

Abstract Submission Deadline: 1 April 2019 at 5 p.m. U.S. Central Daylight Time

## OFFICIAL ABSTRACT KIT

SEG 2019 International Exposition and 89<sup>th</sup> Annual Meeting

San Antonio, Texas USA

15–20 September 2019

### Please Note:

- The Technical Program Committee seeks submission of new ideas and applications. Submitting material that previously has been presented or material submitted to but not yet accepted by another meeting may result in rejection. Please review sections on ethical guidelines and novelty on page three for further information.
- To further enhance the Technical Program, SEG may live stream and/or record and rebroadcast select oral sessions. In order to do so, we must have license agreements for both your presentation files and for recording and broadcast of your presentation. Please consider selecting “Yes” for these optional licenses when making your expanded-abstract submission.
- Official notification letters will be sent only via e-mail and will be sent only to the individual listed as the speaker of the abstract. **Please add no-reply@seg.org to your address book to ensure your letter is received.**

### Additional Notes for Submission:

- A reference list should not be included at the end of the abstract and should be prepared separately. Please copy and paste your references into the appropriate submission field. If using LaTeX, please use a plain-text version of your references. SEG will append the references to the expanded abstract if the expanded abstract is accepted.
- The only file type that SEG will accept is PDF (.pdf). Further instruction regarding this requirement can be found in the “Instructions to Submit Online” section of this document.

This Abstract Kit contains the following items:

1. Criteria for Abstract Acceptance
2. Online Review Form
3. Presentation Styles
4. Instructions for Typing Abstracts
5. Instructions to Submit Online
6. Primary Emphasis Category List
7. Keyword Table
8. Abstract Information Form
9. Submission Checklist

\*A sample abstract is available online for your reference.

### Abstract Submissions

To submit your abstracts for the SEG 2019 International Exposition and 89th Annual Meeting, you must submit online using SEG’s program for submissions at <https://segam2019.abstractcentral.com/>. The online program will open for submissions on **1 February 2019**. We recommend that you **do not wait until the last week** to submit an abstract. Using the SEG online submission program, authors will be able to open their browser windows, fill out the forms, and submit their abstracts for review. **There is a 10 MB file size limit per uploaded abstract.** Abstract submissions must be complete before 5 p.m. U.S. Central Daylight Time on 1 April 2019.

### Questions?

Contact the Technical Program Planner in the SEG Business Office by e-mailing [techprog@seg.org](mailto:techprog@seg.org).

## Criteria for Abstract Acceptance

**Abstracts submitted that are not properly formatted following the specifications laid out in the Official Abstract Kit will be rejected.** The acceptance of your abstract by the 2019 San Antonio Technical Program Committee is based on the quality of your submitted abstract and whether the abstract fits the subject coverage of the Technical Program, as well as space available in the Technical Program schedule. All abstracts must be complete and contain full references (prepared separately as per the instructions). Each abstract will have up to three reviewers. The Technical Program Committee will be responsible for selecting and organizing the abstracts into cohesive sessions that fit within the Technical Program schedule.

### **Copyright**

SEG secures copyright to abstracts accepted for presentation at the SEG Annual Meeting. Copyright transfer is delivered during the submission process but does not take effect until manuscript acceptance. The copyright transfer includes a warrant by authors that they have secured permissions to use all included material owned by third parties. **If you have not secured permission to use all material in your abstract at the time of submission, please do not submit.** Papers cannot be withdrawn after online publication, which typically occurs in late July or early August. It is recognized that works are not eligible for copyright transfer if **all authors** are U.S. government employees reporting on work performed in the course of their employment. Government employees agree to all terms other than copyright transfer when clicking through the rights-transfer forms. **Acceptance of your abstract does not guarantee publication.** Generally, papers are published online before the Annual Meeting. Expanded abstracts also will be published on [www.onepetro.org](http://www.onepetro.org). In addition, the SEG Technical Program Expanded Abstracts are included in the Ei Compendex database.

