

American Chemical Society 2011 National Meeting (Denver) Twitter Analysis (p.2)

Table 3. Most shared links

Links	Description	No.
http://t.co/dXFEsax	ACS live Ustream	102
http://t.co/PLoHQDX	ACS live Ustream	75
http://t.co/Y5SCRVic	Event on Aug30th, communicating chemistry to the public	23
http://schmap.it/alm4ni	Tweetup for ACS Denver attendees	23
http://schmap.it/atgofv	ChemLuminary Awards Reception	20
http://t.co/pdwBoFX	Article describing an alarming shortage of plutonium to fuel future space missions	19
http://t.co/CVx24AX	ACS national meeting info page	10
http://t.co/wlQnqEd	Improbable Research, an organization that aims to communicate science to the public through humor. They host an annual IgNoble awards ceremony, honoring the most improbable research	10
http://t.co/NuWDORA	Royal Society of Chemistry (RSC) inviting attendees to their booths, as well as a summary of interesting sessions at ACS Denver	9
http://t.co/JX1ccxl	Nature Chemistry paper demonstrating utility of ion mobility-mass spectrometry in analyzing self assembly of amyloid fibers that contribute to plaque formation	8
http://t.co/bfU0rLE	A blog post by Astronaut Sandra Magnus about her attempts at cooking in space	7
http://t.co/UvluQR4	A summary of discussions on lab safety, and recommendations by an ACS safety task force, as well as those from audience at the meeting	6
http://t.co/oHEZ6sgJGA	Link to the YouTube video 'Miss USA - Should math be taught in schools' -	6
http://t.co/IL7G5IM	Announcement by Chemical and Engineering News about a photo contest	5
http://t.co/IR78Vbo	Link to Dow chemical website highlighting their work on production of omega-9 oils	5
http://t.co/CI7F5GG	Picture of a Nature Chemistry Tshirt with Marie Curie on it	4
http://t.co/FMFJntO	A report prepared by ACS, "Innovation, Chemistry, and Jobs", detailing steps to create economic growth, generate revenue, and add new jobs in chemistry.	4
http://t.co/whD9gZk	Summarizer report of Twapperkeeper archives for the conference	4
http://t.co/Sq2aa7Z	News on Wiley open access blog, announcing the ChemistryOpen: The First Open Access Chemical Society Journal	4
http://t.co/rFlvZua	Article on an incident of error in chemistry tests in a forensic lab that overestimated the level of alcohol in people's blood	4
http://t.co/9vV7yIU	The archive of slides on slideshare curated on Lanyard.com (The social conference directory) a great website where you can track a conference even if you are not attending	4
http://t.co/hFyEaww	Picture of a quilt	4
http://t.co/tMZYQRt	Archive of tweets about the conference on a webpage called ACS network	4
http://ht.ly/6dPOB	Information about a refund to registrants who were affected by Hurricane Irene	4
http://t.co/UneN18U	ACS conference website	4
http://ow.ly/6oWUA	Interesting blogpost about the public anxiety around the word "chemicals" and the scam of selling products as "Chemical free." The author is collecting suggestions for words to replace "Chemical free" to prevent negative sentiment about chemistry in general	4
http://t.co/FCVG8bG	ACS abstract creation page	4

Table 4. Most shared hashtags

Hashtags	No.	Description
#IYC2011	41	The International Year of Chemistry 2011
#space	21	Tweets referring to the shortage of plutonium and the implications on nuclear powered space exploration
#chemistry	14	Most of these tweets announce a talk by @deborahblum about communicating chemistry, she seems to be a highly regarded science blogger
#comp	13	News about computational chemistry
#chem_amb	12	Chemistry ambassadors, referring to the "communicating chemistry to the public initiative"
#medi	9	Tweets describing talks on Medicinal chemistry efforts, most talk about pfizer's efforts, especially in crowdsourcing for drug design
#CINF	8	Talks on Chemical Information and web 2.0 resources available to find information about chemicals

Compendia's Expert Summary

Analysis of the most frequently shared links, most hashtags used to classify twitter posts, and most shared news via retweeting posts provides a snapshot of the wealth of information shared during the recent ACS National conference. At a high level what was shared during the conference could be classified into five major categories, each of which are outlined below, along with the most exciting news shared for each category:

1-Communicating chemistry to the public: Chemists acknowledge public anxiety and negative sentiment around "chemicals", and have been mobilized to communicate chemistry to the public. A number of initiatives towards this end were mentioned in the twitter posts, which include: a) "The International Year in Chemistry", an annual educational event, b) "Improbable Research" an organization that communicates science to the public through humor, c) "The IgNobel awards, an annual event organized by "Improbable Research", d) "The Right to Know" network, a website providing public access to information about chemical factories and their environmental effects, e) announcement of \$500.00 prizes to chemistry students who would include a chapter in their thesis to explain their research to the public, and f) Blogging, specifically, Deborah Blum who seems to be highly regarded as a pioneer in communicating science with the public.

2-Chemistry and Web2.0: The positive effect of Web2.0 technology on sharing information, and availability of resources for chemists was evident at many levels: a) video livestreaming of the conference, b) organizing tweetups to aid better networking, c) announcement of "Chemistry Open" the first open access chemistry journal, d) curating of conference slides on "Lanyard" a social conference directory, e) Chemspider, a free chemical database, 3) PubChem3D, a software generating 3D descriptions of compounds, and 4) Chempro, a chemistry education mobile app for iPhone and iPad

3-Chemistry jobs: A report prepared by ACS, "Innovation, Chemistry, and Jobs," detailing steps to create economic growth, generate revenue, and add new jobs in chemistry. Plans to lobby government to take notice of this report was mentioned in the twitter conversations.

4-Chemistry and space exploration: Concern was raised over diminishing supplies of Plutonium to fuel nuclear powered space expeditions. Also, an interesting blog post by an astronaut was shared, where she demonstrates that cooking in space is possible.

5-New findings and tools in chemistry: This category included a range of topics: a) utility of ion mobility-mass spectrometry in analyzing self assembly of amyloid fibres that contribute to plaque formation, b) concern about the fact that hundreds of published/proprietary RNAi delivery agents have been evaluated by big drug companies and most of them don't work, c) ss-DNA can have similar activity to catalytic RNA, and these have some advantages over enzymes, d) the reason people get addicted to nicotine and not paralyzed by it comes down to a cation-pi interaction, and d) new laboratory safety guidelines released by an ACS-appointed task force.

Analysis of the frequency of posts shared by each meeting participant usually offers a good indication of scientists influential in the field. Our analysis of meeting participants most active on twitter and with high Klout scores revealed a number of influential chemists including Jennifer MacLachlan (@pidgirl), jokrausdu (@jkrausdu), Egon Willighagen (@egonwillighagen), Chris Taylor (@dfchemist), and David K. Smith (@professor_dave). A list of all of the ACS Denver Twitterers, with Klout scores for the top 100, is available from Compendia.