



ACS Publications

Most Trusted. Most Cited. Most Read.

Worldwide initiatives in Open Science and open access

Open Science and Open access: where we are? Trends, opportunities and challenges

邁向開放取用 (OA) 的出版之路：現況與未來，一次搞懂

Sybille Geisenheyner – Director of Open Science Strategy & Licensing - ACS

August 26th, 2021

Agenda

報告大綱

ACS Open Science commitment on a timeline

ACS支持開放科學的承諾與發展歷史

ACS Author Survey

ACS作者調查

Recent policy developments

近期政策發展

Plan S and the Rights Retention Strategy

Plan S與權利保留策略

Copyright and Licensing

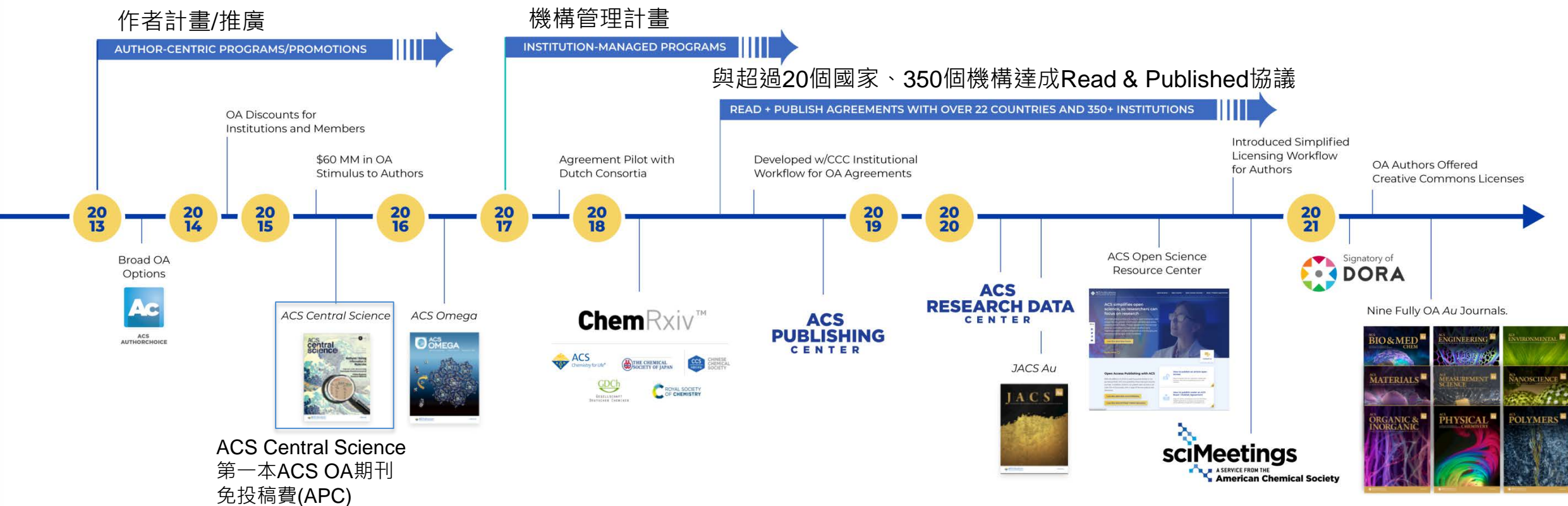
版權及許可授權

Some further reading

更多有關開放取用



ACS' Commitment to Open Science



DECEMBER 2020

2020 Open Access Survey

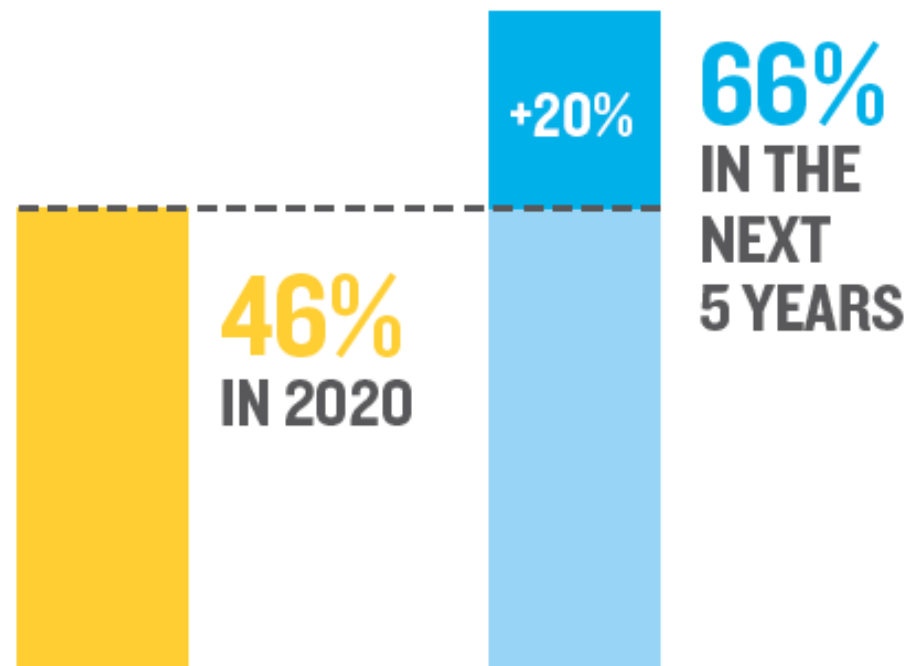
KEY FINDINGS



ACS Publications

How important is it to you to publish your research articles as open access? (Showing % “extremely” or “moderately important”)

您認為以開放取用形式發表研究論文有多重要？



Why is publishing open access an important consideration for you?

什麼是您考慮開放取用的重要因素之一？

I personally support open access principles

個人支持開放取用

51%

I want to increase the visibility to my research

想讓研究被更多人看到

51%

Funder requires that I publish open access

研究贊助者要求以開放取用發表

16%



ACS Publications

Would you prefer to publish in a traditional journal (HYBRID open access) with open access options or a publication that only publishes open access articles (GOLD open access)?
(Excludes those with no preference)