During the submission process, authors are invited to transfer copyright in their presentation files—primarily slide sets and videos—so that SEG may publish them online alongside their abstracts after the meeting has occurred. Authors also are invited to extend SEG permission to live stream and/or record presentations and publish the recordings with presentation materials on removable media and/or online. Authors are not required to agree to either of these rights transfers, as it is recognized that there sometimes are proprietary reasons authors must withhold permission to publish presentation materials and/or recordings. Copyright transfer does not prevent the author(s) from presenting their material elsewhere after their presentation at 2019 SEG Annual Meeting, but full citation and proper acknowledgment of SEG's copyright is required.

### **Open Access**

SEG's open-access policy allows an author to pay a \$2,500 author-publication charge to make his or her expanded abstract available without access controls in the SEG Digital Library. To opt for open-access publication, please click through the copyright-transfer agreement and send an e-mail to [techprog@seg.org](mailto:techprog@seg.org) stating your desire to pay for open access. Learn more about SEG's open-access policy at <http://www.seg.org/openaccess>.

### **Recording Policy**

SEG may live stream and/or record your audio and presentation slides at the SEG Annual Meeting for delivery via the Internet and/or SEG on Demand. Only presentations for which the author has granted permission will be broadcast and/or recorded. Presentations to be recorded for SEG on Demand are selected from the list of accepted abstracts. **Granting permission to record your presentation does not guarantee that your presentation will be selected for recording.** Recordings compiled for sale on SEG on Demand are available to SEG members and nonmembers and will be available approximately four weeks after the Annual Meeting.

### **Technical Content**

A good abstract presents technically correct ideas with a fresh and enlightening perspective. The discussion is pertinent and well-focused on the topic and is the appropriate length. Definitive conclusions are made and supported by data with appropriate figures and cogent, convincing arguments. If the abstract is part of an ongoing study, the work should represent a significant milestone with specific conclusions supported by data presented in figures.

### **Coherency, Style, and Grammar**

Abstracts must be written in English. A well-written abstract is readily understandable, even if it has been translated. SEG partners with Editage to provide SEG authors with a discount on presubmission manuscript-preparation services including English editing and formatting. Visit <https://editage.seg.org> to receive a quote. Submitted work should be prepared according to the Instructions to Authors

(<http://seg.org/Publications/Journals/-Geophysics/Information-for-Authors/Instructions-to-authors>). SEG will publish the abstract exactly as it is received. Please proofread your abstract carefully because neither the Technical Program Committee nor the SEG Business Office staff will make any typographical or grammatical changes. Grammatical and typographical errors reflect on the entire Society and may be cause for rejection. **You will not be given the opportunity to resubmit a new version of your abstract after it has been submitted. NO EXCEPTIONS!**

### **Format**

Authors must follow format guidelines (see Instructions for Typing Abstracts) and submitted abstracts with the appropriate forms. The abstract must be of sufficient length to cover the topic and allow reviewers to judge its quality but **must not exceed four pages (including graphics) or 10 MB file size**. **REMEMBER: A reference list should NOT be included at the end of the expanded abstract and should be prepared separately.**

### **Commercialism**

Commercial reference may occur only once and then only to identify that certain products or services were used to incorporate the method being presented. The abstract shall contain no other reference to proprietary products, company names, or trademarks. Repeated references to products are cause for rejection.

### **Ethical Guidelines for SEG Publications**

Authors are expected to follow Ethical Guidelines for SEG Publications and agree to be bound by its provisions, including penalties for violations. Please see <http://www.seg.org/pubethics>. SEG is a participating publisher in the Crossref Similarity Check anti-plagiarism system powered by iThenticate software. iThenticate identifies material that matches text from documents found in its extensive database. Identified text might include text that has been properly quoted and cited. Nonetheless, Expanded Abstracts receiving a similarity score of 30% or higher overall or more than 5% to any single source will be subject to further evaluation to determine if identified sections have been properly quoted, summarized, or paraphrased with proper attribution. Authors must not use their own previously published work without appropriate citations and, if exceeding the limits of fair use, permission from the original publisher.

### **Novelty**

At the time of abstract submission, authors will be asked whether the submitted paper has been submitted to or presented previously at another conference or whether the paper has been submitted or presented previously with only small changes. While previous presentation is not necessarily a cause for rejection, the Technical Program Committee seeks submission of new ideas and applications. Permissions must be secured and attribution provided for any material previously presented or published.

### **First Claim to Publication**

Authors agree to give SEG first claim to publication of an expansion of the Work into a journal article or book chapter if the authors produce one. Please consider whether an expansion of your work, with fresh expression and expansion of the ideas and descriptions rather than duplication of the expanded-abstract text, would be suitable for publication in *GEOPHYSICS*, *The Leading Edge*, or *Interpretation*.

### **Best Abstract Presentation**

Please note that the quality of the abstract may be used as one of the criteria for selecting Best Paper presentation awards for those abstracts submitted to Technical Program topic areas.

## Online Review Form

The information below is found in the online form reviewers will fill out for each abstract. Up to three reviews will be performed on each abstract. The selections below each heading (Commercialism, Coherency, etc.) are the options reviewers are given in that category, along with the corresponding weights.

<b>Commercialism</b>	<b>Weight (Score)</b>
None	0
Some but tasteful	-2
Blatant	-5

<b>Coherency</b>	<b>Weight (Score)</b>
Well written	2
Adequately communicates	1
Muddled but understandable	0
Difficult to understand	-1
Incomprehensible	-2

<b>Illustrations</b>	<b>Weight (Score)</b>
Clear and insightful	2
Average quality	1
Adequate but could be better	0
Poor illustrations/hard to understand	-1
Lacks needed figures	-2

<b>Conclusions</b>	<b>Weight (Score)</b>
Definite conclusions with data	2
Tentative conclusions/ongoing	1
Not supported by data	-1
No conclusions	-2

<b>Relevance</b>	<b>Weight (Score)</b>
Suitable for any audience	2
Suitable for specialist audience	1
Of little interest to any SEG member	-1

<b>Technical Content</b>	<b>Weight (Score)</b>
Innovative/novel	4
Technically solid, extends previous work	2
Reporting or demonstrating state-of-the-art	1
Technically OK but not innovative, or already well known	0
Lacking or poor technical content	-1
Not supported by known scientific methods	-2

## Presentation Styles

You are required to select your preferred presentation style during submission. Please review the styles available and select the one you feel will best represent your abstract.

### Poster Presentation

Poster presentations are best suited for abstracts that contain detailed mathematics, large-scale plots, or frequent correlation of several displays. They also are most appropriate for abstracts that are targeted to a focused audience or present difficult concepts that may require more than 20 minutes to develop. Poster presentations offer a unique opportunity for one-on-one communication and interaction between the presenter and the audience.

Authors of papers accepted as poster presentations will be asked to prepare their materials to display during the course of the meeting. If you are unable to present, contact the Technical Program Planner. Each poster presenter is given **one** (1) single board that is 8 feet wide by 4 feet high or 2.4 meters wide by 1.2 meters high. You will have use of the entire board area and must include the abstract title and author(s) in your presentation. Title cards will not be on the frame. Each presenter is assigned one presentation and discussion time for judging along with a time window to be at the poster for interaction with attendees. Upon acceptance, this information will be sent to you via e-mail in your official notification letter. Poster presenters are expected to be present at their poster stations during assigned presentation times.

### Oral Presentations

Oral presentations are best suited for abstracts in which a specific and significant milestone is conveyed and in which the work and results can be demonstrated with clear data examples within the time allotted for talk. Oral presentations allow knowledge transfer to large audiences. Oral presentations will be 25 minutes.

Each of the oral-session rooms will be equipped with an LCD projector and computer equipment, one screen (Note: single-screen presentations only), a pointer, and microphones. Information regarding what is compatible with the equipment in the session rooms will be available in the Speaker Kit. A link to access the Speaker Kit will be e-mailed to the speaker for each accepted abstract. All PC-based presentations will utilize the SEG-provided computer and projector with no exceptions. A standard template for oral presentations has been set and is strongly recommended to be used when creating your presentation files.

### Presentation Type Preference

Papers will be assigned to poster or oral (all 25-minute presentations) after the review process. You have the opportunity to designate your *preferred* presentation type when submitting your abstract. A no-preference option will be available. (Please note: Your preference is not always accommodated.)

