Methods Acronyms – The Witty Side of Science

D. Sović* and B. Bertoša

a Faculty of Food Technology and Biotechnology, Pierottijeva 6, 10000 Zagreb, Croatia, e-mail: dsovic@gmail.com
b “Rudjer Bošković” Institute, Bijenička cesta 54, 10000 Zagreb, Croatia

The name of a method usually contains its basic principles. To simplify the name of a method and make it easier to remember, an acronym is often used. However, sometimes the name of a method and its acronym are formed in such a way that the result often has quite a different or even humorous meaning. Here we have sorted out acronyms of scientific methods that have unusual or humorous meaning. The summation is a list of representative methods that represent the true face of science: an interesting, skillful and joyful human activity.

Key words: Acronyms, methods, nuclear magnetic resonance, computational chemistry

Introduction

Scientists are often portrayed in the public as spectacle-wearing nerds in white lab-coats with no sense of humor, while science is generally perceived as a boring human activity. In some cases this might be true, but the majority of scientists are often frolicking with their jobs. This results in naming new techniques and methods with a sense of humor. Usually the names of different techniques are acronyms or abbreviations derived from the initial letters of the full name that gives it its description (e.g. NMR stands for Nuclear Magnetic Resonance). In order to make it catchier and easier to pronounce and remember, sometimes an acronym can be formed from not only the initial letters of the full name. As a result, sometimes unintentionally, but most often deliberately, techniques and methods are given funny abbreviations and acronyms. An example is the method the acronym of which is NOESY, representing a nuclear magnetic resonance method – Nuclear Overhauser Effect Spectrocopy. This acronym is read [nou:zi] which is very similar to the English word nosey meaning one who has a big nose. