



Musing about acronyms

Human beings love acronyms. They have been in use for many centuries, and they exist in many languages. They can significantly shorten long titles and can facilitate communications through those abbreviations. For example, hardly anyone in common conversation says, “light amplification by the stimulated emission of radiation,” and yet almost everyone knows the meaning of and uses the acronym LASER. In fact, it’s so commonplace that the most use of the word is lowercase “laser” rather than LASER. People also seem to love to look for names for places and processes so that the associated acronyms have a common name, which may or may not be related to the place or process.

You are reading this because you are a member of the Materials Research Society (MRS) or have an interest in materials research. I have a number of items that have the MRS logo on them. I cannot tell you the number of times that people unfamiliar with MRS have asked whether or not this (MRS) is an organization for married women (i.e., the honorific Mrs. in English). When I explain, it clears up their confusion, but I can’t help but wonder how many people have strange thoughts about what I’m involved in every time I wear my shirt with the MRS logo.

Sometimes the use of acronyms can complicate understanding even among technophiles. For example, when I think of APS, I think of the American Physical

Society or the Advanced Photon Source (because I’m a user), but in materials research APS can stand for appearance potential spectroscopy. APS is also the acronym for the Association for Psychological Science, the American Physiological Society, the American Philatelic Society, the American Phytopathological Society, the American Pain Society, the American Philosophical Society, the American Peptide Society, the American Psychosomatic Society, Acta Pharmicologica Sinica, and a host of others such as Arizona Public Services, Albuquerque Public Schools, etc., etc., etc.

In fairness, I note that others use the MRS acronym including the Market Research Society and the Metastasis



LEXICON

CARS	Coherent Anti-Stokes Raman Spectroscopy
EELS	Electron Energy Loss Spectroscopy
FIB	Focused Ion Beam
FRET	Fluorescence Resonance Energy Transfer
HAS	Helium Atom Scattering
LASER	Light Amplification by the Stimulated Emission of Radiation
LIBS	Laser-Induced Breakdown Spectroscopy
MRS	Magnetic Resonance Spectroscopy
PACT	Photo-Acoustic Computed Tomography
PEELS	Polarized Electron Energy Loss Spectroscopy
REM	Reflection Electron Microscopy
SAD	Selected Area Diffraction
SANS	Small-Angle Neutron Scattering
TACT	Thermo-Acoustic Computed Tomography
UPS	UV Photoelectron Spectroscopy

Research Society, as well as the Music Radio Service and others. The MRS acronym is also associated with at least one type of spectroscopy (see below).

I value integrity. Honesty is important to me as an individual and a professional. And yet, in my professional life I am associated with several notorious FIBers. FIBing is important, indeed critical, for the activities of my group. So much so that we hire people who have skills in FIBing, and we send others to training sessions to train them in how to FIB.

I also have people who look for signatures of EELS in our labs. This may seem weird, because our labs are bone dry and they don't use the same equipment that ordinary snigglers use. Nonetheless, they get as excited as the most excited of snigglers looking for EELS in solid materials.

I am a fairly tolerant person. Consequently, it distresses me to mention this, but there are many conservatives who are biased against LIBS. I cannot figure out why those practicing LIBS deserve the animus of these conservatives. Can't we all just get along?

Some of my favorite acronyms that have nothing to do with the word they purport to represent are CARS (which has little to do with automobiles), FRET (which has nothing to do with worrying), HAS (which has nothing to do with having something), PACT (which has nothing to do with a formal binding agreement), PEELS (which has nothing to do with potato skins or orange rinds), REM (which has nothing to do with the music group), SAD (which has nothing to do with feeling blue), and SANS (which has nothing

to do with being without), TACT (which has nothing to do with diplomacy), and UPS (which has nothing to do with the package delivery service).

Now, one might be tempted to think that NIMROD (which has nothing to do with the Biblical reference; also do not even think about calling someone a nimrod) is a fictitious acronym, but in fact it stands for Northern Illinois Meteorological Research on Downbursts and is quite real.

I could go on, but I think that's enough for existing acronyms. However, it doesn't feel right to end this article without suggesting some new acronyms such as CASHCOW (Coherent Anti-Stokes Spectroscopy of Heterocyclic Carbon Oligomers from Weed), CRUD (Coherent Resonant Ultraviolet Detection), CURSED (Coherent UV Raman Spectroscopy of Electron Dynamics), FRAUDS (Forensics Research in Arson Using Diffraction Spectroscopy), FUNDME (Femtosecond UV Nanoscale Dynamics in Materials Engineering), FUNDMENOW (Femtosecond UV Nanoscale Dynamics in Materials Engineering using Nonlinear Optical Warbling), GRUMPY (Genome Research Using Microanalysis of Perennial Yams), NOBEL (Nonlinear Optical Biasing of Electrical Latches), XMEN (X-ray Microanalysis of Exotic Nerds), and ZOMBIES (Zeptosecond Optical Microscopy of Internal Energy States). If any of you want to adopt/adapt these, please feel free to do so.

I am sure that all of you have your favorite acronyms. There are far too many to list in this short article, which concentrates on those in English that are related to science. For those of you who have more interest in acronyms, I recommend the references shown on this page.

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References

- <http://en.wikipedia.org/wiki/Acronym>.
- http://www.allacronyms.com/tag/materials_science.
- <http://www.allacronyms.com/>.
- [http://www.acronymfinder.com/Scientific-and-Technical-Acronyms,-Symbols,-and-Abbreviations-\(Wiley-InterScience\)-\(STASA\).html](http://www.acronymfinder.com/Scientific-and-Technical-Acronyms,-Symbols,-and-Abbreviations-(Wiley-InterScience)-(STASA).html).