您比較傾向將文章出版於哪種期刊？

Traditional journal *with* open access options 有開放取用選項的傳統期刊



Fully open access publication 完全開放取用期刊

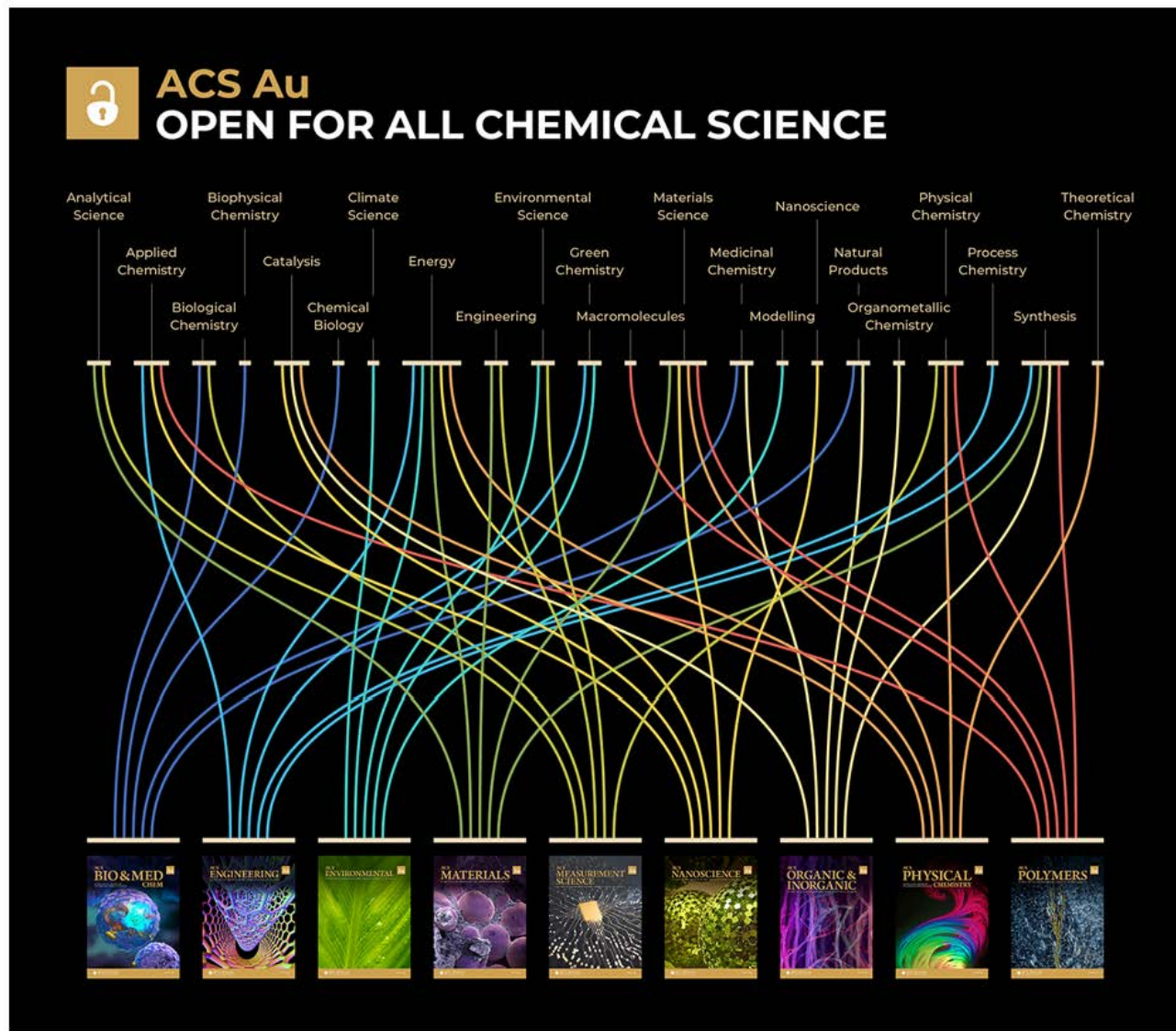


Traditional journal *without* open access options 無開放取用選項的傳統期刊



經過多年對於開放取用期刊的觀察與監測，
ACS於2021年新出了不同的開放取用期刊：

- ACS Au系列 - 包含9本不同領域的期刊
- JACS Au- 承襲ACS旗艦刊JACS的高品質



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JACS Au
AN OPEN ACCESS JOURNAL OF THE AMERICAN CHEMICAL SOCIETY

pubs.acs.org/jacsau

Article

Counterion Migration Driven by Light-Induced Intramolecular Charge Transfer

Ta-Chun Lin,[§] Zong-Ying Liu,[§] Shih-Hung Liu, Igor O. Koshevoy,^{*} and Pi-Tai Chou^{*}

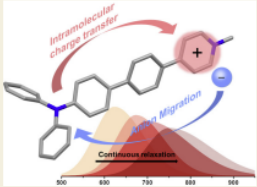
Cite This: *JACS Au* 2021, 1, 282–293

Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information

ABSTRACT: A series of D– π –A⁺ pyridinium compounds, in which D = –NPh₂ and A⁺ = –PyMe⁺ are linked by various amounts of linear phenyl spacers, were strategically designed and synthesized. Their characterization revealed the presence of excited-state intramolecular charge transfer (ESICT) that triggers a corresponding response from the counterion. In medium and strong polar solvents, the fast solvent relaxation occurring after ESICT overwhelms the counterion effect, showing typical emission solvatochromism. In weakly polar solvents, ESICT induces counteranion migration for electrostatic stabilization, the time scale of which is dependent on the radius of the counteranion, the length of the π -linker, and the viscosity of the solvent. In low-viscosity organic solvents such as toluene, counteranion migration occurs within several tens to hundreds of picoseconds, resulting in a time-dependent continuous emission that can be resolved from the spectral temporal evolution. Concrete evidence for this is provided by the chemical synthesis of a D– π –A⁺ pyridinium–sulfur trioxide[–] zwitterion, where anion migration is restricted due to its internally locked ion pair. As a result, only a single emission band can be observed. These comprehensive studies prove that the ion migration process may be significant for a wide range of ESICT-type ionic fluorophores. Such an ionic movement, triggered by optically pumped ESICT of the D– π –A⁺ dyad, is similar to the molecular machine driven by the redox reaction, but with a facile access and fast response.