## Instructions for Typing Abstracts

As in past years, abstracts will be published online exactly as they are submitted. SEG staff will not edit or retype the copy. **Significant violations of the format requirements will be immediate cause for rejection of an abstract.**

A sample expanded abstract and Microsoft Word templates are available online for your reference. **You will NOT be given the opportunity to resubmit a new version of your abstract. NO EXCEPTIONS!**

### Typographical Instructions

- ◆ All abstracts must be written in English and formatted to fit an 8.5" wide x 11" high page (U.S. letter-size paper).
- ◆ A reference list should NOT be included at the end of the expanded abstract but should be prepared separately and ready to enter during submission in the online form. References should be formatted according to SEG standards available online at <http://seg.org/Publications/Journals/-Geophysics/Information-for-Authors/Instructions-to-authors>. **Please copy and paste your references into the appropriate submission field. If using LaTeX, please use a plain-text version of your references.** Please include digital object identifiers (DOIs) for each reference if they are available.
- ◆ Abstracts are **limited to four pages** and must be single-spaced. Note: You are able to submit four full pages without the reference list at the end of the expanded abstract. SEG will proof and compose the references that are provided in the online submission form and attach that page to your expanded abstract if it is accepted and published.
- ◆ Preferred font is 9-point, normal weight, Times New Roman or similar style.
- ◆ Fonts used in equations must be fully licensed and embeddable fonts. Be certain that type within figures is of a size that facilitates easy reading.
- ◆ Margins must be set as follows:

	Page 1	Pages 2, 3, and 4
Top	1.5 inch (39 mm)	1.0 inch (26 mm)
Bottom	1.5 inch (39 mm)	1.5 inch (39 mm)
Left	1.0 inch (26 mm)	1.0 inch (26 mm)
Right	1.0 inch (26 mm)	1.0 inch (26 mm)

- ◆ Text must be justified on both the right and left sides. Authors may use one, two, or three columns of type per page and can change the number of columns within an abstract to accommodate illustrations. Your illustrations can be in color or black and white.
- ◆ The first page begins with the title of the abstract set in 11-point bold type, aligned on the left margin. **Use lowercase for all words in the title except for the first word and proper nouns.** The title should not exceed 235 characters.
- ◆ On the line immediately after the title of the abstract, enter the author name and affiliation line, which is the name and affiliation of each author in 10-point italic type, also aligned on the left margin. **Do not include cities and countries.** Place an asterisk (\*) next to the name of the person presenting the abstract (e.g., Joe Smith\* and Jill Brown, Baxter Research). Remember: The affiliation for each author should be listed as the company/institution that employed the author at the time the research was conducted.
- ◆ Enter two lines of space (two returns) between the last line of the author name and affiliation line and the first line of your abstract. Category headings (i.e., Summary) should be in 9-point bold type, left alignment only. Separate the category headings from the rest of the text with one line of space (one return) before and one line of space after the heading.
- ◆ Empty lines throughout the abstract should be 9-point.
- ◆ Paragraphs should not be indented; instead, separate paragraphs with one line of space (one return).
- ◆ Pages 2, 3, and 4 must contain a shortened version (not to exceed 40 characters) of the abstract title at the top of each page in 10-point bold type, aligned in the center of the abstract. There should be one line of space (one return) between the shortened title and the text of the abstract.
- ◆ Organization of the abstract's content should closely follow this scheme:
  1. Summary
  2. Introduction
  3. Theory and/or Method
  4. Examples (optional)
  5. Conclusions
  6. Acknowledgments (optional)

## Instructions to Submit Online

Deadline: All expanded abstracts must be submitted via the online abstract submission system **before** 5 p.m. U.S. Central Daylight Time, 1 April 2019 for consideration. Late submissions will not be accepted.

1. Prepare your computer. Your Internet browser must be one of the following:
  - ◆ Google Chrome
  - ◆ Microsoft Internet Explorer 8 or greater
  - ◆ Firefox 7 or greater
  
