

IV.8.C. INTERPRETATION

IV.8.C.1. Cooperation between AAPG and SEG

In February 2013, SEG and AAPG entered into an agreement to copublish *Interpretation*. Under the agreement, SEG is the operator of the journal and has sole authority to establish and alter editorial style, graphical presentation, copyright transfer terms, author fees, subscription rates, sales-agency terms, subscriber licensing terms, advertising rates, content-licensing arrangements and terms, and linking arrangements. Net revenue and financial risk are shared between the organizations as specified in the agreement, which has an initial term expiring on 31 December 2018. Copyright in the published work is shared between the organizations. The journal is available at special member rates to members of each organization as well as by institutional subscription. AAPG promotes submissions and subscriptions to the journal, and both organizations make Editor-in-Chief and Deputy Editor appointments on a schedule specified in the agreement.

IV.8.C.2. Editorial Policy

Interpretation is a peer-reviewed journal for advancing the practice of subsurface interpretation. While many activities of geoscientists routinely require judgment, interpretation here specifically refers to conceptualization of the subsurface by an interpreter with incomplete information and a-priori knowledge. An interpreter evaluates alternative subsurface models consistent with available data and selects the most plausible geophysical and geologic scenarios by following scientific methods.

Interpretation seeks papers directly related to the practice of interpretation of the earth's subsurface for exploration and extraction of mineral resources and for environmental and engineering applications. Relevant contributions to *Interpretation* include, but are not limited to, submissions that advance geophysical or geologic concepts and principles of interpretation; correlation and calibration with engineering data; planning and evaluation of alternative completion strategies, case studies; algorithms for interpretation tools; and workflows, pitfalls, observations, insights, technical challenges, and tutorials. An *Interpretation* article is not required to contain an interpretation; it only has to help advance the practice of interpretation. Likewise an article may focus on interpretation of a data set if this provides significant new insight on the geology of an area or on the workflow used. Articles that describe interpretation methods and applications involving integration of multiple data sets to quantify as well as visualize subsurface structure are strongly encouraged.

Interpretation is a dedicated forum for subsurface interpretation geoscientists. For papers focused on interpretation concepts, methodologies, tools, and workflows, the journal requires originality, completeness of descriptions, and demonstrations of viability. For papers that contain subsurface interpretations, the journal's novelty requirement can be satisfied by new applications of established methods. This is different from SEG's other peer-reviewed journal, *GEOPHYSICS*, in which the presentations of novel ideas and methods themselves are normally required. The AAPG *Bulletin* is the geologic counterpart of *GEOPHYSICS*. The papers in *GEOPHYSICS*, the AAPG *Bulletin*, and many other geosciences journals build the knowledge foundation for the multidisciplinary work in *Interpretation*. SEG's magazine, *The Leading Edge (TLE)*, has published Interpreter's Corner as a monthly feature and has had many special sections on interpretation during its 30 years. With more limited article length

and a less-stringent requirement for demonstration of methodology details for reproducibility, *TLE* aims for all of its contents to be accessible to a broad range of geoscientists. *TLE* is not recognized as a formally peer-reviewed publication, whereas *Interpretation*, an archival journal, expects to gain recognition in the Science Citation Index, increasing its value to academic authors.

As with GEOPHYSICS, the review process for *Interpretation* will be constructive, designed to help authors improve their papers and to safeguard the standard of the journal. Because interpretation is called for in instances when knowledge is incomplete, data are insufficient, and solutions are nonunique, results reported in *Interpretation* might contain irreproducible, speculative, or controversial elements. Reviewers evaluate geophysical and geologic soundness of the applied methodologies and conclusions, the relevance and importance to other interpretation geophysicists, and clarity of presentation. A contribution can be novel if the interpretation technique is new, the data are new, the exploration area is new, the exploitation method is new, or the interpretation outcome is new.

An *Interpretation* paper likely might be the result of a business project that was completed or terminated long before the paper submission. It might not be justifiable for the contributing authors to maintain continued access to proprietary project data or to spend significant additional project resources for the purpose of addressing some of the technical deficiencies identified by the reviewers. An *Interpretation* paper could include a section on "Suggestions for further study" in which new ideas for expanding the work can be put forward, technical weaknesses of the work can be enumerated, and remedies of such weaknesses can be proposed. This might be an important section for geosciences students who have less frequent exposure to real data or problems.

