WEBINAR SERIES

From Research to Publication: A Researcher's Guide to Open Access

ChronosHub

How Does Open Access Fit with Funder Requirements?

April 21, 2022

CHRONOSHUB WEBINAR

PRESENTING TODAY

Romy Beard

Publisher Relations at ChronosHub

Laura Davidson

Customer Care Specialist at ChronosHub

Researcher

How Does Open Access Fit with Funder Requirements?

TODAYS AGENDA

1. Funders & open access
2. Review of the basics in the context of funders
3. Sample funder policies & funding eligibility requirements
4. Common issues & resources

LET’S GET POLLING!

Is your research funded?

WHAT IS A FUNDER

Research funders issue research grants ($) to cover researchers' projects

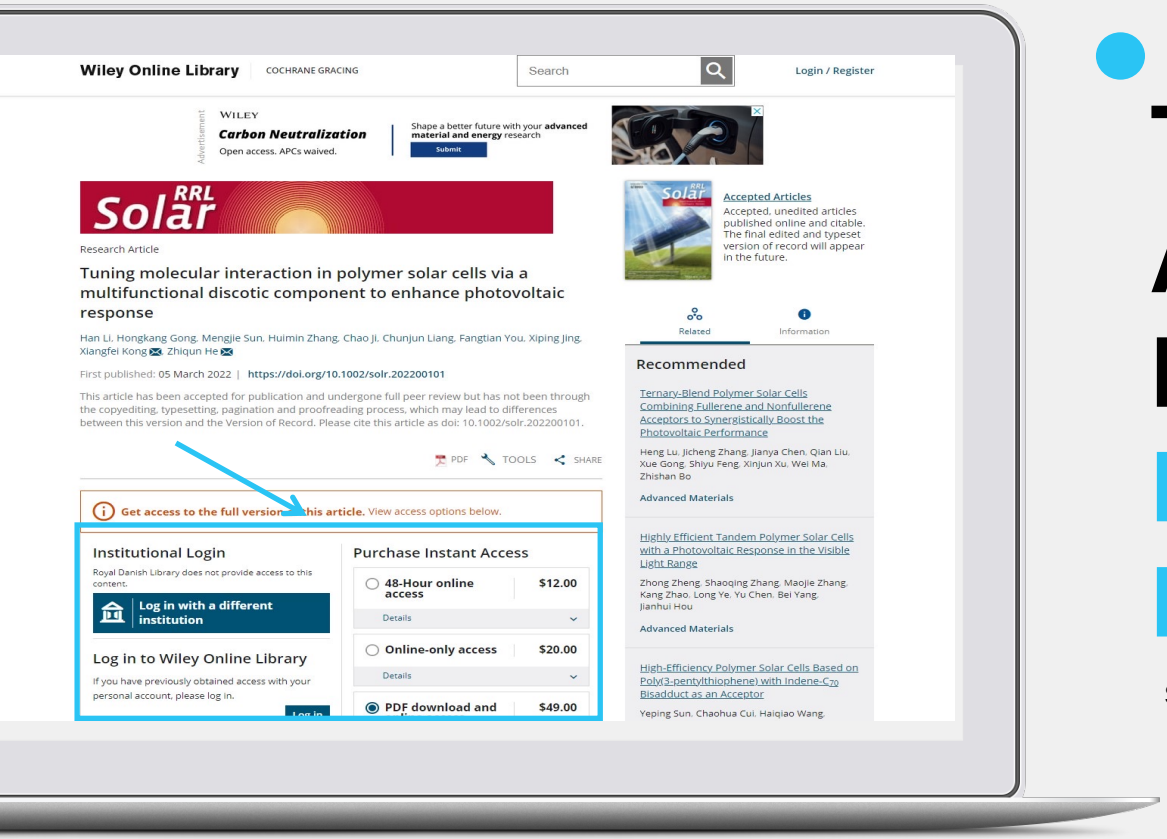
Grants can cover: salary, supplies/research equipment, travel expenses, charges required to get the work published, including Article Processing Charges for OA publishing.

