
Publication & Open Access Guideline of the Leibniz Institute for Catalysis - LIKAT Rostock

Content

| | |
|---|---|
| 1. Background..... | 1 |
| 2. Objective - Quality Assurance & Open Access..... | 1 |
| 3. Recommendations & Obligations | 2 |
| 4. Implementation & Promotion..... | 3 |
| 5. Open Access secondary publications | 4 |
| 6. Glossary | 5 |
| 7. Creative-Commons-Licenses | 9 |

1. Background

This document serves as a guideline for publishing scientific work of the Leibniz Institute for Catalysis. It is based on LIKAT's mission statement and on current requirements in the field of scientific communication. Within the last decade, about 15.7 million scientific journal articles have been published worldwide. The number of journal articles per year increased by about a quarter in the period 2011 to 2020 (from 1.26 million in 2011 to 1.79 million in 2020).¹ So-called science-to-science communication is increasingly taking place outside traditional publication channels, in the form of blogs, via Twitter or in academic social networks.

The guideline summarizes recommendations & obligations for publications by LIKAT scientists. It also provides information on different possibilities of Open Access publishing, Creative Commons licenses as well as a glossary.

2. Objective - Quality Assurance & Open Access

Against the background of excellent scientific productivity, LIKAT's main future goal is to increase the quality, visibility and impact of its publications. Prerequisites for maximum impact are high relevance and quality of the research results as well as reputation and quality of the publication medium. At LIKAT, transparent, traceable and evaluable quality indicators and criteria (e.g. peer review) are recorded and communicated transparently. Key individual goals of the publication guidelines for increasing the influence as well as the visibility and perception are:

1. Publication of >50% of all journal articles in international journals with high impact factor (>5).
2. LIKAT documents books, book chapters and journal articles in journals in its publication list. Journal articles that have undergone a *peer review* process are identified as such. *Corrigenda* and withdrawn publications are not considered publications. *Preprints* (e.g., on *chemRxiv*) are reported as open access publications without a *peer review* process as long as they have not appeared in a journal with a *peer review* process. Once published, the *preprint* will be linked to the publication and documented as one publication.
3. Increase international collaborations,
4. Increased inter- and transdisciplinary research,
5. Promotion of Open Access, Open Data and Open Science in the context of the science (funding) policy of the EU and national funding agencies (NFDI4Cat),
6. Raising awareness about fake journals and predictive publishing,²
7. Archiving and securing research data for at least 10 years,
8. Access to stored research data in consultation with researchers and in accordance with legal requirements,
9. Administration and operation of the official LIKAT Institute account on Twitter and LinkedIn is carried out exclusively by the Public Relations Office.

As a publicly funded, non-profit research institution, LIKAT has set itself the goal of making its research results accessible via the Internet without financial, technical or legal barriers as far as possible. As a

1 <https://www.webofscience.com/>

2 <http://thinkchecksubmit.org/>

member of the Leibniz Association, the institute follows the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities³ and the Leibniz Association's Open Access Policy.⁴ Open Access supports scientists in researching and publishing, accelerates scientific innovation processes, and improves the visibility and utility of research. The institute aims to make at least 40% of all journal articles available in open access and supports its scientists financially as far as possible (*4 Implementation & Funding*).

As a Leibniz Institute, LIKAT addresses socially, economically and ecologically relevant issues and conducts knowledge- and application-oriented research in the field of catalysis. Its science communication and public relations activities focus on socially relevant questions, e.g. on the application of catalysis in the environmental, energy or health sectors. Research results are to be made public in appropriate formats and tailored to different target groups (*science-to-professionals or science-to-public*).