KEYWORDS: donor–acceptor compounds, charge-transfer, counterion migration, pyridinium dyes, fluorescence, dual emission



INTRODUCTION

Artificial molecular machines/motors function by mimicking the naturally evolved biological function. Further, they have attracted considerable attention due to their immense potential in various applications.^{1–6} This has promoted a rapid development of a variety of systems capable of undergoing molecular motion in response to external impulses and stimuli. In chemistry, the ability to harness mechanical motion at the molecular level has triggered a boom in the design of smart

response to the redox process is relatively slow,³⁰ thus complicating the fulfillment of the criterion of switching response time. Alternatively, a photon-activated switch provides a fast response time and may not involve the formation of byproducts. This also enables the conduction of a kinetics study by means of the time-resolved probe, helping us to gain more insight into the associated mechanism.^{14,33–39}

Most of these approaches require a sophisticated molecular architecture and an advanced synthesis process, which may



Global Policy/Landscape Developments

全球也有許多贊助機構、研究機構開始制定開放取用相關政策

USA

- OSTP (Office of Science and Technology Policy) driving forward with stronger OA mandate
美國白宮科技政策辦公室推動OA相關規範
- Private funders Gates Foundation require immediate OA publication under a CC-BY license
私人蓋茲基金會要求立即以CC-BY授權OA出版
- HHMI announces policy to align with the principles of Plan S from 2022
HHMI宣布2022年起政策保持與Plan S一致

Europe

- Coalition S/Plan S Rights Retention Strategy
Coalition S/Plan S 權利保留策略
- Model Grant Agreement for Horizon 2021
2021 Horizon補助協議範本
- Continued uptake with transformative agreements
持續跟進轉型協議



Global Policy/Landscape Developments

全球也有許多贊助機構、研究機構開始制定開放取用相關政策

China

- Adopting 12 months embargo, funding APCs capped at \$2,850

採用 12 個月限制模式，
APC 贊助上限為 2,850 美元

India

- India pushes bold ‘one nation, one subscription’ journal-access plan

印度推行 “一國一訂閱” 的
期刊訂閱計劃



cOAlitionS & Plan S

Plan S於2018年9月發布，旨在促進開放取用出版



Plan S

One target 目標

“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.”

2021年起，所有受到國家贊助的學術研究論文都需發布於開放取用期刊、平台或知識庫。

Ten principles 十大原則

In addition:

- 01** Authors or their institutions retain copyright to their publications. All publications must be published under an open licence, preferably the Creative Commons Attribution licence (CC BY), in order to fulfil the requirements defined by the [Berlin Declaration](#).
- 02** The Funders will develop robust criteria and requirements for the services that high-quality Open Access journals, Open Access platforms, and Open Access repositories must provide.
- 03** In cases where high-quality Open Access journals or platforms do not yet exist, the Funders will, in a coordinated way, provide incentives to establish and support them when appropriate; support will also be provided for Open Access infrastructures where necessary.
- 04** Where applicable, Open Access publication fees are covered by the Funders or research institutions, not by individual researchers; it is acknowledged that all researchers should be able to publish their work Open Access.
- 05** The Funders support the diversity of business models for Open Access journals and platforms. When Open Access publication fees are applied, they must be commensurate with the publication services delivered and the structure of such [fees must be transparent](#) to inform the market and funders potential standardisation and capping of payments of fees.
- 06** The Funders encourage governments, universities, research organisations, libraries, academies, and learned societies to align their strategies, policies, and practices, notably to ensure transparency.
- 07** The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for [monographs](#) and book chapters will be longer and requires a separate and due process.
- 08** The Funders do not support the 'hybrid' model of publishing. However, as a transitional pathway towards full Open Access within a clearly defined timeframe, and only as part of [transformative arrangements](#), Funders may contribute to financially supporting such arrangements.
- 09** The Funders will monitor compliance and sanction non-compliant beneficiaries/grantees.
- 10** The Funders commit that when assessing research outputs during funding decisions they will value the intrinsic merit of the work and not consider the publication channel, its impact factor (or other journal metrics), or the publisher.



Plan S' routes to Open Access

除了發表至完全開放取用期刊及平台，或提供OA選項的訂閱制期刊以外，Plan S 也提供第三個選項——有轉型安排的訂閱制期刊。

	開放取用期刊或平台	提供OA的訂閱制期刊	有轉型安排的訂閱制期刊
	Open Access publishing venues (journals or platforms)	Subscription venues (repository route)	Transition of subscription venues (transformative arrangements)
Route	Authors publish in an Open Access journal or on an Open Access platform.	Authors publish in a subscription journal and make either the final published version (Version of Record (VoR)) or the Author's Accepted Manuscript (AAM) openly available in a repository.	Authors publish Open Access in a subscription journal under a transformative arrangement.
Funding	cOAlition S funders will financially support publication fees.	cOAlition S funders will not financially support 'hybrid' Open Access publication fees in subscription venues.	cOAlition S funders can contribute financially to Open Access publishing under transformative arrangements.