UK Research and Innovation

Swiss National Science Foundation

Luxembourg National Research Fund

Source: https://www.openaccess.nl/en/what-is-open-access



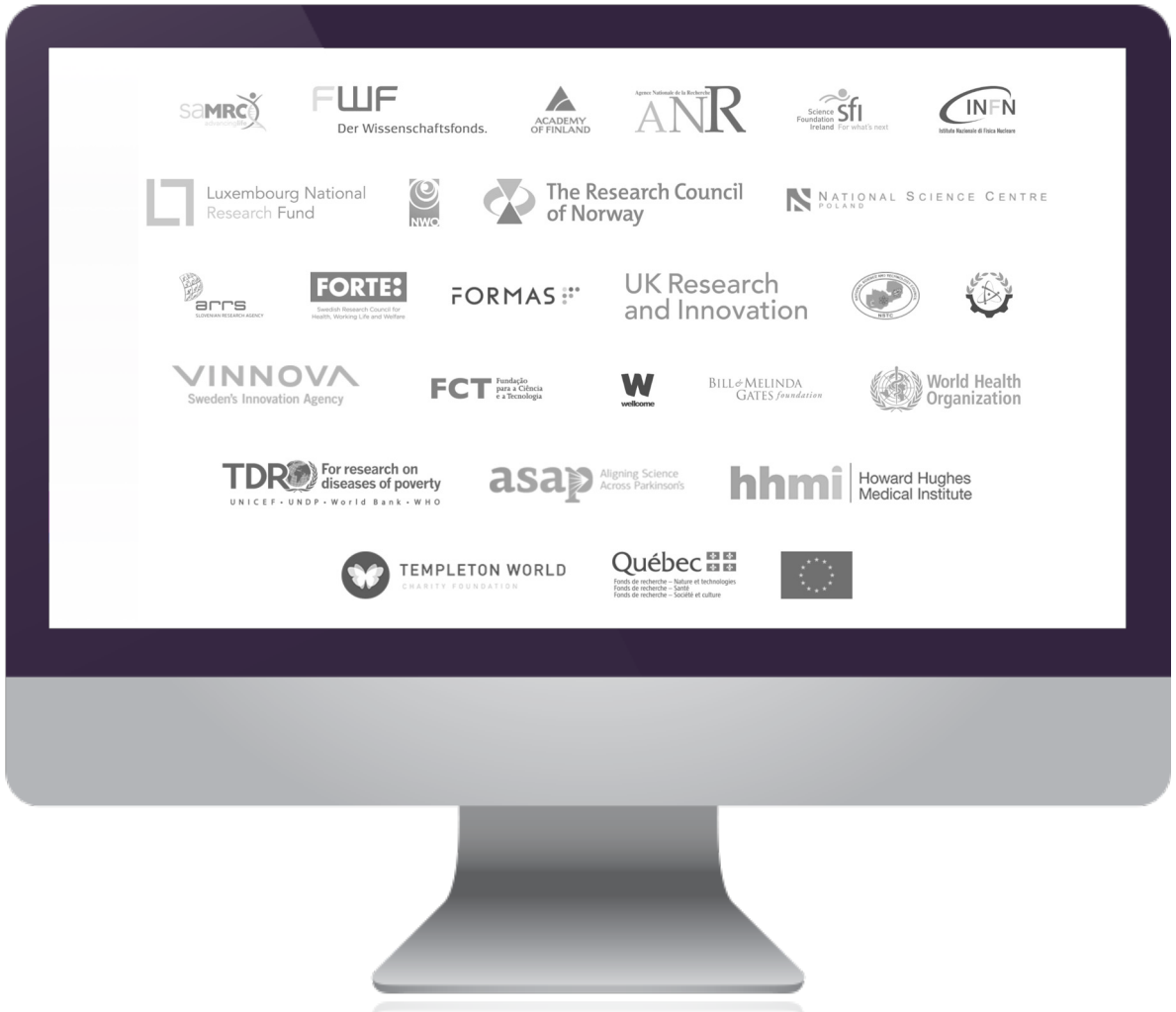
THE ISSUE: ARTICLES PAID FOR BY FUNDER MONEY REMAIN BEHIND THE PAYWALL

Subscription or paywalled article.

FUNDER OA POLICIES

- Public money being spent on research but the content is locked behind the paywall
- OA progress too slow via green route
- Can be related to national strategies
- cOAlition S and Plan S

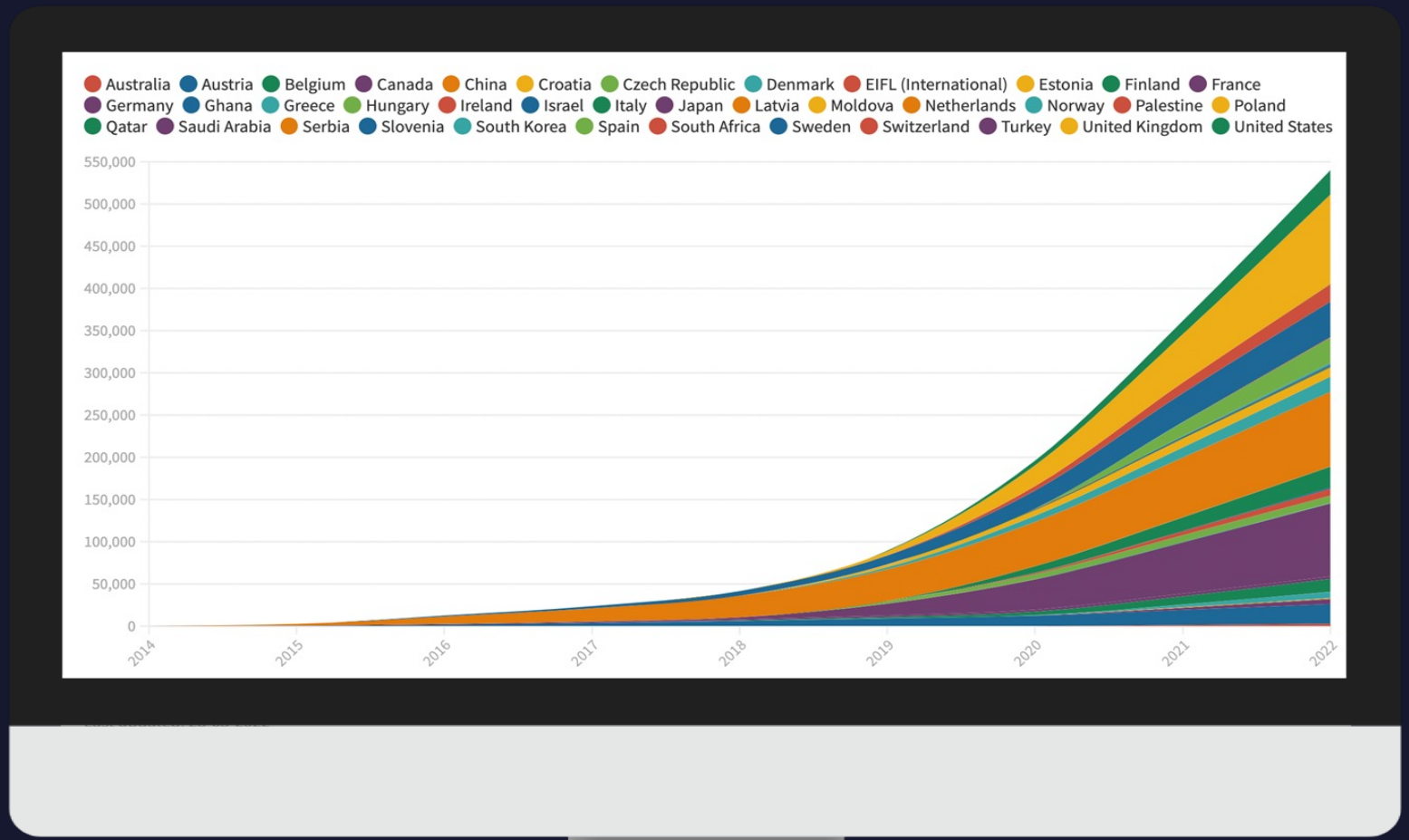
COALITION S FUNDERS & PLAN S



"With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories without embargo."

