

# Science and the Media:

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Cold fusion is back in the public eye, together with low-energy nuclear reactions, or LENRs.

Consider a blurb on page 26 of the [preliminary program](#) of the [American Nuclear Society's](#) November 2012 winter meeting that explains the panel discussion of LENRs:

*This session will explore the surprising possibility that highly energetic nuclear reactions and elemental transmutations result from low-energy nuclear reactions (LENRs). Although the term was not used a century ago, examples of LENRs go back that far. LENRs are weak interactions and neutron-capture processes that occur in nanometer-to-micron scale regions on surfaces in condensed matter at room temperature. Although nuclear, LENRs are not based on fission or any kind of fusion, both of which primarily involve the strong interaction.*

According to a [report from the New Energy Times](#) news service, the American Nuclear Society last held a session on LENRs 14 years ago. (On its [About page](#), the news service says the service 'began in 2000 and specializes in investigating and reporting the myths, realities, strengths, and challenges associated with low-energy nuclear reaction research.')

Whatever is to be said about scientific validity for either cold fusion or LENRs, and whatever the overlap or lack of it, a few media outlets have lately been considering the general topic of new potential for nuclear energy. Here's a sampling:

\* The August *US News* article '[New burst of energy could bring cold fusion to front burner](#)' began, 'After decades of wandering in the scientific wilderness, cold fusion may be returning to the land of the acceptable.' The article points to interest at NASA and Boeing and to 'LENR demonstration projects recently initiated at respected places like MIT, the University of Missouri, and the University of Bologna; public presentations by executives at one of the world's largest instrument companies, National Instruments, apparently designed to attract the top LENR researchers into a project to test and quantify observed LENR effects; and a July report from the European Commission's research and development center that LENR at least has sustainable future energy technology potential.'

\* The New Energy Times news service [reports](#) that the current issue of *Discover* magazine includes the two-page article '[Bring back the cold fusion dream](#),' with the subhead 'A new theory may explain the notorious cold fusion experiment from two decades ago, reigniting hopes of a clean-energy breakthrough.' (The magazine itself apparently delays online posting of its issues.)

\* The 4 October issue of *Nature* contains the letter '[Cold fusion: Fleischmann denied due credit](#)' from [Brian D. Josephson](#), a physics Nobel laureate. Josephson complains that many ignore 'the experimental evidence contradicting the view that cold fusion is 'pathological science.'" He proposes that errors have plagued nuclear measurements and that replication has posed special difficulties. He adds:

*Scepticism also arose because the amount of nuclear radiation observed was very low compared with that expected from the claimed levels of excess heat. But it could be argued*

*that the experiment never excluded the possibility that the liberated energy might be taken up directly by the metal lattice within which the hydrogen molecules were absorbed.*

*In my opinion, none of this would have mattered had journal editors not responded to this scepticism, or to emotive condemnation of the experimenters, by setting an unusually high bar for publication of papers on cold fusion. This meant that most scientists were denied a view of the accumulating positive evidence.*

\* Josephson's recent [article in the Guardian](#) , an obituary for Fleischmann, asserts that cold fusion has 'come to be commonly regarded as a delusion, but the true situation is more complicated' and that 'progress seems to be occurring towards the application of cold fusion as a practical energy source.'

\* In a July 2012 [adulatory blog posting at the Washington Times](#) of a Q&A with Josephson, the Nobel laureate says that 'in my work I have come across many cases of what I call Pathological Disbelief, for example with Low Energy Nuclear Reactions (cold fusion), where there is a complete disconnect between what is generally believed ('fiasco of the century') and the facts, namely that there is abundant experimental confirmation of the phenomenon.'

One more article requires inclusion in this list, but it has a different tenor. At the *Guardian*, the pseudonymous blogger [GrrlScientist](#) is described as a molecular evolutionary biologist and ornithologist. She [recently criticized](#) Josephson for 'openly espousing parapsychology—a field of quantum kookiness that encompasses a wide array of anti-scientific and pseudoscientific hocus-pocus attributed to powerful brain waves' and for having become 'an outspoken supporter of cold fusion, that faith-based idea that is often referred to as 'pathological science' by his scientific colleagues.' He has, she charges, 'abandoned rationality and the scientific method to advocate boneheaded fantasies.'

*Steven T. Corneliussen, a media analyst for the American Institute of Physics, monitors three national newspapers, the weeklies Nature and Science, and occasionally other publications. He has published op-eds in the Washington Post and other newspapers, has written for NASA's history program, and is a science writer at a particle-accelerator laboratory.*