For any chosen route to compliance, the publication must be openly available immediately with a [Creative Commons Attribution license \(CC BY\)](#) unless an exception has been agreed by the funder.

<https://www.coalition-s.org/guidance-on-the-implementation-of-plan-s/>



Rights Retention Strategy

權利保留策略

Plan S 包括以下承諾

1. 保留智慧財產權以符合 OA要求
2. 確保文章被接受的版本(AAM) 或正式出版的版本(VoR) 必須是 Open License

Background

The Plan S guidance includes the following commitment:

“ *Where possible, cOAlition S members will ensure by way of funding contracts or agreements that the authors or their institutions retain copyright as well as the rights that are necessary to make a version (either the VoR, the AAM or both) immediately available under an open license. To this end, cOAlition S will develop or adopt a model 'License to Publish' for their grantees.* ”

To deliver on this commitment, cOAlition S Organisations will modify their funding agreements such that:

- › Authors (or their organisations) must retain sufficient intellectual property rights to comply with their Open Access requirements.
- › Authors (or their organisations) must ensure Open Access to the Author Accepted Manuscripts (AAMs) or the Version of Record (VoR) of research articles, at the time of publication. All research articles must be made available under a [Creative Commons Attribution](#) "CC BY" licence or equivalent or, by exception, if so decided by a cOAlition S Organisation, a [Creative Commons Attribution, NoDerivatives](#) "CC BY-ND" licence, or equivalent.

The grant agreement of most cOAlition S Organisations will stipulate that a Creative Commons Attribution "CC BY" licence or equivalent (or a Creative Commons Attribution, No Derivatives, "CC BY-ND" licence if agreed by the cOAlition S Organisation) will be applied to all future Author Accepted Manuscripts ("AAMs") as of the commencement of the grant.



ACS Open Access Licensing Options

- AuthorChoice has changed from a ,license‘ to a ,program‘
AuthorChoice從許可證模式轉為發表程序
- There is a dedicated Journal Publishing Agreement (JPA) now, that retains copyright with the author (Plan S compliant) when publishing Open Access
現在有專門的期刊出版協議 (JPA), 在以開放取用出版時保留作者的版權(符合 Plan S)
- There are then two Creative Commons licenses to chose from:
目前有兩種常見的創用CC授權選項