2. Before you begin the online submission process, gather all necessary information. You may use the abstract information form found at the conclusion of this kit to guide you in preparing your submission information. This information should include the following:
  - ◆ **Primary emphasis category**—Select one from the list provided in this kit.
  - ◆ **Keyword**—For indexing reasons, select five from the list included in this kit.
  - ◆ **Presentation Style**—Poster, Oral, or No Preference
  - ◆ **About Presentation**—Previously submitted to or presented at another conference, etc?
  - ◆ **Primary author information**—Include e-mail address, company name, full mailing address, phone number, SEG member number. A valid e-mail address is required.
  - ◆ **Primary contact information**—Include e-mail address, company name, full mailing address, phone number, SEG member number. The primary contact MUST be available by e-mail. The primary contact and the primary author may be the same person.
    - If the primary contact does not have a valid e-mail address, please obtain one. Free e-mail addresses are available from a variety of sources.
  - ◆ **Speaker information**—Include e-mail address, company name, full mailing address, phone number, SEG member number. A valid e-mail address is required. This is the person who will receive communication regarding this abstract.
  - ◆ **Secondary authors**—Include all authors of your paper. You will search our database for your authors. If they are not found, you will be responsible for entering their contact information. You will need his or her e-mail address, company name, full mailing address, phone number, SEG member number.
  - ◆ **References**—Remember that the reference list should not be included at the end of the expanded abstract and should be prepared separately and ready to enter in the online form. **Please copy and paste your references into the appropriate submission field. If using LaTeX, please use a plain-text version of your references.**
  - ◆ **Address**—This will be used only if we need to contact you via postal mail regarding your presentation. Please complete this section as you would if you were addressing an envelope to yourself. **Please note that status notification letters will be sent only via e-mail.**
  - ◆ **Intended Audience Selection**—Please select the category from the provided list that best describes your target audience relative to their assumed knowledge of the abstract's general topic area.
  - ◆ **Expanded Abstract**—The only file type that SEG will accept is PDF (.pdf). No security restrictions or links may be included in the files. Abstracts that are not in the prescribed format, with correct file name extensions, will not be accepted for review. Fonts must be embedded in your abstract. There is a 10 MB size limit on each uploaded abstract. Please have your abstract ready before you begin the online submission process.
  
3. When you are ready to submit online:
  - ◆ Using your Web browser, go to <https://segam2019.abstractcentral.com/> for the online submission form.
  - ◆ If you cannot view Adobe Portable Document Format (.pdf), you will need to download Adobe Reader version 6.0 or higher to view your abstract online. You can get Adobe Reader free by going to <https://get.adobe.com/reader/> and following the download instructions for your computer.
  - ◆ If you encounter problems, please contact the Technical Program Planner at [techprog@seg.org](mailto:techprog@seg.org) for assistance.

# Making PDF Files Using LaTeX

LaTeX templates for SEG Expanded Abstracts are available in the SEGTeX package.

To download SEGTeX please visit <http://ahay.org/wiki/SEGTeX>

## Primary Emphasis Category List

As instructed on the previous page, please select one primary emphasis category to enter into the online submission form. This is required information.

<b>Technical Program Topic Areas:</b>	<b>Special Sessions:</b>
<ul style="list-style-type: none"><li><input type="checkbox"/> Acquisition and Survey Design</li><li><input type="checkbox"/> Anisotropy</li><li><input type="checkbox"/> AVO and Seismic Inversion</li><li><input type="checkbox"/> Borehole Geophysics</li><li><input type="checkbox"/> Distributed Acoustic Sensing</li><li><input type="checkbox"/> EM Exploration and Reservoir Surveillance</li><li><input type="checkbox"/> Emerging Technologies</li><li><input type="checkbox"/> Full Waveform Inversion</li><li><input type="checkbox"/> Gravity and Magnetics</li><li><input type="checkbox"/> Induced Seismicity</li><li><input type="checkbox"/> Interpretation</li><li><input type="checkbox"/> Machine Learning and Data Analytics for E&amp;P</li><li><input type="checkbox"/> Mining</li><li><input type="checkbox"/> Multicomponent Seismic</li><li><input type="checkbox"/> Multi-physics Data Integration</li><li><input type="checkbox"/> Near Surface</li><li><input type="checkbox"/> Passive Seismic</li><li><input type="checkbox"/> Reservoir Characterization</li><li><input type="checkbox"/> Rock Physics</li><li><input type="checkbox"/> Seismic Modeling</li><li><input type="checkbox"/> Seismic Processing: Emerging Technologies</li><li><input type="checkbox"/> Seismic Processing: Migration</li><li><input type="checkbox"/> Seismic Processing: Multiples, Noise and Regularization</li><li><input type="checkbox"/> Seismic Theory</li><li><input type="checkbox"/> Seismic Velocity Estimation</li><li><input type="checkbox"/> Time Lapse</li><li><input type="checkbox"/> Vertical Seismic Profile</li></ul>	<p data-bbox="821 661 1380 672"><i>Please note: Special Sessions are for invited speakers.</i></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Best of AAPG, URTEC, and SPE</li><li><input type="checkbox"/> Booking P2 Reserves using Geophysical Data</li><li><input type="checkbox"/> CO2 Monitoring</li><li><input type="checkbox"/> DAS, Borehole, and Microseismic Geophysics for Unconventionals</li><li><input type="checkbox"/> Eagle Ford</li><li><input type="checkbox"/> Geomechanics and Geophysics</li><li><input type="checkbox"/> Geoscientists Without Borders and Humanitarian Geophysics</li><li><input type="checkbox"/> SEG/AGU Hydrogeophysics</li><li><input type="checkbox"/> Machine Learning and Artificial Intelligence Applied to Geophysics</li><li><input type="checkbox"/> Permian</li><li><input type="checkbox"/> Recent Advances and the Road Ahead</li><li><input type="checkbox"/> Surface Wave Method Applications</li><li><input type="checkbox"/> Texas Water Resource Challenges</li></ul> <p data-bbox="821 1140 1380 1192"><b>*Special Global Session:</b> Latin America – New Plays and Challenges</p> <p data-bbox="821 1213 1380 1281"><i>*[Travel grants may be available for this session on Latin America. If your paper is accepted into this session, you will be contacted with more information.]</i></p>