EFFECTS OF PLAN S ON OA AGREEMENTS

MORE ON THIS IN WEBINAR 4: INSTITUTIONAL AGREEMENTS, 12TH MAY



SOURCE: https://esac-initiative.org/market-watch/

VERSIONS OF ARTICLES

Submitted Version
The version that the author submitted to the publisher's submission system

Author Accepted Manuscript – AAM
The version of the article that was accepted by the publisher: includes reviews of the article (subject to acceptance) but without final editing, layout, typesetting, etc.

Version of Record – VoR
Final publisher's PDF

Seven temperate terrestrial planets around the nearby ultracool dwarf star TRAPPIST-1

Michaël Gillon[1], Amaury H. M. J. Triaud[2], Brice-Olivier Demory[3,4], Emmanuël Jehin[1], Eric Agol[5,6], Katherine M. Deck[7], Susan M. Lederer[8], Julien de Wit[9], Artem Burdanov[1], James G. Ingalls[10], Emeline Bolmont[11,12], Jeremy Leconte[13], Sean N. Raymond[13], Franck Selsis[13], Martin Turbet[14], Khalid Barkaoui[15], Adam Burgasser[16], Matthew R. Burleigh[17], Sean J. Carey[10], Aleksander Chaushev[17], Chris M. Copperwheat[18], Laetitia Delrez[1,4], Catarina S. Fernandes[1], Daniel L. Holdsworth[19], Enrico J. Kotze[20], Valérie Van Grootel[1], Yaseen Almleaky[21,22], Zouhair Benkhaldoun[15], Pierre Magain[1], Didier Queloz[4,23]

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One focus of modern astronomy is to detect temperate terrestrial exoplanets well-suited for atmospheric characterisation. A milestone was recently achieved with the detection of three Earth-sized planets transiting (i.e. passing in front of) a star just 8% the mass of the Sun 12 parsecs away[1]. Indeed, the transiting configuration of these planets combined

PERSPECTIVE

Solar RRL
www.solar-rrl.com

Electrodeposition as a Versatile Preparative Tool for Perovskite Photovoltaics: Aspects of Metallization and Selective Contacts/Active Layer Formation

Diego Di Girolamo and Danilo Dini**

Perovskite-based photovoltaics (PV) is expected to play a central role in sustainable energy production during the next decades. Several companies are investing intensively to develop a market-ready product with efficiency and stability rapidly improving. The craft of making perovskite solar cells (PSCs) consists in the art of thin-film deposition, with electrodeposition (ED) representing one of the most versatile techniques available. The ED's role in the development of perovskite PV with its advantages, drawbacks, and perspectives is analyzed herein. The ED of inorganic or organic/polymeric selective contacts enables high-efficiency devices. Moreover, by exploiting properly designed functional barriers it is possible to rely on ED for the metallization of perovskite solar cells through the deposition of copper. The latter aspect could be particularly relevant for the development of silicon/perovskite tandem PV at the TW scale. On the other hand, the ED of the active layer is less successful to date mainly due to solubility issues of the perovskite in electrochemical polar solvents.

1. Introduction

In general terms, electrodeposition (ED) can be defined as the electrochemical technique that allows the deposition of thin films onto a conductive substrate the deposited film being a product of a redox reaction driven electrochemically. To a certain extent, ED could be considered a hybrid approach that shares most of the advantages of both chemical and physical thin-film deposition techniques. ED is conducted from precursor solutions without the need for vacuum as most printing/coating techniques. In contrast, ED allows a strict and direct control over nucleation and growth of the target film like gas phase-based techniques. As it will be discussed in the conclusive part of this perspective article (vide infra), ED is gaining momentum in the photovoltaics (PV) industry mainly due to the promising results on copper metallization with the primary intention of replacing the screen-printed silver busbars in silicon PV. However, in thin-film PV, the versatility of ED could be exploited much more intensively with respect to what is presently accomplished with ED in the ambit of PV. Perovskite PV is the emerging thin-film technology within PV and with regard to ED, the surface enclosing the potentialities of PV has been just scratched. In this perspective article, we will report a concise description of the fundamental theory of ED in the initial section. In the successive section, the advancements concerning the ED of selective contacts will be reviewed including a discussion of the potentialities and limits of active layer electroplating. In the final section, the recent developments on metallization for perovskite solar cells (PSCs) via ED will be highlighted.

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DOI: 10.1002/solr.202100993

2. ED for PV Purposes: General Features

Figure 1 shows the experimental electrochemical setup (an ordinary three-electrode cell) for the conduction of an ED process (sketch 1a), and the voltammogram (plot 1b) and the chronoamperogram (plot 1c) recorded with the apparatus of 1a when a hole-transporting layer of NiOOH is electrodeposited onto indium tin oxide (ITO).[1] This specific case is characterized by the presence of a nucleation loop in the voltammogram (Figure 1b), which is originated from the succession of the redox processes of oxidative electrodeposition of NiOOH and oxygen evolution reaction (OER) when the potential is scanned in the region of oxidative ED.

The loop is originated by the increasing electrochemical activity of the ITO substrate (working electrode (WE)) after the NiOOH is deposited on ITO. In the cathodic branch, the deposit of NiOOH is reduced to the Ni(II) hydroxide $Ni(OH)_2$. With the appearance of the loop, cyclic voltammetry becomes a useful technique to identify the potential range within which ED takes place. The chronoamperogram starts with a low current value

Most funders allow both routes

PUBLISHING OA

- The VoR (final PDF) is made OA immediately upon official publication in the journal
- No delay
- It is available to read for free on the publisher's website
- No action required from author
- Under an open license
- Depends on author's choice
- Possible cost to the author

VS

ARCHIVING IN OA

- The author needs to put their AAM into an institutional (or subject) repository
- Sometimes an embargo (6-12 months)
- The AAM is only accessible via the repository, the VoR is still behind closed access on the publisher's site
- No action from the publisher in making the article OA
- Usually, no license applies
- Depends on publisher's permissions
- No cost to the author (some exceptions)

TYPES OF OPEN ACCESS

Hybrid Open Access = Open Access Publishing in a hybrid journal, where open access and closed access articles co-exist. APC applies for open access articles – not always eligible for funding..

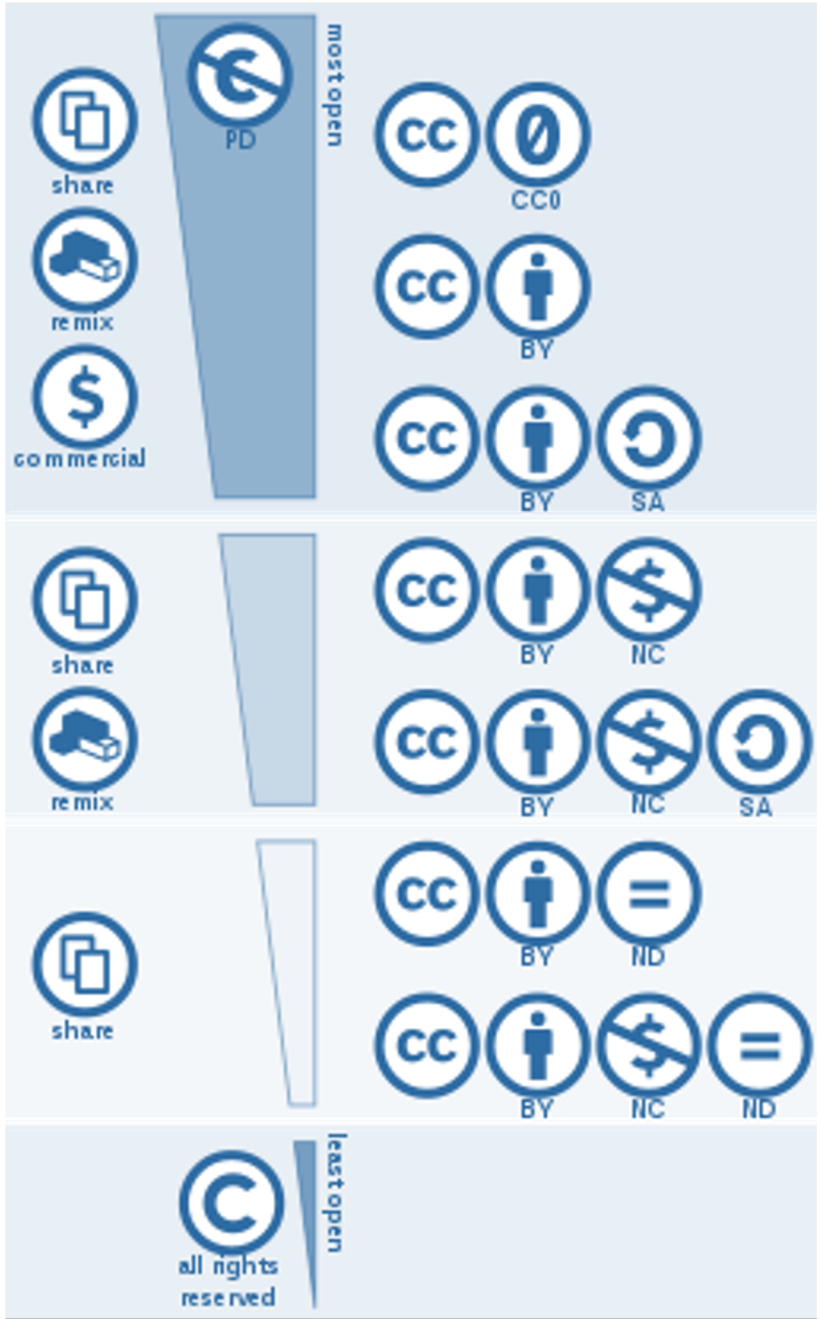
Gold Open Access = Open Access publishing in a Gold, or fully open access journals, which include only open access journals Some gold journals charge APCs, others do not. Usually eligible for funding.

- **Bronze:** Articles are made free-to-read on the publisher website, without an explicit open license. This could be for a limited time only, for example a promotion, or during Covid. No APCs.

- **Diamond/Platinum = Open Access publishing:** Publish in open access and the fees are covered by other models such as volunteer work, donations, subsidies, and grants. No APCs.

Green Open Access = archiving: Publish in the journal of your choice, deposit a version of the publication (the final publisher version, or Version of Record, or the Author Accepted Manuscript (AAM) in a repository and make it publicly available in Open Access, sometimes after an embargo period set by the publisher. Generally, No APCs . Accepted as a compliant route by most funders, some require 0 embargo.

SOURCE: https://onderzoektips.ugent.be/en/tips/00000461/



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- **CC BY-NC-ND – Attribution Non-Commercial-No- Derivs:** allows others to download your works and share them with others as long as they credit you but can't change them in any way or use them commercially.

SOURCE: https://creativecommons.org/share-your-work/public-domain/freeworks/

DEFINITIONS OF TERMS

PI: Principal Investigator

They are in charge of a project and/or research grant.

Grantee:

The person who has received funding.

Grant ID/ Project ID:

The funder issues the grantee with a grant number. Both grant number and grantee need to match.

SAMPLE POLICY: FONDS NATIONAL DE LA RECHERCHE

FNR - LUXEMBOURG

Fonds National de la Recherche Luxembourg

- Requirement that research published as a result of FNR funded research is published OA.
- OA policy applies to research funding given after 2017 and PRIDE funding from 2016.

This can be achieved via two routes:

- "…by depositing the publication in a sustainable online repository (subject-specific, institutional or other) either immediately or after an embargo period defined by the publisher."
- "…by making the publication openly available from the publishers' website immediately, which may require payment of Open Access fees, usually called article processing charges (APCs) by the author(s). This is called 'Gold or Hybrid Open Access'."

SOURCE: https://www.fnr.lu/funding-instruments/open-access-fund/

APC PAYMENT ELIGIBILITY: FNR

Fonds National de la Recherche Luxembourg

- FNR will pay towards publishing in gold and hybrid journals
- Max APC funding of 2,500 EUR for gold and 1,500 EUR for hybrid
- Must be published immediately OA (no embargo)
- Must acknowledge FNR and the grant number in the article
- The grant must have been given after 1st January 2017 (certain types of grants)
- CC-BY license required

SAMPLE POLICY: SWISS NATIONAL SCIENCE FOUNDATION

SNSF

Swiss National Science Foundation

- Grantees required to make “all SNSF-funded research results they publish publicly accessible without any restrictions.”
- “Applies to all publications that are regarded as scientific output (e.g. articles, book chapters, books.)”

This can be achieved via two routes:

- Immediate open access (gold, hybrid)
- Delayed open access (green)
    - “Embargo period of a maximum of 6 months for articles, and 12 months for books and book chapters.”
    - “The version published in open-access format must be at least the author’s accepted version (AAV), i.e. including the changes made after peer review (but without the publisher’s layout).”
    - “Availability in an institutional or discipline-specific repository, i.e. unrestricted access without any need for registration; permanent, free access to the publications.”

SOURCE: https://oa100.snf.ch/en/funding/guidelines/

APC PAYMENT ELIGIBILITY: SNSF

Swiss National Science Foundation

- Only pay APCs for fully open access/gold journals/ journals that are in the DOAJ
- There is a maximum funding limit and amounts over the amount can be considered on a case-by-case basis
- Must be published immediately OA (no embargo)
- Must acknowledge SNSF and the grant number in the article
- APC funding applicants must be grantees and authors
- No specification about licence

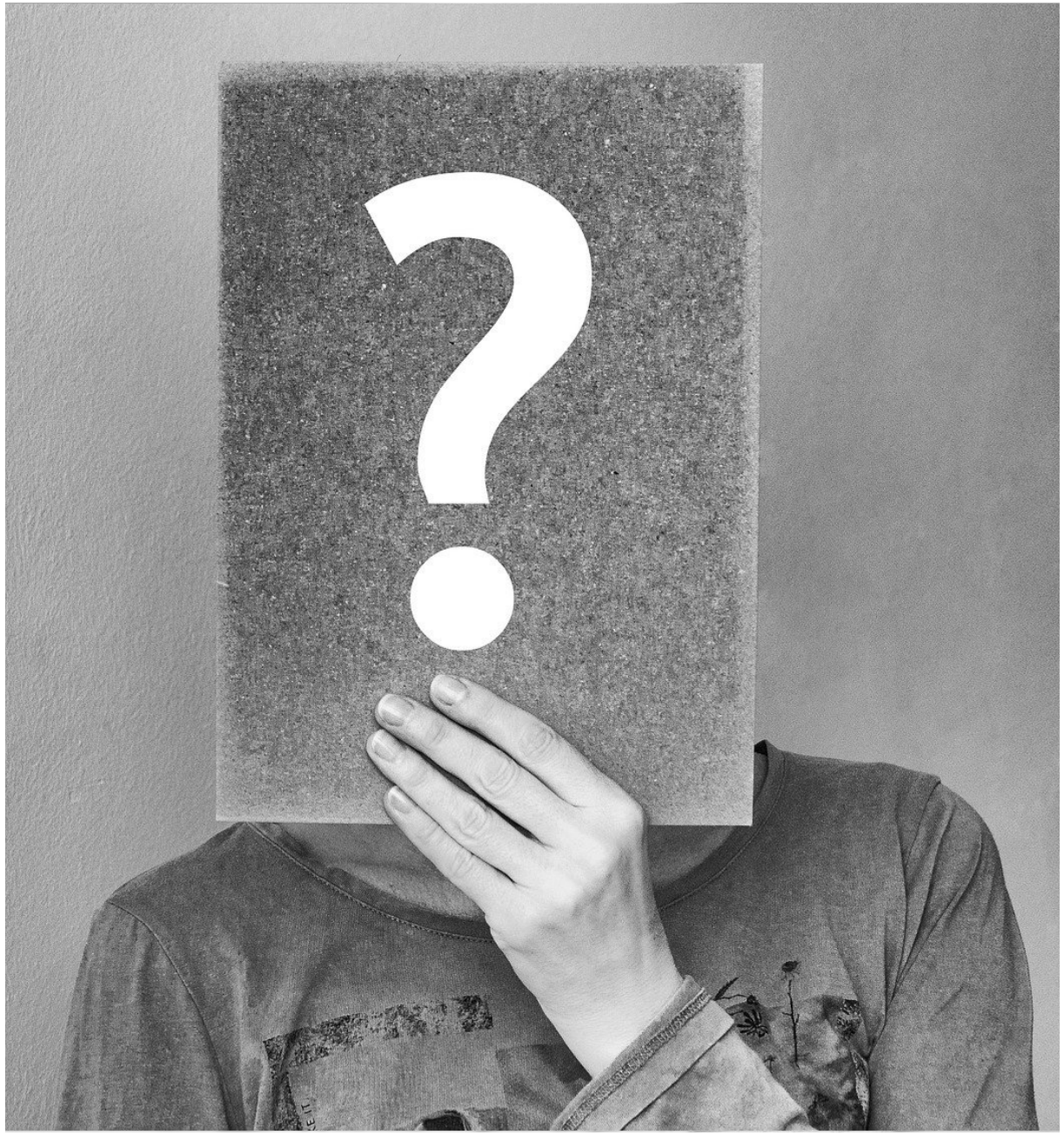
SNSF JOURNAL FINDER & SUBMISSION PORTAL FOR FUNDED AUTHORS

Swiss National Science Foundation

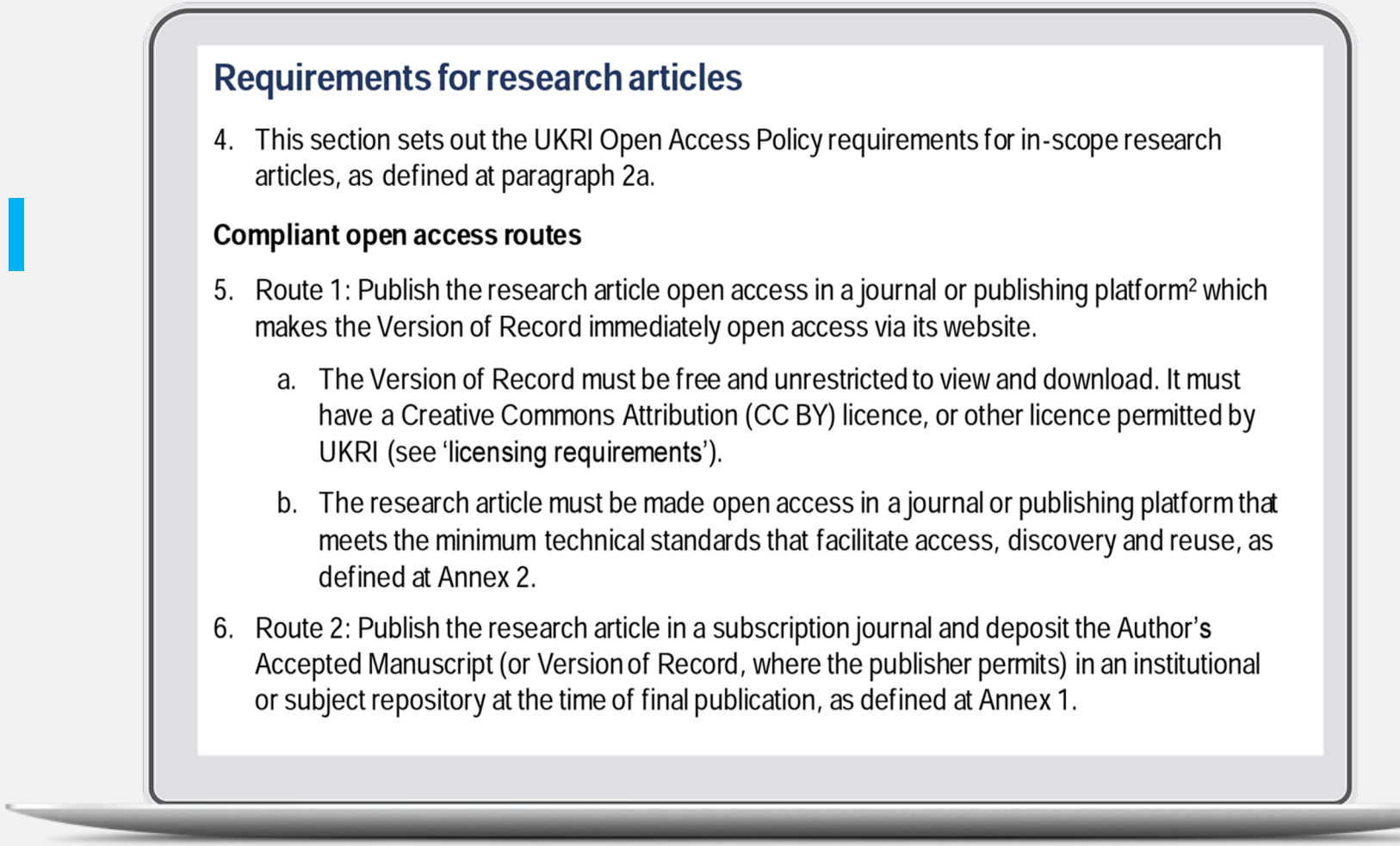
QUESTION

Frequently asked question from ChronosHub Customer Support

> I am a PhD student and I am going to submit a manuscript under the supervision of my Principal Investigator. Our project is related to grant 123456. Will my funder fund the Open Access publication charge?



SAMPLE OA POLICY: UKRI



Requirements for research articles

4. This section sets out the UKRI Open Access Policy requirements for in-scope research articles, as defined at paragraph 2a.

Compliant open access routes

5. Route 1: Publish the research article open access in a journal or publishing platform[2] which makes the Version of Record immediately open access via its website.
    a. The Version of Record must be free and unrestricted to view and download. It must have a Creative Commons Attribution (CC BY) licence, or other licence permitted by UKRI (see 'licensing requirements').
    b. The research article must be made open access in a journal or publishing platform that meets the minimum technical standards that facilitate access, discovery and reuse, as defined at Annex 2.
6. Route 2: Publish the research article in a subscription journal and deposit the Author's Accepted Manuscript (or Version of Record, where the publisher permits) in an institutional or subject repository at the time of final publication, as defined at Annex 1.

https://www.ukri.org/wp-content/uploads/2021/08/UKRI-090222-UKRIOpenAccessPolicy-4.pdf

UKRI FUNDING RESTRICTIONS

Although publishing OA in a hybrid journal is compliant with UKRI's policy via Route 1, it's important to note that UKRI block grants cannot be used to pay Article Processing Charges (APCs) for articles published in hybrid journals unless the article is published under a Jisc-approved transitional agreement (TA) or in a transformative journal that meets the sector's criteria for transformative journals.