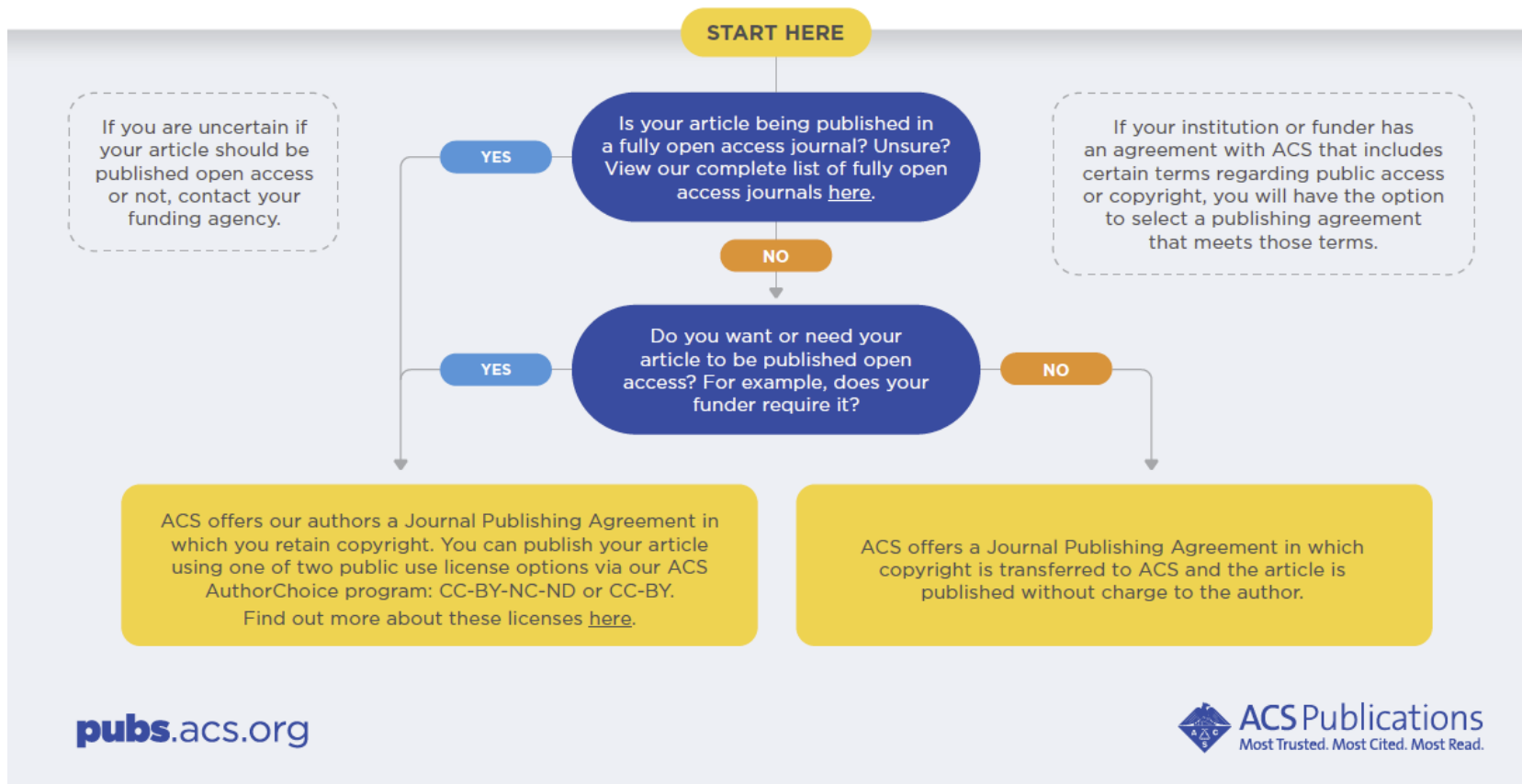


了解ACS新期刊出版協議(JPA)流程

Understanding the new Journal Publishing Agreement process

Congratulations on your article being accepted for publication!

Look for an email from us with a customized hyperlink that will guide you through the process of selecting the most appropriate Journal Publishing Agreement for your article. Please use the flowchart below to find out more information.



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ACS提供作者的開放取用選項

ACS Open Access Options for Authors

ACS完全開放取用期刊

ACS Fully Open Access Journals



Where can I read more?

<https://acsopenscience.org/>

Platinum Open Access

白金開放取用

ACS Central Science

Gold Open Access

金色開放取用

ACS Omega
JACS Au
ACS Au Collection
2021

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Gold Open Access

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Available in all
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ACS Read + Publish

ACS Read + Publish

- ACS Read + Publish Agreements seek to shift the relationship with an institution from a subscription-based model to one that more sustainably supports open access publishing.
ACS Read & Publish協議使ACS與機構的關係從訂閱模式轉為可以更穩定支持開放取用出版的模式
- Such agreements assist authors and institutions with meeting their goals of widespread open access publication while ensuring researchers have full access to ACS journal content.
此協議有助於作者及機構達到廣泛出版開放取用文章目標的同時，也有權限可以瀏覽所有ACS期刊。
- To date, ACS has partnered with hundreds of institutions in over 20 countries worldwide to establish ACS Read + Publish Agreements, including Germany's Max Planck Institutes, the U.K.'s JISC consortia, the Austrian Academic Library Consortium, and in the United States with LSU, Syracuse, Tulane, and Boise State
目前為止，ACS已經與超過20個國家的數百間機構達成此Read & Publish協議。



Moving from “Subscribe” to “Publish” model redirects costs toward high-output institutions

How do you balance over time?

