan National Academy of Sciences (Uganda).
- **Dr. Edmond Sanganyado**, Zimbabwe Young Academy (Zimbabwe).
- **Khalid El Bairi**, Cancer Biomarkers Working Group, Oujda, Morocco.

A moderated discussion will explore:

- Ways to identify predatory journals and conferences.
- What to do if you think you have been scammed by one.
- Why they are thriving (root causes) and how to curb them.
- The threat of predatory practices to global and African science, if left unchallenged.
- Personal insights and experience. What academies can do to help.
- **Interactive questions and answers with online registrants.**

13.50-14.00 **Closing remarks**

- Forthcoming IAP report and small grants programme.
- Short post-webinar evaluation poll.

NASAC was established on 13th December 2001 in Nairobi, Kenya, under the auspices of the Inter Academy Panel, currently known as the Inter-Academy Partnership (IAP).

NASAC is a consortium of merit-based science academies in Africa and aspires to make the “voice of science” heard by policy and decision makers within Africa and worldwide.

NASAC is dedicated to enhancing the capacity of existing national science academies and champions the cause for creation of new academies where none exist.

At the time of printing, the following academies constituted the membership of NASAC:

- African Academy of Sciences (AAS)
- Algerian Academy of Science and Technology (AAST)
- Académie Nationale des Sciences, Arts et Lettres du Bénin (ANSALB)
- Botswana Academy of Sciences (BAS)
- Académie Nationale des Sciences du Burkina (ANSB)
- Burundi Academy of Sciences and Technology (BAST)
- Cameroon Academy of Sciences (CAS)
- Académie Nationale des Sciences et Technologies du Congo (ANSTC)
- Académie des sciences, des arts, des cultures d’Afrique et des diasporas africaines, Cote d’Ivoire (ASCAD)
- Academy of Scientific Research and Technology, Egypt (ASRT) - *Provisional Member*
- Ethiopian Academy of Science (EAS)
- Ghana Academy of Arts and Sciences (GAAS)
- Kenya National Academy of Sciences (KNAS)
- Madagascar’s National Academy of Arts Letters and Sciences
- Mauritius Academy of Science and Technology (MAST)
- Hassan II Academy of Science and Technology in Morocco
- Academy of Sciences of Mozambique (ASM)
- Nigerian Academy of Science (NAS)
- Rwanda Academy of Sciences (RAS)
- Académie des Sciences et Techniques du Sénégal (ANSTS)
- Academy of Science of South Africa (ASSAf)
- Sudanese National Academy of Science (SNAS)
- Tanzania Academy of Sciences (TAS)
- Académie Nationale Des Sciences, Arts Et Lettres du Togo (ANSALT)
- Tunisia Academy of Sciences Arts and Letters
- Uganda National Academy of Sciences (UNAS)
- Zambia Academy of Sciences (ZaAS)
- Zimbabwe Academy of Sciences (ZAS)

The NASAC Secretariat
Miotoni lane, Off Miotoni Road
Karen, Nairobi, Kenya
Tel: +254 712 914285
Email: nasac@nasaonline.org
website: www.nasaonline.org



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