

5-2009

Web Reviews: Open Science Caught on Tape: Science & Technology Video Web Sites

Lisa Johnston

University of Minnesota - Twin Cities, ljohnsto@umn.edu

Follow this and additional works at: <http://jdc.jefferson.edu/scitechnews>

 Part of the [Physical Sciences and Mathematics Commons](#)

[Let us know how access to this document benefits you](#)

Recommended Citation

Johnston, Lisa (2009) "Web Reviews: Open Science Caught on Tape: Science & Technology Video Web Sites," *Sci-Tech News*: Vol. 63 : Iss. 2 , Article 8.

Available at: <http://jdc.jefferson.edu/scitechnews/vol63/iss2/8>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in *Sci-Tech News* by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Web Reviews

Lisa R. Johnston



Reviews of web resources of interest to *SciTech News* readers.

Open Science: Caught on Tape

Science & Technology Video Web Sites

Earlier this year Bora Zivkovic, a science blogger from "A Blog Around the Clock," gave the keynote presentation on open science as part of a panel discussion at Columbia University. The talk titled "Open Science: Good for Research, Good for Researchers?" gave a historical overview of the transition of scientific communication, from print to online and where this evolution is headed. The next phase, Zickovic explains, encompasses real-time scientific discovery as the scientific communication process moves away from journals toward sharable scientific ideas. Open science might include pre-prints, open notebook science, and, increasingly, video. Video, in particular, allows sharing, not just the results, but the entire scientific process, allowing people to replicate and learn techniques more effectively than through traditional communication. Open science is, in short, fast, free and effective.

You can see the video from Zivkovic's talk at <http://scholcomm.columbia.edu/past-events>. In the meantime, here are several emerging websites that specialize in scientific video sharing.

SciVee

<http://www.scivee.tv>

SciVee is a great example of the open science concept of using video to change how information is communicated. The social site enables scientists to share their research with combined video, documentation, and data in a rich-media format. This involves what they call "pubcasts," by linking and synchronizing video explanations

to their published articles as well as posters (aka "postercasts"). The popular Slideshare.net does something similar, however, SciVee stands apart with very nice features such as useful metadata, a target audience (K12-professional), and linked supplemental materials (like data). And, to top it off, SciVee is open to anyone to view content and become a contributing member by sharing their research and thoughts.



Research Channel

<http://www.researchchannel.org>

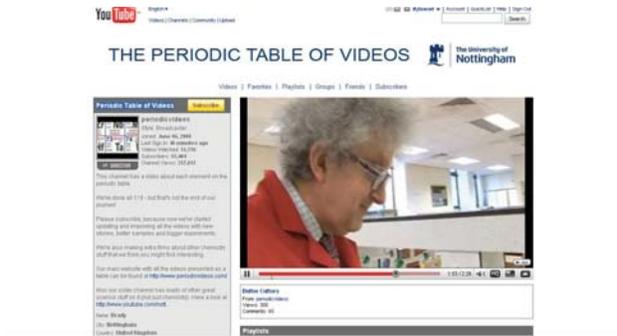
The member contributed Research Channel has over 3,500 videos on topics such as Computer Science, Engineering, Science, and Health /Medicine. The invited videos are submitted by universities, like my own institution, the University of Minnesota, and large organizations like the National Science Foundation. Not simply a website, Research Channel is broadcast to 38 million cable television and satellite subscribers. The web site version functions like a video archive, supporting rather than highlighting the content. Users must download the videos to watch them and each video, though of good quality and from highly respected sources, tend to be long and less creative than a typical web audience might be accustomed.



YouTube Science & Technology Channel

<http://www.youtube.com>

YouTube, the most popular video sharing site on the web, is a wealth of science and technology video content. Everything from scientific lectures to full-length course lectures to Mentos and cola experiments (cool things happen) are freely available and anyone can upload their own content. Even the most amateur videographers can make a topic sound new and exciting. The YouTube Channel organization of videos makes finding quality sci-tech videos even easier. You

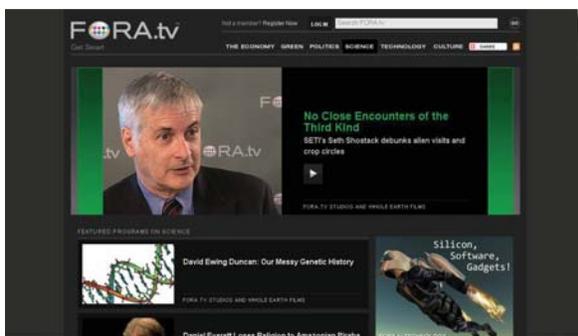


may subscribe to a particular channel and get updates each time the University of California, Berkeley loads a new lecture on quantum mechanics or the Journal of Number Theory publishes a new issue. And, best of all, the content is freely available.

FORA.tv

<http://fora.tv>

Earlier this year, the New York Times described this site as a new player to YouTube's growing academic video success ("Thanks to YouTube, Professors Are Finding New Audiences," January 9, 2009). Like YouTube, science and technology



takes a backseat, this time to the economy and politics rather than, well, teenage video diaries. Worth keeping an eye on.

ScienceHack

<http://sciencehack.com>

ScienceHack is a searchable collection of science videos. Many of the videos are taken from YouTube and organized into categories such as Space, Geology, and Robotics. It contains mostly documentaries and educational content but also fun geek stuff like "How to solve a rubik's cube in less than 100 moves" (surprisingly informative). I couldn't find any recent updates, however, and it seems that the archive stopped in 2006.