SOURCE: https://www.jisc.ac.uk/content/open-access/our-role

UKRI POLICY COMPLIANCE VS FUNDING ELIGIBILITY

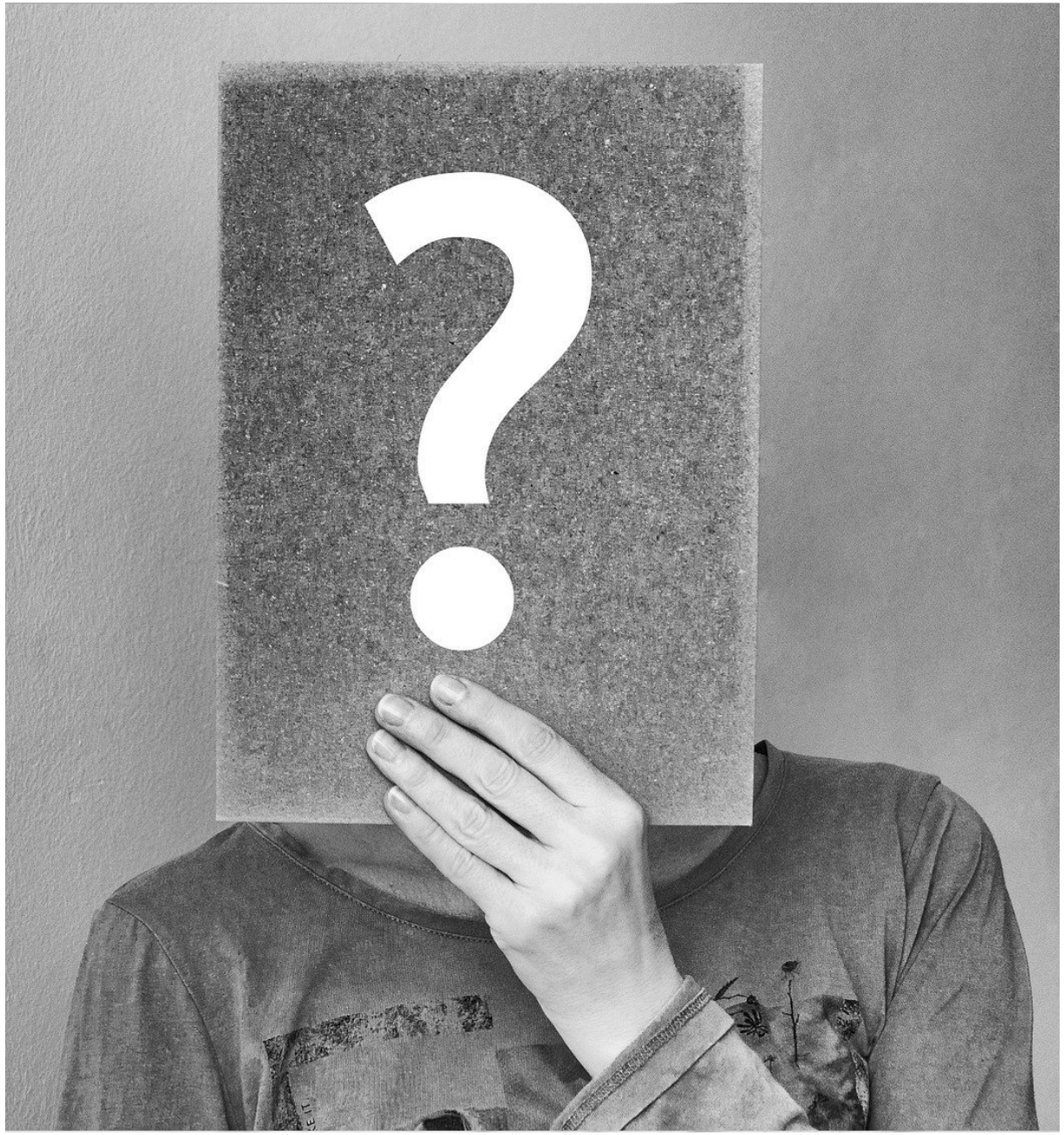
Journal type	Publishing option	Licence [1]	UKRI policy compliant?	Eligible for UKRI funding?
Fully open access	Open access	CC-BY	Yes	Yes
Hybrid	Open access	CC-BY	Yes	Yes, if journal is included in a transitional agreement that author's affiliated institution is signed up to
Hybrid	Open access	CC-BY	Yes	Yes, if journal is transformative journal according to sector criteria
Hybrid	Closed access	CC-BY	Only if VoR or AAM is archived with CC-BY licence, without embargo	No
Subscription	Closed access	CC-BY	Only is VoR or AAM is archived with CC-BY licence, without embargo	No

SOURCE: https://www.jisc.ac.uk/content/open-access/our-role

QUESTION

Frequently asked question from
ChronosHub Customer Support

“Why won't my funder cover the APC for my article?”