## Keyword Table

The following list contains suggested keywords for indexing your abstract by subject. Please choose up to five of the keywords listed and enter them during submission.

2D	conical wave	fracture stimulation	machine learning
3C	continuation	fractures	magnetic resonance
3D	converted wave	frequency-domain	measurements
4C	core-log intergration	full-waveform inversion	magnetic susceptibility
4D	correlation	gas	magnetic tensor
5D reconstruction	crosscorrelation	gathers	magnetics
acceleration sensors	crosswell	geology	magnetization
acoustic	crustal structure	geomatics	magnetometer
acquisition	curie depth	geomechanics	magnetotelluric
adaptive subtraction	DAS (distributed acoustic sensors)	geophones	mapping
Africa	data reconstruction	geostatistics	marine
air gun	datuming	geothermal	mass transport complex
airborne survey	deblending	global positioning systems (GPS)	mathematical transform
algorithm	decomposition	global search	maximum entropy
aliasing	deconvolution	gradiometry	maximum likelihood
amplitude	deepwater	gravimeter	measurement while drilling (MWD)
anisotropy	density	gravity	media incompressibility
Antarctica	depositional systems	gravity tensor	Mexico
apparent resistivity	depth conversion	ground-penetrating radar (GPR)	microseismic
aquifer	depth migration	groundwater	Middle East
archaeology	development and production	Gulf of Mexico	migration
arrays	diagenesis	head waves	minimum entropy
artificial intelligence	dielectric measurements	heat flow	minimum likelihood
Asia	diffraction	heterogeneous	mining
attenuation	dip moveout (DMO)	high-angle wells	modeling
attributes	dispersion	high-resolution	monitoring
Australia	displacement	high-velocity layer	moveout
autofocusing	distributed systems	horizontal wells	mudrocks
AVO/AVA	divergence	HTI	multiazimuth
azimuth	diving wave	hydrates	multicomponent
basement	DMO	hydraulic fracturing	multilinear algebra
beam	downhole receivers	hydrocarbon production	multiparameter
bed thickness	downhole sources	hydrology	Multiphysics
blind deconvolution	downward continuation	hydrophones	multiscale
borehole acoustics	earthquake	illumination	multiples
borehole geophysics	economics	imaging	navigation
borehole measurements	edge detection	impedance	near surface
boundary analysis	effective	incompressibility	neural networks
boundary conditions	elastic	induced polarization (IP)	NMO
broadband	electrical/resistivity	induced seismicity	noise
bulk modulus	electromagnetics	integration	nonlinear
Canada	elimination (SRME)	interferometry	North America
carbonate	microseismic	internal multiples	North Sea
case history	engineering	interpolation	nuclear
cased-hole and production logging	environmental	interpretation	nuclear magnetic resonance
CSEM	estimation	invasion	numerical
Central America	Europe	inversion	ocean-bottom cable (OBC)
chaos	extensional	isostasy	ocean-bottom node
chronostratigraphy	extrapolation	isotropic	oceanography
clastic	facies	K-L transform	offset
cloud computing	faults	Kirchhoff	one-way
coal	fiber-optic sensors	land	openhole logging
coherency	field experiments	layered	optimization
common angle	filtering	least squares	overthrust
common conversion point	finite difference	least-squares migration	P-wave
common midpoint (CMP)	finite element	life-of-field seismic (LoFS)	paleomagnetism
common offset	fluid	linear	parallel
common receiver	fluid flow in porous media	lithology	particle-velocity sensors
common shot	fluvial-deltaic	log analysis	passive acquisition
completion	formation evaluation	logging	passive filtering
compressional	Fourier	logging while drilling	passive imaging
compressional wave (P-wave)	fractals	love wave	passive noise suppression
conductivity	fracture imaging	low frequency	

