

## **From authoring, to peer review, publishing, hosting and archiving, all in one place for the first time: the ARPHA Publishing Platform**

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There are three key challenges that need to be addressed by journal publishers nowadays: (1) increasing machine-readability and semantic enrichment of the published content to allow text and data mining, aggregation and re-use; (2) adopting open science principles to expand from publication of mainly research articles to all research objects through the research cycle, and (3) facilitating all of this to authors, reviewers and editors through novel and user-friendly technological solutions.

ARPHA (<http://arphahub.com/>) stands for: Authoring, Reviewing, Publishing, Hosting and Archiving, all in one place, for the first time. ARPHA is the first publishing platform to support the full life cycle of a manuscript within a single online collaborative environment.

The platform consists of two interconnected, but independently functioning, journal publishing workflows:

- ARPHA-XML: Entirely XML- and Web-based, collaborative authoring, peer review and publication workflow.
- ARPHA-DOC: Document-based submission (PDF, or text files), peer review and publication workflow.

The two workflows use a one-stop login interface and a common peer review and editorial manuscript tracking system. A journal can use one of the two workflows or a compilation of both. ARPHA enables a smooth transition from the conventional, document-based workflow to the fully XML-based publishing of the future.

ARPHA is modular and its operational model rely on flexibility reflected at each step of the journal publishing cycle. Journals may use (1) submission and peer review; (2) production; (3) publishing and (4) management/accounting platforms or all these together plus associated services, if needed.

ARPHA is used by a growing number of journals, among these is the Research Ideas and Outcomes (RIO) Journal, a SPARC Innovator Award Winner for 2016 (<https://riojournal.com/>).