Advertising is not allowed to masquerade as a technical contribution, but mentioning brand names can be tolerated when kept to a minimum, when a commercial product is important in a presented workflow, and when there is no conflict of interest. In the sense of tool utilization, an interpreter's work is not dissimilar to that of a medical doctor. A doctor would not be able to convey the results of her clinical study adequately if she were prevented from naming the brand of a drug or tools she used in treating patients. *Interpretation* encourages authors to use a more generic or scientific term to describe a particular software vendor's implementation.

For *Interpretation*, the editorial decision would align with the answer to the following question: "Would the interpretation community be better served if the paper were published?" A technical contribution written in English is accepted for review with the understanding that (1) it has neither been accepted for publication nor published elsewhere either in whole or in part and (2) it is neither currently being considered by another journal nor will be submitted to another journal either in whole or in part while under consideration for *Interpretation*.

All authors are required to follow all other ethical policies stipulated by SEG and AAPG, including the Ethical Guidelines for SEG Publications.

IV.8.C.3. Editorial Structure

An Editor-in-Chief (EIC), a Deputy Editor, and members of the Editorial Board lead the journal. The EIC serves a three-year term after being nominated by one of the organizations. The Deputy EIC also serves a three-year term after being nominated by one of the organizations. The organizations alternate in selecting the EIC. The organizations also alternate in selecting the Deputy EIC. Thus, when one selects

the EIC for a three-year term, the other selects a Deputy EIC for a three-year term. Top leadership of both organizations must approve both selections. More details about this process are provided in Section IV.8.C.7. The EIC has sole authority to appoint members of the Editorial Board. Editorial Board members are selected to serve the journal, not one or the other of the copublishing organizations. The EIC appoints Editorial Board members with expertise in geology and geophysics as well as other disciplines to serve the full range of subjects covered in the journal. Most papers published in the journal are published in special sections. Special-section editors recruited or otherwise engaged by members of the Editorial Board serve as associate editors for papers submitted to their special sections, routing papers to reviewers and recommending acceptance, revision, or rejection.

IV.8.C.4. Special Sections and Departments

Interpretation includes a regular, peer-reviewed technical section on Pitfalls and another on Tips, Techniques, and Tutorials. There are no subject-specific sections for technical articles. Most articles are published in special sections consisting of at least three papers. Each issue contains several special sections, in contrast to many other journals that feature one at a time, if any. General submissions, not specific to a special section, are encouraged also and are published in a Technical Papers section without subject headings. The journal also includes two nontechnical/semitechnical sections — From the Editor, in which a message from the EIC is published, and a Perspectives section that includes a message from the Deputy EIC and sometimes also a semitechnical, non-peer-reviewed piece by another Editorial Board member or contributor.

IV.8.C.5. Review of Technical Papers

Manuscripts for technical papers are submitted online by authors. Each manuscript and pertinent information is keyed into an online peer-review system. An e-mail of acknowledgment is sent to the author. Manuscript information is maintained in an online record along with correspondence pertaining to it. The abstract for a technical paper not submitted for inclusion in a special section is sent to an Editorial Board member who usually serves as both the Assistant Editor (ASE) and Associate Editor (AE) for the paper. The abstract for a technical paper that is submitted for inclusion in a special section is sent to the lead editor serving as the special section's Assistant Editor, who may handle the manuscript herself or himself or assign it to one of the other editors for the special section. All editors handling assignment to reviewers are Associate Editors in the peer-review process. For every paper, the Associate Editor finds two or three knowledgeable referees who are willing to review the paper and sends the manuscript to them. Reviews are sent to the Associate Editor. Two reviews of high quality are required for an editorial decision on a manuscript that are arguably within the scope of the journal and are of sufficient quality to be reviewable. Taking into account the referees' reviews, the Associate Editor makes a recommendation that generally falls into one of the following categories:

- Accept (may need minor revision, to EIC without further review)
- Needs minor revision (with limited review)
- Needs moderate revision (with limited or full review)
- Reject

The Associate Editor sends his review to the Assistant Editor. Guided by the referees' and Associate Editor's reviews, the Assistant Editor determines whether the paper should be accepted for publication, returned to the author for revision, or rejected. If the manuscript requires further revision to be considered for publication in *Interpretation*, a message from the Assistant Editor in which changes are requested is sent to the author along with the reviews and a request to resubmit with review comments applied. If the Assistant Editor recommends acceptance or rejection, the manuscript is then sent to the Editor-in-Chief for a final decision. If the Editor-in-Chief concurs that the paper should be

rejected, he sends reviews and an appropriate rejection e-mail to the author. If the Editor-in-Chief deems the paper acceptable for publication, the author may be notified of any final changes requested by the Editor.

