How accurate is the information within the SEG Wiki? Are the articles peer reviewed?

- a) What are the risks associated with the SEG Wiki housing inaccurate or incomplete content?
- b) I've often heard that Wikipedia and wikis are not a trusted or respected source of information. How true is that?
- c) What is the difference between the SEG Wiki and Wikipedia? Is there one?

Most of the information in the SEG Wiki has come from SEG publications. SEG seeded the wiki with the society's two best-selling books: Robert E. Sheriff's *Encyclopedic Dictionary of Applied Geophysics* and Oz Yilmaz's *Seismic Data Analysis*. Many of our biographies have come from several SEG sources, including early articles of *The Leading Edge*, SEG awards citations, and from authors who have published in the journal GEOPHYSICS.

In addition to these trusted sources, registered users of the SEG can contribute. All contributions are monitored daily by SEG staff and the SEG Wiki Committee. The Wiki Committee, the governing body of the site, is keenly aware that, like with any resource, inaccurate and incomplete content tarnish credibility. Given this fact, the committee is committed to launching and refining content to meet the high-quality standards of the SEG.

As with any tool that is open to the public, risk can never be completely eliminated. The SEG Wiki Committee believes that tapping into the knowledge and experience of the geoscience community – from SEG members, industry experts, academics, and students of the geosciences – through the open model of publication the wiki offers far outweighs restricting contributions to a select few. The SEG Wiki can only be modified by users registered with SEG. This greatly limits content errors in the wiki. The great thing about wikis: if you do not agree with the accuracy of an entry, you can change it in real time using trusted sources of information, thus correcting the error. This is a key difference between a scholarly published book or peer reviewed journal - the process of SEG Wiki content being curated is open and transparent for all users, but it is also ever-evolving. One additional point to note: vandalism within Wikipedia is almost exclusively the product of anonymous users, which are not permitted within the SEG Wiki, thus virtually eliminating cases of abuse or vandalism (in its over 4-year history, the SEG Wiki has experienced two spam posts).

As for the general accuracy of online encyclopedias, two major studies have taken place over the last 10 years investigating Wikipedia and its competitors. The first study was published by the journal *Nature* and the second study was led by an e-learning consultancy in partnership with Oxford University. Both studies compared a selection of Wikipedia articles with Encyclopedia Britannica. The first study found that Wikipedia articles were on par for accuracy with their counterparts at Encyclopedia Britannica. The second study concluded that Wikipedia articles were generally more up-to-date and better referenced than their Encyclopedia Britannica counterparts. And, they appeared to be at least as strong as other sources in terms of comprehensiveness, lack of bias, and readability.

While there will still be stories every now and then of errors in Wikipedia, it has proven again and again it can be trusted source of information (it's important to remember that Wikipedia is an encyclopedia; it is intended to be a starting point for researchers).

In closing, I want to briefly compare the SEG Wiki and Wikipedia. The SEG Wiki is focused on applied geophysics and related geoscience. Wikipedia can include all content that match their guidelines (including geophysics). Both wikis run off the same software (MediaWiki) and share some similarities around how content gets added. Within the SEG Wiki only registered users can contribute. Comparatively, anyone, including anonymous users, can edit Wikipedia. SEG also has more freedom in adding content that on Wikipedia would prove difficult, i.e., biographies in the SEG Wiki may not all be accepted on Wikipedia. Wikipedia does in fact reject and delete many articles and contributions that do not meet their standards for publication.

How can the wiki benefit me?

The wiki has numerous resources to benefit the reader and contributor. If you would like free and searchable editions of SEG's two best-selling books — you have it. If you would like to learn about the history of pioneers in the field over the last 100 years, the wiki has it. If you need to find free, open data for research to further your professional and academic career, the wiki has it. From refreshing your knowledge on the basics of geophysics to an in-depth overview of rock physics, the wiki offers lots of opportunities to learn, and grow your skills.

In addition, contributing to the wiki offers its own rewards. Each year the SEG Wiki Committee name member, student, and Student Chapter wiki champions. Wiki award honorees receive:

- Free Annual Meeting registration for the winning student and Student Chapter representative (or, \$100)
- Featured article in *The Leading Edge* for all honorees
- Free SEG eBook of choice
- An SEG Wiki trophy
- Invitation to attend SEG's annual Editors' Dinner, a who's who of accomplished authors and researchers in the Society.

The SEG Wiki has its own unique community and networking opportunities. With over 10 million views in less than 4 years -6 million in the last year alone - many in the public and in the field will see your contributions and the value you bring to the wiki when you add your knowledge to it.

In addition to the benefits above, many students and early career professionals are interested in adding new skills that may serve to differentiate them from their peers. Understanding wikitext and the MediaWiki software that powers the SEG Wiki can prove beneficial to employers in the field. Many industry leaders (e.g., ConocoPhillips, Schlumberger, etc.) use internal wikis to educate and exchange ideas among their workforce.

Why should I contribute to the wiki?

- *a)* Who or what is the ideal wiki contributor/contribution?
- b) What is the easiest way to start contributing to the wiki? How can I contribute to the SEG Wiki?
- c) So you are telling me I can edit Oz Yilmaz's Seismic Data Analysis and Robert Sheriff's Encyclopedic Dictionary?