3. Recommendations & Obligations

1. All researchers of LIKAT are obliged to publish their scientific results in order to demonstrate research performance and expertise.
2. For quality assurance purposes, LIKAT demands its researchers to follow the *LIKAT rules and regulations on Good Scientific Practice* when publishing.
3. For publications of scientific results in the form of journal articles, only journals with *peer review* procedures are to be chosen. If a publication has already been made on a pre-print server, the researchers are encouraged to submit the finished manuscript to a journal with a *peer review* process.
4. LIKAT urges its scientists to publish their research results in accordance with the Open Access principle. This can be done directly via OA first publications or, within the scope of legal possibilities, via OA second publications in repositories, where a timely publication is to be aimed for (see section 5, p. 4). In the case of direct OA publication, the Institute strongly recommends publication under a free use license (*Creative Commons Attribution*,⁵ see section 7, p. 9). This is the only way to ensure free access.
5. LIKAT recommends the free use license for text-based publications: **CC BY**.
6. If, from the authors' point of view, there is no suitable open access publication journal for an article, it can be published in an access-restricted format.
7. LIKAT encourages its scientists to apply for external funding for Open Access publications when applying for projects.
8. The affiliation of authors belonging to LIKAT has to be stated:
Leibniz-Institut für Katalyse e.V., Albert-Einstein-Str. 29a, 18059 Rostock, Deutschland.
The English name is also permissible:
Leibniz Institute for Catalysis, Albert-Einstein-Str. 29a, 18059 Rostock, Germany.
9. For coordinated public relations, press releases are prepared in cooperation with the Public Relations Office and published exclusively by them.

3 [Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities](#).

4 [Open-Access-Policy der Leibniz-Gemeinschaft](#).

5 <https://creativecommons.org/about/cclicenses/>

4. Implementation & Promotion

1. The publication performance of LIKAT is documented under consideration of relevant quality criteria, updated monthly, and communicated regularly in the extended board meeting as well as on the intranet for all employees.
2. LIKAT endeavours to list freely available publications by its scientists in the Leibniz repository *ReNaTe* (Repository for Natural Sciences and Technology).
3. LIKAT informs and advises its scientists on Open Access as well as on legal issues related to Open Access publications of their research results. The open access network⁶ offers an online course [Open Access for beginners](#).

The OA contact person at LIKAT is Dr. Sandra Hinze (sandra.hinze@catalysis.de).

4. LIKAT participates in transformation contracts, e.g. *Wiley DEAL*, *Springer Nature* and *ACS*, and thus provides its scientists with financing options for publication fees of Open Access publication media: The institute covers the costs incurred by LIKAT authors for the journals listed in the transformation contracts as *Wiley DEAL*, *Springer Nature*, *ACS (American Chemical Society)* and *RSC (Royal Society of Chemistry)*. Payment must be made for each publication regardless of whether it is published Open Access or not.
5. The APCs for other journals must be financed by external funds of the respective research departments.
6. It is possible to apply for financial support via the *Leibniz Open Access Publication Fund*. Further information can be found on the intranet under [Management /Licensed Journals & Databases/Leibniz Open Access Publikation Fund](#).

⁶ [open access network](#)

5. Open Access secondary publications

The European Commission (EC) and the European Research Council (ERC) require the widest possible dissemination and worldwide access for publications funded by them.

LIKAT generally recommends publication in genuine *open access* journals (*gold OA*). If the publication takes place in conventional (*closed access*) journals, the secondary publication (*green OA*) is recommended.