If the Editor-in-Chief accepts a paper for publication, the corresponding author is asked to submit the paper in ready-for-production form with all requested revisions made to the manuscript. The corresponding author is asked to provide an address to be published with the paper, biographies, photographs, completed Transfer of Copyright forms, a two-sentence summary of the paper, payment elections for page charges if applicable, and high-resolution figures in an acceptable file format. “*Interpretation* Instructions to Authors” lists acceptable file formats for high-resolution figures.”

At the time the manuscript is sent into production, the author is sent a formal acceptance message informing him approximately when he can expect to receive the galley proofs.

IV.8.C.6. Production of Technical Papers

When a manuscript has been accepted, it is forwarded to the journal’s production staff for copy editing, styling, and production processing. The style guidelines applicable to material published are published in “*Interpretation* Instructions to Authors,” available online. The *Interpretation* Instructions to Authors include guidelines for ancillary and supplementary material, including video, which may be submitted for review and publication. From year to year, revisions to the instructions are made at the discretion of the Editor-in-Chief. The copy-editing process involves comprehensive readings of each manuscript for the purposes of correcting style, grammar, punctuation, spelling, and consistency problems and sizing figures. The process sometimes involves further resolution of questions with the author. The copy editor’s goal is to improve the overall presentation of each paper without changing the scientific communication. After they are edited, the manuscripts are sent to composition and then to authors for review.

After all of the problems are resolved satisfactorily, the copy editor applies the proofreading revisions of the author and staff, and the production editor forwards layout changes to the compositor. The compositor makes the corrections and returns page proofs to the production editor. If further questions arise or additional changes are necessary, additional final proofs are processed and approved before the pages go to the printer. Meeting deadlines is the key to efficient processing throughout the editing and proofing stages. The editors, typesetters, and printers adhere strictly to a specific schedule. *Interpretation* publishes each paper online as it is approved for publication. Each issue, printed and online, includes all papers approved for publication by the approval deadline for that issue except for any special-section papers approved but designated for inclusion in a future issue and any papers with which authors are insufficiently responsive in returning proof comments.

IV.8.C.7. Editorial Board Appointment Guidelines & Service Requirements

The Editorial Board:

1. The board consists of a minimum of 18 board members.
2. Board terms are three years.
3. A board member who is active as defined below and willing to continue service on the board may be reappointed for another three-year term.
4. Reappointments are subject to the limit of four consecutive terms. An exception to this term limit can be made to reappoint a highly active member with the approval by both the SEG Board of Directors and the AAPG Executive Committee.

5. A member who is inactive as defined below drops off of the board without completing the year of inactivity; a semiactive member can complete the term. Inactive members are not reappointed for another term. Exceptions must be approved by both the AAPG Executive Committee and the SEG Board of Directors.
6. Terms begin and end with the calendar year. A new board member may be appointed and begin service at any time of year and have a term that concludes at the calendar-year end closest to the third anniversary of her or his appointment.
7. The board roster is refreshed periodically and at least once per year.

To maintain the active member status with good standing, a board member

1. follows SEG and AAPG ethical guidelines,
2. actively contributes to the board's editorial and steering discussions,
3. handles manuscripts in a timely manner without burdening staff and other editors with the task of issuing repeated reminders to act on delayed papers, and
4. liaises (defined below) for two or more scheduled, but not necessarily published, special sections every calendar year. At least one of these special sections should be organized by an expert not on the board.

A board member serves as a liaison when she or he recruits the organizer (lead editor) for a special section and facilitates the announcement of the special section. A board member who is organizer of a special section doubles as liaison for that special section.