Science & Technology Media Sites

The websites of popular science magazines are great places to grab video of scientific and technological news stories and original content. The videos are short (usually 3-4 minutes), high-quality productions (aka not homemade) and freely accessible. One key downside, there will be commercials...

Check out these popular video sources:

Scientific American:

<http://www.sciam.com/video.cfm>

Imaginova (owns Space.com):

<http://www.livescience.com/video>

Science Daily:

<http://www.sciencedaily.com/videos>

Wired:

<http://www.wired.com/video>

New Scientist:

<http://www.newscientist.com/projects/misc/video>

Journal of Visualized Experiments (JoVE)

<http://www.myjove.com>

Journal of Visualized Experiments (JoVE) is a peer-reviewed video journal for biological research. Embracing what they coin as "Rapid



Knowledge Transfer," JoVE strives to combat two challenges faced by the life science research community: poor reproducibility of biological experiments and the difficulty of learning new experimental techniques.

Unfortunately, JoVE comes up short on a key component of open science communication: article submission and open access availability is not freely available. The journal charges an author fee of \$500 per article. Open access videos cost an additional \$2,000 to allow anyone to view, otherwise, an annual subscription to the journal ranges from \$1000-2,400 for institutions.

Open Culture

<http://www.oculture.com>

This site compiles "the best free cultural and educational media available on the web." Editor Dan Colman, who is also the Director & Associate Dean of Stanford's Continuing Studies Program, includes a large collection of videos for teaching and sharing of science and technology. Although not specifically dedicated to science and technology, this site does a nice job of bringing together interesting and valuable videos from



places on the web including YouTube, university webcasts and video archives, then reviews their content so you understand exactly what the video contains. The site also compiles podcasts and audio files.

Big Think

<http://bigthink.com>

Rather than having everyone upload their videos, like YouTube, Big Think vets their information by only posting "Expert" videos which are solicited, edited, and produced. They focus on global ideas and connecting the world's information through a social network like interface. The science & technology section is small, only 28 videos posted on popular topics ranging from stem cells to robotic warfare.

Lab Action

<http://www.labaction.com>

This community driven site focuses mainly on the biological sciences, each video channel ranges from genetics to zoology. But the videos on these topics are interesting. You have your basic frog dissection next to a video of mitochondria under an electron microscope. Interestingly, this site contains more than just lab video footage, including animations and simulations of biological science concepts, such as DNA replication.

Cool Online Tools to Help You Create and Find Videos!

<http://animoto.com/>

Converts your images and music into a dynamic video.

<http://labs.google.com/gaudi>

Not yet complete, Google Labs has indexed a selection of videos by voice recognition. If successful, all videos will be as searchable by the content (spoken words) as text.

<http://12seconds.tv/home>

Twitter for your video life. Record 12-sec broadcasts about your day then post to your twitter feed.

<http://www.flixbwagon.com/>

YouTube-like social interface for posting video from your mobile phone. ❖



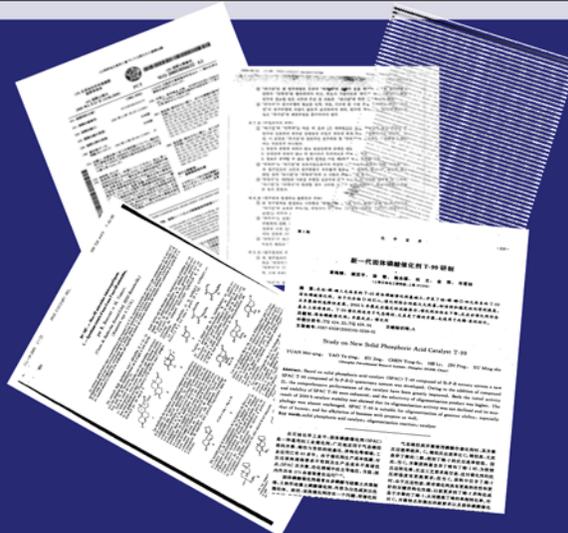
Technical translations since 1996



LESS	Cost - Quality - Time	MORE
<p>FAST-TRANS™ Machine Translation (MT)</p> <ul style="list-style-type: none"> • Fastest turnaround • Lowest cost • Rapid document screening • “Gist” type translation • Text only 	<p>KWIKTRANS™ Machine Aided Translation (MAT)</p> <ul style="list-style-type: none"> • Human post-edit of MT • Better quality than Fast-Trans • 80%-90% of full human quality • Charts, Tables, Graphs 	<p>Human Translation (HT)</p> <ul style="list-style-type: none"> • Best quality • Native language translators • Subject Matter Experts • Competitive rates • Volume discounts

MT/MAT Languages:

- Arabic
- Chinese
- Dutch
- French
- German
- Greek
- Italian
- Japanese
- Korean
- Portuguese
- Russian
- Spanish
- Swedish



Convert PDF Image / Hardcopy → TEXT

Customized requests:

- Claims by Human, rest by MT
- Claims and Examples by Human
- Pages 2-4 by Human, rest by MAT
- Claims ONLY
- MT today, HT in two weeks

Optimize your research by applying precision only where you need it!

Over 70 languages available for Human Translation – Patents, MSDS, Contracts, Package Inserts, Labels...

Telephone interpreting 24/7 available in 150 languages

Request a translation TODAY!

WWW.GLTAC.COM

877.68TRANSLATE

877.688.7267