Because it's important and feels good. By contributing to the wiki you have an opportunity to add to the world's knowledge of geophysics – you display to the world your expertise. There are many reasons to contribute to the wiki. Our goal is to expand the world's knowledge of geophysics, create a stronger science, and engage emerging professionals in the field. If these goals line up with some of your interests and aspirations, we want to see you on the wiki! And as I mentioned before, each year we award those that make the most meaningful contributions!

So who is the ideal wiki contributor – you! Wiki contributors come in many shapes and sizes. And, SEG needs all of you to be successful - people who like copy editing and making grammatical improvements. We need more people who are generating geophysics-related content. Perhaps there are others who excel at reviewing and formatting mathematical equations – we have a whole page in need of these repairs.

We need more images, so if you have many geophysics-related photos, you'd also be a great fit for the SEG Wiki. Honestly, the ideal wiki contributor is passionate about the science and is ready to teach and learn. The wiki is all about exchanging ideas and growing this space. For many of us, we consider it a lot of fun, too.

The easiest way to get started for most is to add your own user page. This is a page to tell others in the wiki community a little bit about you, your academic experience, professional goals, and your interest in the wiki. We have a tutorial video as well as step-by-step instructions on the wiki for how to create your own user page.

Also, just ask yourself what interests you? Is it the geology of the earth? Is it acquisition? Is it math? Is it fixing poor grammar? We need all of these areas in the wiki. Do you have a great idea how we can better display pages or concepts from *Seismic Data Analysis* or Sheriff's *Dictionary*? We encourage everyone to jump in and start making enhancements. You can always come back and improve what you started, but even starting with a short article with a few sentences – what we call a stub – is better than not adding your knowledge.

Our help page includes a wiki cheat sheet, and other video tutorials. Some additional areas that need expansion include:

- Documenting open datasets http://wiki.seg.org/wiki/Open_data
- Geoscience 101 entries http://wiki.seg.org/wiki/Category:Geoscience_101
- Summaries of classic papers
- SEG Student Chapters http://wiki.seg.org/wiki/Student_Chapters
- Women in geoscience http://wiki.seg.org/wiki/Category:Women_in_geoscience

What are the best pages to look at to get an idea of the content in the wiki?

After the main page, open data is our most popular page. The landing pages for Sheriff's *Dictionary* and *Seismic Data Analysis* are next. In the spirit of open data there are the geophysical tutorials. You can find these on the home page, as well as by typing geophysical tutorials in the search bar. Matt Hall, an SEG member and geophysics consultant, serves as the editor of these tutorials. Every two months, a geoscientist presents a brief exploration of a geophysical topic and makes all the code and software used within the tutorial freely available.

Biographies are another great way to learn more about the field. Some bios to check out: current president <u>John Bradford</u>, <u>Maurice Ewing</u>, and <u>Robert Sheriff</u>. Also check out the category: Women in geoscience.

We have been developing a list of topics to help build a basics of geophysics section on the wiki. This page – called the knowledge tree – outlines the main articles under three subjects. This page is a work-in-progress, designed to offer those new to the geosciences a quick view of the relevant topics in the field and provide a starting point to learn more.

As for SEG's two best-selling books on the wiki, find these links on the left side of the screen under Navigation. When you click on *Dictionary*, you will see an A-Z directory as well as some tips to get started to improve the *Dictionary*. On the *Seismic Data Analysis* landing page, you see an outline of the entire book – including all the chapters and appendices.

And another great way to get started is to simply search a subject you are interested in knowing more. Read an article, and click on more blue links to keep finding more.

Is there any content that I cannot add to the wiki?

The details of license and permissions get complicated quickly, but, in general, the rules of research and citation apply to the SEG Wiki. There are many websites that clearly explain effective paraphrasing, acceptable summarizing, and proper citation (e.g., Purdue OWL - https://owl.english.purdue.edu/owl/section/2/). Follow these rules and cite your sources, and you'll build strong wiki articles.

The wiki has a Creative Commons Attribution-ShareAlike 3.0 Unported License (CC-BY-SA) license. This means the content can be copied, modified, and redistributed, including for commercial use, as long as the new version grants the same freedoms to and imposes the same restrictions on others and acknowledges the authors of SEG Wiki entries (a link to the entry satisfies author-credit requirements). This means that any text added to the wiki will take on this CC license and must grant the same license to others that use the content.

Images may or may not permit reuse and modification; the conditions for reproduction of each image should be individually checked. One good rule of thumb is if the image is from an American government site (noted by .gov), then you can use the images with attribution (attributing a photo to a source is done by simply adding a summary about the image when uploading to the wiki). If you do not have permission of the author to republish his or her book,

journal article, blog post, etc., and the material in question has a copyright or a different CC license than the SEG Wiki (must be CC-BY-SA), the material cannot be added and would be in violation of copyright law. Again, writing in your own words with paraphrasing, summarizing, and by citing multiple sources, as you would in a research paper, is permitted.

The wiki is also not a place for new findings and journal articles. Publications like *TLE*, Interpretation, and GEOPHYSICS are appropriate outlets for peer reviewed articles. We do strive for accurate and factual content, but cutting edge research belongs in other SEG publications.

This is an area that can get complicated quickly, so if you have any specific questions regarding this issue, please reach out to us at wiki@seg.org.