A semiactive member liaises with only one special section per year, does not routinely need staff-initiated reminders to handle delayed papers, and has not failed to handle an assigned manuscript that has to be reassigned to another editor after reminders from the system and staff. An inactive member initiates no special sections within four consecutive quarters, routinely needs staff-initiated reminders to handle delayed papers, or fails to handle an assigned manuscript that has to be reassigned to another editor after reminders from the system and staff. A member who becomes inactive drops off the board automatically. A member with extenuating circumstances (e.g., summer field work to remote sites without Internet access) should alert the staff and EIC in advance, if able, for a short (~3 months) reprieve. Members whose other priorities (e.g., work, AAPG or SEG committee responsibilities) prevent them from serving as an active member can maintain eligibility to volunteer at a future time by resigning from the board as active members in good standing.

Special-section ideas often are unplanned, occurring during the members' routine technical activities. Members are encouraged to follow up those ideas with special-section proposals. Members are also encouraged to plan at least one special section during each half of the year to help maintain a steady stream of content for the journal. Members are further encouraged to recruit non-board organizers for topics not in the members' areas of expertise to broaden the board's subject coverage.

A candidate for *Interpretation* Editorial Board membership is generally a successful organizer of at least one special section within the previous twelve months, with an editorial record consistent with the expectation of an active member of the board. The Editor-in-Chief shall have sole responsibility for appointing members of the board. The EIC shall select members that collectively have scientific focus in the full range of major interpretation-related disciplines. The EIC shall make appointments without regard to association or society membership affiliation and instead will base board-member selections on editorial needs, subject-matter expertise, and record of editorial performance.

Candidates for EIC and Deputy EIC must be active members of the Editorial Board. The above four-term limit does not count the single-term service as either Deputy EIC or EIC. Neither the EIC nor the Deputy EIC may serve consecutive terms in the same position.

Near the beginning of the year during which SEG and AAPG will select an EIC and Deputy EIC, the incumbent EIC and Deputy EIC, with guidance from the editorial staff, will provide a list of individuals who meet criteria for Editorial Board reappointment (i.e., active) to the leadership of both organizations. The EIC and Deputy EIC will be selected from among these individuals. Both appointments will be made by the organizations' presidents, who may elect to delegate the responsibility to their board (in the case of SEG) or executive committee (in the case of AAPG); the presidents or their designees in the appointment process are encouraged to consult the EIC and Deputy EIC before making their selections. Each organization's selection must be approved by the other organization. Each organization shall make its EIC or Deputy EIC selection at least nine months prior to the expiration of the incumbent's term, but not more than one year prior, and each organization shall either accept or reject the other organization's selection within two months of receiving notice of the nomination. If in any case the nonselecting organization rejects the selecting party's nominee, the selection process shall be repeated and accelerated until a mutually acceptable EIC or Deputy EIC is selected. AAPG and SEG agree that approval of such selections shall not be unreasonably withheld. If either organization selects a candidate who does not meet the criteria for appointment, the selecting organization must provide justification to the other. Both organizations shall conduct the EIC and Deputy EIC selection processes in as confidential a manner as is reasonably possible.

Should an EIC or Deputy EIC be unable to complete a term or be subject to removal with cause by the organization that selected him or her, the organization that selected the departing EIC or Deputy EIC shall select a replacement to fulfill the remainder of the departing editor's term, and that selection shall be subject to the approval of the other organization.

IV.8.C.8. Page Charges

The journal shall assess from SEG and AAPG member authors mandatory page charges of \$150 for the 13th and each subsequent typeset page. The mandatory charge for excess pages shall be \$200 per page for nonmember authors. Authors shall be asked to pay voluntary charges of \$100 per page for the first 12 pages. Authors shall not be assessed mandatory color charges but shall be asked to pay \$450 per color page voluntarily.

The exact number of pages in an article cannot be confirmed until shortly before printing. However, a reasonable estimate is the number of words in the text divided by 1000 plus 35% of the number of figures and tables. Billing will take place after composition of the paper is complete. No charges are assessed if a submitted manuscript is not published.

In addition to these charges, there may be charges for changes requested in the typeset proofs that alter the text or figures in the accepted manuscript. The SEG Publications Department staff will determine such charges from the proofs that reflect the changes.

It is the journal's policy to suspend publication privileges of any author who has a past-due account with the Society.

“Interpretation Instructions to Authors” includes a hardship relief policy under which authors without means to pay mandatory page charges may apply to have these charges waived. The journal’s hybrid open-access policy and related fees is described in this document, also.