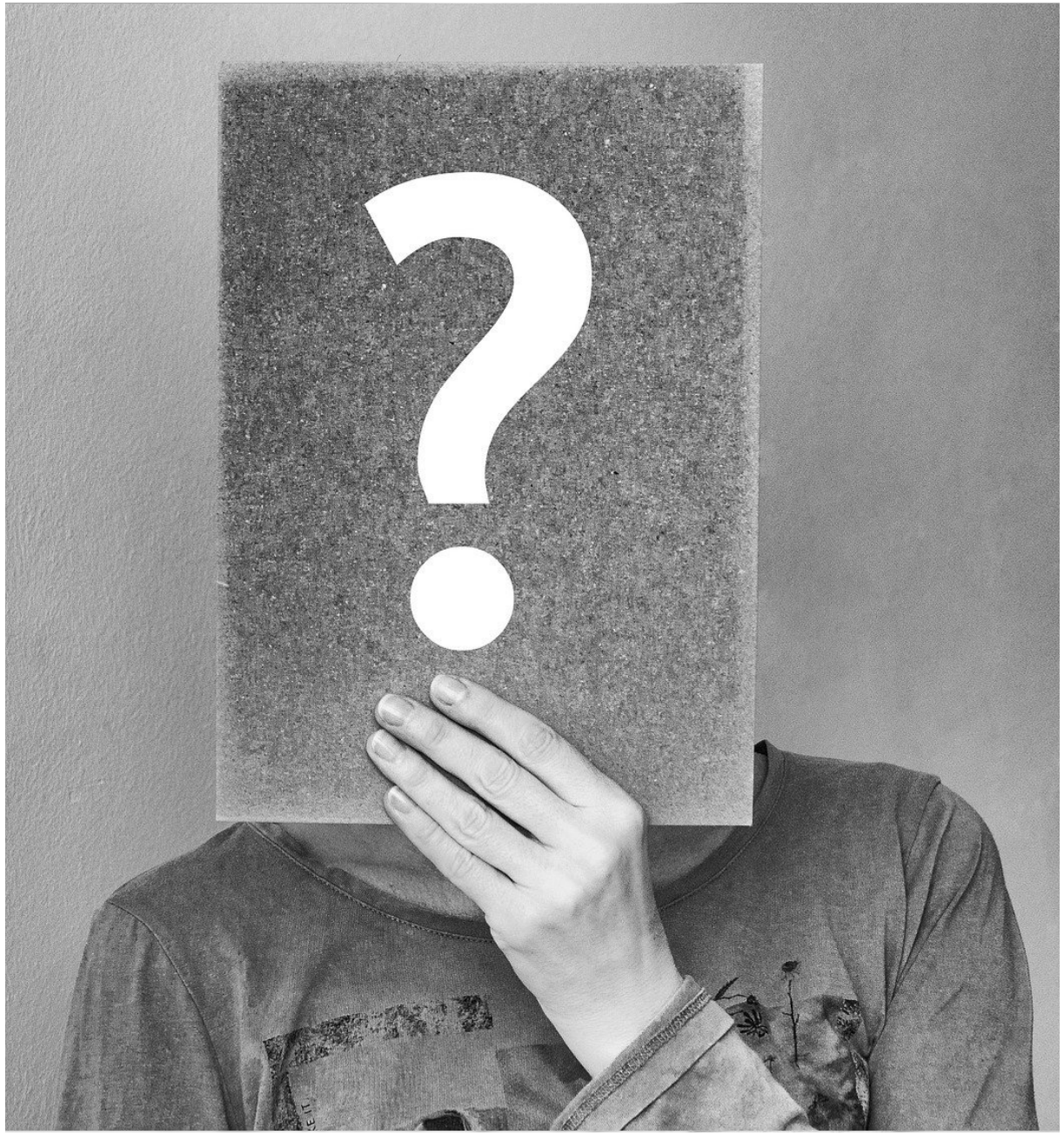
COMMON ISSUES

- The wrong license has been selected (funder requirement)
- The journal type (i.e., hybrid) is not eligible for payment by the funder
- The article is compliant with OA policy, but the APC cannot be paid for
- There are additional charges on the invoice that are not covered by the funder and will have to be paid using money from elsewhere
- The embargo period is longer than funder regulations

QUESTION

Frequently asked question from ChronosHub Customer Support

> I did not qualify for Open Access funding so I chose the green route. However, I discovered that the embargo period is 18 months and my funder requires an embargo of 6 months. What can I do?



SNSF EMAIL TEMPLATE FOR REDUCING EMBARGO

Standard e-mail for contacting publishers

Dear Sir or Madam,

The article “TITLE” is the result of research funded by the Swiss National Science Foundation (SNSF). Researchers who were awarded an SNSF grant are required to provide open access to publications containing the results of their research. Accordingly, at least the ‘author’s accepted manuscript’ of an article needs to be made available within 6 months of initial publication in an institutional or discipline-specific repository.

In order to satisfy the SNSF requirement and be able to continue publishing in “Name of journal” in the future, I kindly ask you for permission to publish the ‘author’s accepted manuscript’ of my article after 6 months in a not-for-profit repository.

RIGHTS RETENTION STRATEGY

Plan S

- Last resort if publishers do not offer compliant routes, authors can add a statement to their submission that they are applying a CC-BY license to their AAM as required by their funder, in order to be compliant.
- *The research was funded in whole or in part by the Wellcome Trust [grant number]. For the purpose of Open Access, the author has applied a CC BY public copyright license to any Author Accepted Manuscript (AAM) version arising from this submission."*
- Public license applied overrules any later License to Publish or Copyright Transfer Agreement

SOURCE: https://www.coalition-s.org/rights-retention-strategy/

RESOURCES

Sherpa Romeo

- Check what you're allowed to do with an article (archiving)
- Includes special conditions for authors funded by certain funders

DOAJ

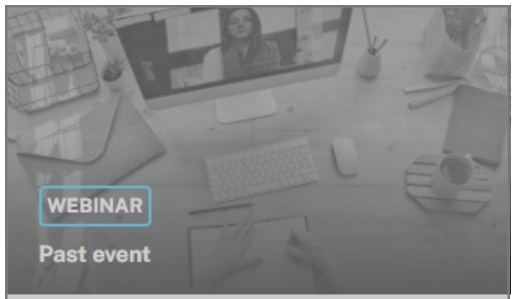
- Find Journals with OA options
  - Publisher's websites, usually split into lists for fully OA journals, and hybrid journals (author choice OA)
  - **DOAJ** lists 17,000 fully open access journals

ChronosHub

- **ChronosHub Journal Finder** 46,000+ journals, filter by journal type and other criteria – includes information about archiving options, licenses, and funder compliance

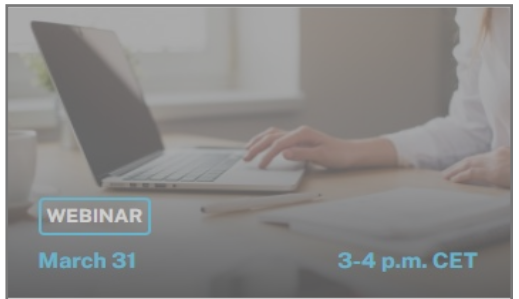
WEBINAR SERIES

From Research to Publication: A Researcher's Guide to Open Access



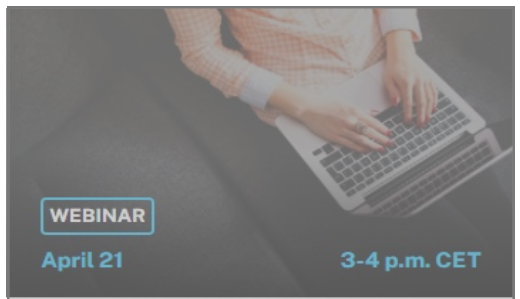
Why Should I Care About Open Access?

Don't miss the first part of our brand-new webinar series: From Research to Publication: A Researcher's Guide to Open Access. First in line is: Why Should I Care About Open Access?



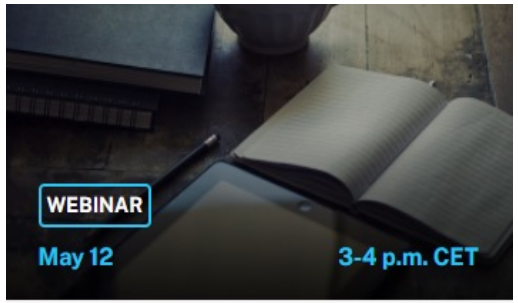
What's Up with APCs and How Do I Deal with Them?

For the second session in this webinar series, you can look forward to becoming a full expert on article processing charges (APCs)! The hosts for this webinar are Publisher Relations & Business Development Manager, Romy Beard and Customer Care Specialist & Researcher, Laura Davidson, who'll put their heads together and discuss APCs from a to z!



How Does Open Access Fit with Funder Requirements?

Understanding different funder requirements and the specific terms of a grant in relation to OA publishing is certainly no cakewalk. Tune in for our third session in our webinar series where we look closer at how Open Access fit with funder requirements.



What Do Open Access Agreements Entail?

Join us as we wrap up our researcher-centric webinar series with a final session where we'll look into why OA agreements are needed and how they come about in a practical sense. Because what exactly do these agreements entail? And what role do discounts, vouchers, and waivers play in this?

Sign up: chronoshub.io/events/

ChronosHub

QUESTIONS

KEEP IN TOUCH

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