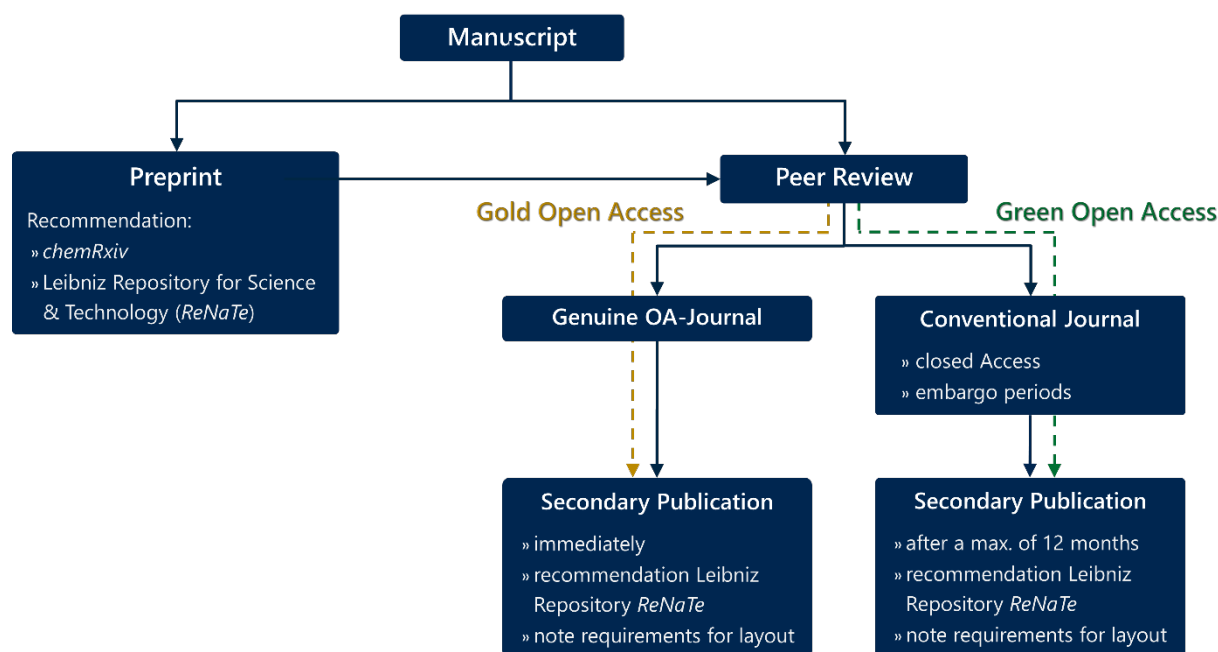


Figure 1. Options for secondary publication of a manuscript.

Recommended repositories

LIKAT recommends depositing *Open Access* first and second publications in the *Leibniz Repository for Science and Technology ReNaTe* in order to maintain a uniform standard. It is a subject-specific, institutional repository that bundles publications from all Leibniz institutions of the subject sections D and E and is linked to the Leibniz Association's central Open Access portal *LeibnizOpen*.

Das Leibniz Repository *ReNaTe* is operated by the TIB (Leibniz Information Centre for Technology and Natural Sciences University Library) and is indexed by search engines, subject search services and library catalogs.

Both first and second publications can be submitted to the repository free of charge. A second publication can be published in the repository as a *preprint*, *postprint*, and as a final publisher's version, depending, among other things, on what a possible publishing agreement allows.

Procedure

In principle, it is possible to have the TIB staff take care of the posting of publications: Contact: reanate@tib.eu.

Alternatively, you can create your own account under [User Registration | Repository for Science and Technology \(tib.eu\)](#).

1. posting of publications that have already been published under **CC-License** (Open Access Publications):
 - » Submit a publication list (without full text, without publication agreement) via the online form
2. posting of (first and) second publications without **CC-License**:
 - » Enter the metadata in the corresponding online form and upload the full text
 - » Submit the signed publication agreement (for first publications „[Publication Agreement ReNaTe v2.0.pdf](#)“ or for second publications „[Publication Agreement ReNaTe v2.0 ZV.pdf](#)“)
 - » Secondary publications without CC license may usually only be published as accepted manuscript (last version after scientific review with all changes) without publisher's own layout
 - » Review (and, if necessary, amendment) of the entries by TIB administrators

6. Glossary

APC

The *Article Processing Charge APC* is a publication fee that is charged for the first publication of a scientific article in a pure Open Access journal or a hybrid journal. A research institute can provide support for the payment of APCs, either within the framework of transformation agreements or funding instruments (e.g. *Leibniz Open Access Publication Fund*).

Alternative terms are Article Charges, Processing Charges, Page Charges, Publication Charges.