5,000+ LOW-PUBLISHING SUBSCRIBING COMPANIES AND INSTITUTIONS

500–750 HIGH OUTPUT RESEARCH INSTITUTIONS



Read & Publish的挑戰：機構從”高閱讀量”逐漸轉移至”高發表量”，我們該如何平衡？



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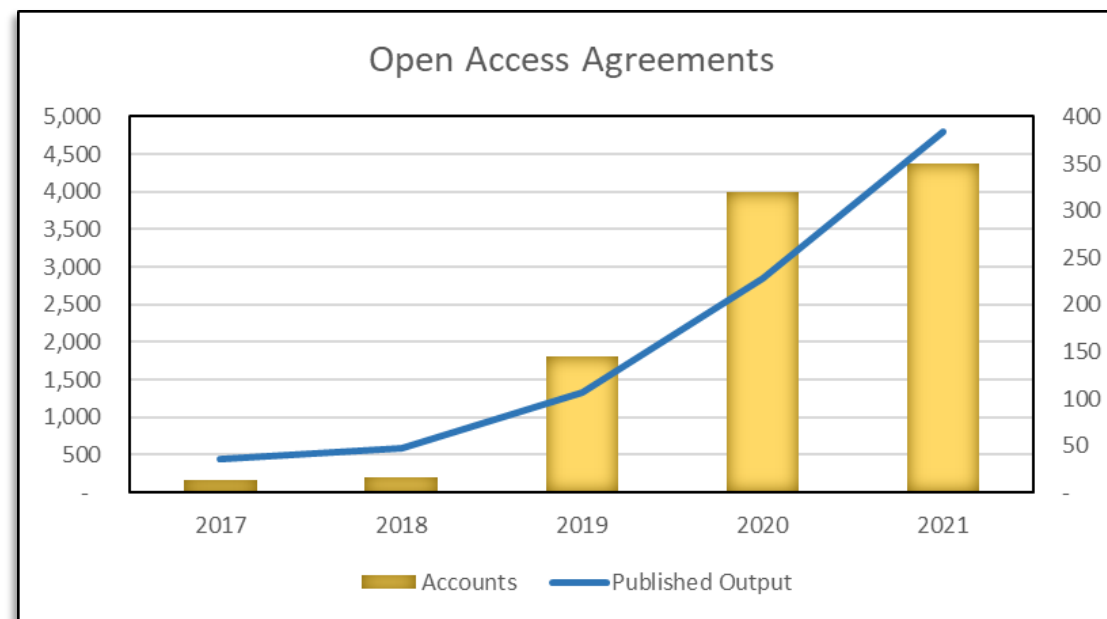


ACS Publications

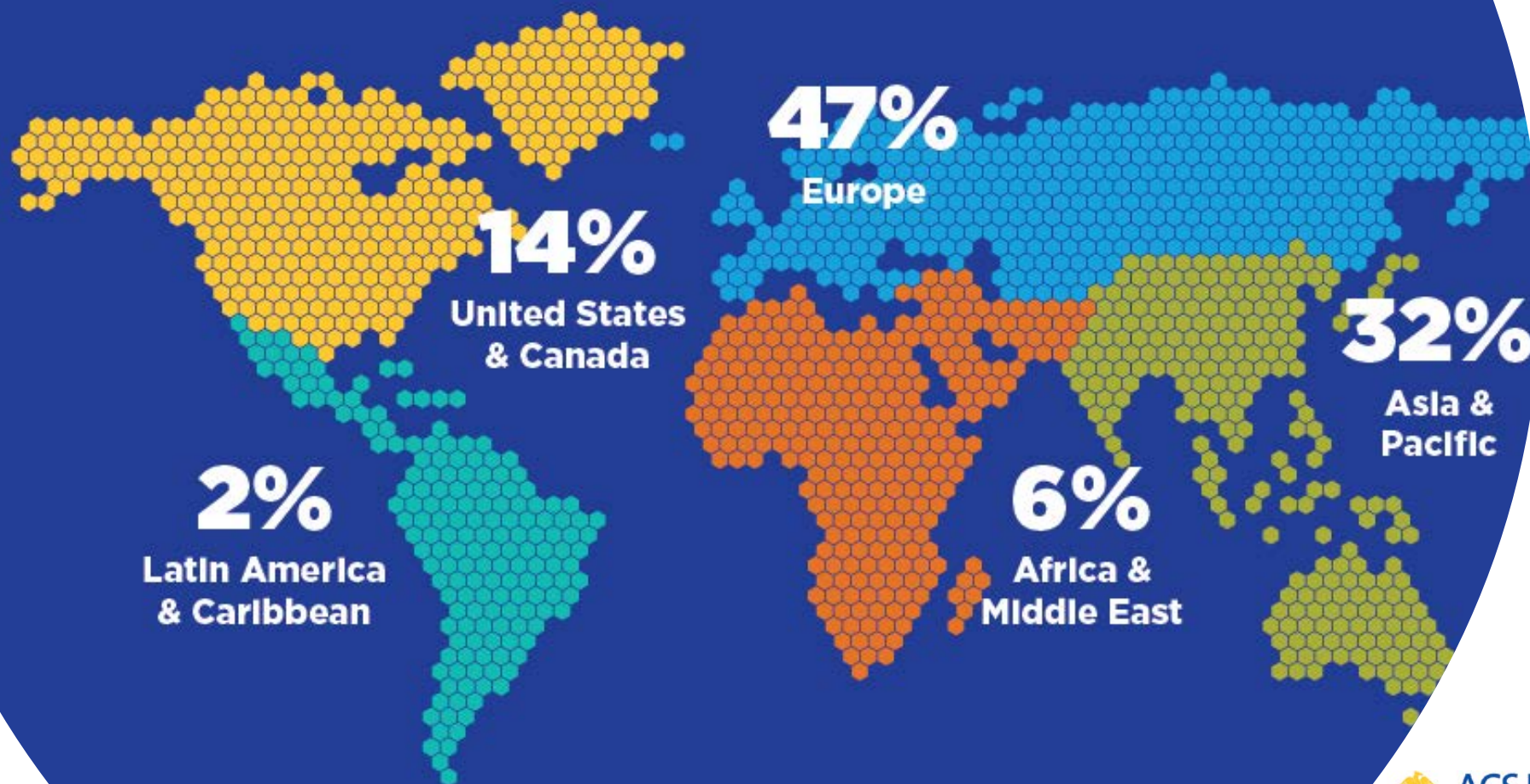
ACS Global Read + Publish Program - 2021 Outlook

