



Chemistry and its social-political-economic context continue to change.

Chemistry and chemistry-based technology that impact our lives make for the complexity and controversy of life and set the stage for thinking about public understanding of chemistry.

The Public Understanding of Chemistry section will try to address chemistry in real life context with original contributions (articles/position papers/policy briefs) and/or published articles and columns in reputable sources (used with permission).

The following article, used with permission from the C & E News, illustrates the necessity of proper representation of chemistry in the media.

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A CHEMICAL NEWS BLUNDER, POWERING UP WITH COTTON

Watchers of the "Tonight Show" -- especially the segment called "Headlines" -- know that there are a lot of unintentionally funny, and sometimes worrisome, mistakes published in print media. Talk-show host Jay Leno encourages viewers and fans to send in error-laden clippings that he then uses to get a few chuckles out of his audience.

Recently, Newscripts received a newspaper clipping from reader David M. Manuta that could elicit both laughs and sad headshakes from our "audience": hawk-eyed chemists who will recognize the molecular mistake immediately.

In its Feb. 27 issue, the Columbus Dispatch ran an article, "Washing Is Rx For Healthy Cars In Winter." The short piece, from the syndicate Content That Works, set out to warn Ohio readers of various hazards that can damage their vehicles' paint jobs', and finishes. In particular, the article says, road deicers are most destructive. "SODIUM MAGNESIUM, used instead of sodium chloride in some locations, can be corrosive ...on a vehicle's undercarriage," the piece reads.

Unsure of what type of fantastical compound "sodium magnesium" might be, Manuta wrote to Content That Works to point out the problem. "Based on the underlying chemistry," he wrote, " 'sodium magnesium' would act as a wonderful deicer, as long as no one is concerned about the ensuing explosion and/or fire!" Manuta, president of Manuta Chemical Consulting, [Inc.] in Ohio, has investigated "too many incidents where reactive metals displace hydrogen from water" and cause explosions, he tells Newscripts.

He postulates that the article probably meant to describe magnesium chloride, a salt that lowers the freezing point of water more than sodium chloride does. This phenomenon was discussed in detail in a 2008 Newscripts column (C&EN, March 31, 2008, page 56). Either way, Manuta says, "there could be potentially devastating consequences for someone tossing pellets containing 'sodium magnesium' on an ice or snow-covered surface." So, readers, don't try this at home.

LAUREN K. WOLF wrote this week's column. Please send comments and suggestions to newscripts@acs.org.

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