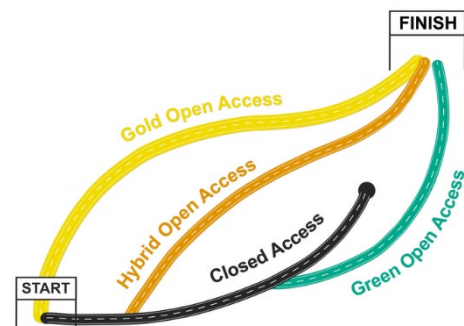


Figure 2. Pathways to open access. (Image: [open access network](#))

Bronze Open Access

Bronze Open Access describes articles that are freely accessible via the publisher's website but have not been published under an Open Access license. These can be downloaded and read free of charge, but not redistributed or reused.⁷

Closed Access

Closed Access refers to restricted, non-free access to scientific literature that is only possible after payment (*paywall*). When publishing in *closed access*, authors cede the exclusive rights of use and exploitation to the publisher and can no longer decide on the further use of their own content.⁸

⁷ Gold, Green, Bronze, Blue...: The Open-Access-Color Theory - TIB-Blog

⁸ Universitaetsbibliothek der HU Berlin - Glossar (hu-berlin.de)

Creative-Commons-Licenses

Creative-Commons-Licenses (CC) licenses provide everyone from individual creators to large institutions with a standardized way to grant the public permission to use their creative work under copyright law. From the perspective of the reuser, the existence of a Creative Commons license for a copyrighted work answers the question: *what can I do with this work?* The various *CC licenses* are described in detail in Section 7. *Creative Commons Licenses* (p. 9).

DEAL

DEAL is a project initiated by the Alliance of German Science Organizations and the German Rectors' Conference. It aims to negotiate nationwide transformative *publish and read* agreements with the largest scientific publishers (Elsevier, Springer Nature and Wiley). This is intended to reduce and restructure the overall German costs for access to scientific literature. The aim is to give all scientists the opportunity to publish Open Access themselves on the one hand and to have access to the entire portfolio of electronic journals on the other.⁹

First publication

This is the first publication of a scientific work.

This refers to the publication of a scientific publication (usually an article or book) by a publisher at the end of a publication process. Scientific publications published by another institution (research reports, etc.) are also included. An initial publication can be non-open access (see *Closed Access*) or open access (see *Open Access*). The latter corresponds to *Gold Open Access*.

Free Access

Free Access articles are articles from subscription journals that are freely accessible to non-subscribers. In contrast to *Open Access*, this access is usually limited in time and the articles are not provided with a *CC license*, so that their subsequent use is not possible.

Gold Open Access

The golden path of open access publishing refers to the initial publication of scholarly works as articles in *open access* journals, as an *open access* monograph, or as a contribution to an open access edited volume or conference proceedings. The articles usually undergo the same quality assurance process as *closed-access* works, usually in the form of *peer review* or *editorial review*, and are accompanied by appropriate licensing information. They can be secondarily published immediately after the article appears.

Green Open Access

The green route refers to the publication of a version of an article that has already been published but was not previously open access. Usually, manuscript versions of the publication (*preprints* or *postprints*) or the already published version (*publication version*) are made freely accessible on institutional or disciplinary *open access document servers* (*repositories*). For the latter, any embargo periods by the publishers must be observed.

An overview of what publishers allow authors to publish is provided by the [Sherpa Romeo](#) directory.

9 Über Projekt DEAL – Projekt DEAL (projekt-deal.de)

Right to secondary publication: As a result of a copyright reform, a right to secondary publication (Section 38 (4) UrhG) has been in force in Germany since January 1, 2014, irrespective of agreements with publishers. According to this, journal articles [...] that have been produced in the context of a research activity that is at least half publicly funded and that have appeared in a collection that is published periodically at least twice a year may be republished,¹⁰ twelve months after the first publication. However, only the so-called *accepted manuscript* (last version after scientific review with all changes) without the publisher's own layout may be used for this purpose.¹¹

Hybrid Open Access

In contrast to *Golden Open Access*, here the first publication of a scientific article takes place in a journal that is fundamentally subscription-based. Individual articles are made freely accessible (i.e., *open access*) in return for additional payment of *article processing charges* (APC) and are provided with appropriate license information. This model is offered by numerous publishers, especially the large ones, and is attractive for researchers: on the one hand, publication in established and renowned journals is possible, and on the other hand, publication is nevertheless freely accessible.

However, there are justified criticisms of this model: in most cases, it cannot be denied that double payment is required for OA publication - both for subscription and for publication as an OA article. In addition, the *Article Processing Charges* (APC) are on average significantly higher than for pure OA journals. Also, the release of paid articles does not work in every case. As a result, such journals are excluded from funding by many publication funds and in the EU framework program, *Horizon Europe*.