2021 R+P Program expectations:

- 74 Profiles covering 356 accts
74個聯盟及356個客戶
- 25 Countries supported
25個國家的支持
- Support over 4,000 transactions
超過4000個合約
- Utilizing ACS' proven OA institution workflow co-developed with CCC
ACS與CCC合作使OA流程更成熟



ACS AUTHORS GLOBALLY ARE PUBLISHING OPEN ACCESS



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OA Agreement: Affiliation Starts with Author Submission

OA 協議：
從作者投稿開始

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通訊作者應於Paragon Plus 檔案中選擇隸屬的機構並將其列於手稿中



Providing Solutions to Barriers: Institution Identity

解決發表時遇到的障礙：
機構名稱辨識

ACS invested in:

- **Institution Lookup Widget** using industry standard (Ringgold) at the point of manuscript submission
- **Secondary validation and ranking system** helps ensure authors are accurately affiliated

Success! Program enhancements have dramatically improved data accuracy and increased author affiliation selection from 15% to 90% of authors.

ACS優化了機構檢索及二次驗證與排序系統，使作者連結機構的精確度從15%提升至90%。

Edit My Profile

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2 Address
3 Areas of Expertise
4 Other Profile Details

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Primary Address

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Daymar Colleges Group LLC
(Daymar College - New Boston Campus) Owensboro, KY, 42303
Country / Region: Boston College
State/Province: Boston, Lincolnshire, PE21 6JF
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Postal Code: Boston, MA, 02111-1093
Phone: Boston City Campus and Business College
Fax: Norwood, 2117
Our Bodies Ourselves
(Boston Women's Health Book Collective Inc) Boston, MA, 02109-5002
EDCO Collaborative
(Education Collaborative for Greater Boston Inc) Bedford, MA, 01730
Columbia Metropolitan College Boston

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Further reading

更多有關開放取用

Max Planck white paper <http://hdl.handle.net/11858/00-001M-0000-0026-C274-7>

Pay-it-forward-study
<https://escholarship.org/uc/item/8326n305>

cOAltions S <https://www.coalition-s.org/>

ESAC registry <https://esac-initiative.org/about/transformative-agreements/agreement-registry/>

The Scholarly Kitchen
<https://scholarlykitchen.sspnet.org/2019/05/20/transformative-agreements-unravel-library-consortia/>

<https://scholarlykitchen.sspnet.org/2021/02/17/rights-retention-strategy/>

ACSOpenScience

<https://acsopenscience.org/what-is-open-science/>



Thank you

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