permafrost	reservoir characterization	simultaneous source	total organic carbon
permeability	reservoir engineering	sonic	transmission
permanent reservoir monitoring (prm)	resistivity	sources	traveltime
petrophysics	resistivity log	South America	TTI
phase	resolution	sparse	tube wave
polarization	reverse time migration	spectral analysis	turbidite
pore pressure	risk	spontaneous potential	turning ray
porosity	rock physics	SRME (surface-related multiple elimination)	two-dimensional
poststack	salt	stacking	ultrasonic
predictive analytics	rock core laboratory measurements	standards	unconsolidated
pressure sensors	salt dome	statics	unconventional
prestack	sampling	statistics	vector processing
processing	sandstone	stratal slice	velocity analysis
production	saturation	steep dip	vertical seismic profile (VSP)
profiling	scattering	Stoneley wave	vibroseis
programming	seafloor	stratigraphy	viscoelastic
properties	sediment	subbasalt	visualization
Q	sedimentology	subsalt	volcanics
radial transform	seismic attributes	surface consistent	VTI
radiation	seismic geomorphology	surface nuclear magnetic resonance	water
radiometrics	seismic impedance	surface wave	water table
Radon transform	seismic stratigraphy	survey design	wave equation
random	sensors	tectonics	wave propagation
ray tracing	separation	tensor	wavelet
rayleigh wave	sequence stratigraphy	tensor algebra	wells
reciprocity	sequestration	tensor completion	well geosteering
reconstruction	shale	thermal conductivity	well-log interpretation
reduced-rank filtering	shale gas	time-domain	wireline logging
reflection	shallow	time-lapse	workstation
reflectivity	shear modulus	time migration	wide azimuth (WAZ)
refraction	shear wave (S-wave)	time slice	
remanent magnetization	scholte wave	tomography	
remote sensing	signal processing		

# Copyright Transfers and License Agreements

These agreements are executed during the online submission process.

## **TRANSFER OF COPYRIGHT for publication of Expanded Abstract**

For and in consideration of the potential publication of the expanded abstract (the "Work") by the Society of Exploration Geophysicists ("SEG"), I, the submitter of the Work, as lead and/or corresponding author and/or rightsholders and acting on behalf of all authors and/or owners of copyright and other rights in the Work ("Authors"), hereby transfer, assign, and convey all right, title, interest, and worldwide copyright in the Work to SEG, effective if and when the Work is accepted for presentation at the SEG International Exposition and 89th Annual Meeting (15–20 September 2019, San Antonio, Texas) and related publication, subject only to limitations expressed in this Transfer of Copyright (the "Agreement"). I warrant that I am authorized and empowered to represent all Authors with respect to the Agreement, which is executed jointly and severally by Authors if copyright transfer is from multiple individuals or entities. The Work includes the article and all material to be published within and with the article in any and all media, including but not limited to tables, figures, graphs, source code, movies, and other multimedia. Responses to discussions of the Work, errata, and other similar material directly related to the Work that may arise subsequent to publication also are considered part of the Work. In the event the Work incorporates copyrighted material of others, Authors warrant that all required permissions or releases have been secured. Authors agree to indemnify, defend, and hold SEG, its directors, officers, employees, and agents harmless against any claims to the contrary.

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