Metadata

Metadata are independent data that contain structured information about other data or resources and their characteristics. They are stored independently of or together with the data they describe. Usually one differentiates between technical and technical and/or administrative metadatas. While the latter have a clear metadata status, technical metadata can sometimes also be understood as research data.¹²

Postprint

In contrast to a *preprint*, a *postprint* has already gone through the review process and has been accepted for publication. This can be the publisher's version or the accepted manuscript version which, although not identical in layout, is identical in content to the publisher's version. The latter is relevant for the Green way of Open Access.

Preprint

A *preprint* is a form of manuscript that has not yet undergone an official *peer review* process. The publication takes place on so-called *preprint servers* (e.g. *chemRxiv*). The article differs from the publisher's version in terms of both layout and content, as changes resulting from the *peer review* process have not yet been incorporated.

¹⁰ § 38 UrhG - Einzelnorm (gesetze-im-internet.de)

¹¹ <https://open-access.network/informieren/open-access-grundlagen/open-access-gruen-und-gold#c7776>

¹² Glossar | Praxis kompakt | Forschungsdaten und Forschungsdatenmanagement

Publish & Read fees

Publish & Read (PAR) fees are fees negotiated as part of the *DEAL contracts* that combine the costs of *open access* publications and comprehensive reading access into one amount.

In this context, the usually uniform fee per article is intended to replace the non-transparent type of subscription-based funding. The amount of the fee is determined by the total subscription expenditure in Germany and the total number of articles published annually (by German research institutions).¹³

Pure open access journal

The *pure/genuine OA journal* refers to a journal (or publisher) that publishes exclusively *OA publications* from the beginning. The publication is provided with an appropriate *CC license*.

Repository

Repositories are either subject-specific or institutional document servers on which various publications or scientific data are made available to the public without access restrictions.








Institutional document servers are usually operated by university libraries, other infrastructural institutions or research organizations. *Disciplinary repositories* are inter-institutional. Essentially, a repository consists of repository software and a database. Data are entered into the *repository* via the web-based user interface. In addition to the actual data, its metadata is required. Metadata describes the content of the research data and provides information about its origin, the software and methods used, and legal aspects.

13 Reduce and redistribute costs - DEAL Operations (deal-operations.de)

7. Creative-Commons-Licenses¹⁴

Creative-Commons-Licenses offer everyone a standardized way to grant permission to the public to use their creative work under copyright law. LIKAT strongly recommends publishing under a **CC BY** license for text-based publications.

CC-License types

| | | |
|--|--|---|
| CC BY  RECOM- MENDED | Users may distribute, remix, adapt and build upon the material in any medium or format as long as credit is given to the author. The license permits commercial use. | BY The author must be named. |
| CC BY-SA  | Users may distribute, remix, adapt and build upon the material in any medium or format as long as credit is given to the author. The license permits commercial use. If changes are made by the user, the modified material must be licensed under the same terms. | BY The author must be named. SA Modified material must be passed on under the same conditions. |
| CC BY-NC  | Users may distribute, remix, adapt and build upon the material in any medium or format for non-commercial purposes as long as credit is given to the author. | BY The author must be named. NC Only non-commercial use is allowed. |
| CC BY-NC-SA  | Users may distribute, remix, adapt and build upon the material in any medium or format for non-commercial purposes as long as credit is given to the author. If changes are made by the user, the modified material must be licensed under the same terms. | BY The author must be named. NC Only non-commercial use is allowed. SA Modified material must be passed on under the same conditions. |
| CC BY-ND  | Users may copy and distribute the material in any medium or format in unedited form as long as credit is given to the author. The license permits commercial use. | BY The author must be named. ND Modifications are not allowed. |
| CC BY-NC-ND  | Users may copy and distribute the material in any medium or format in unedited form for non-commercial purposes as long as credit is given to the originator. | BY The author must be named. NC Only non-commercial use is allowed. ND Modifications are not allowed. |
| CC0  | Creator relinquishes copyright. Users may unconditionally distribute, modify, adapt and build upon the material in any medium or format. | |

¹⁴ [About CC Licenses - Creative Commons](#)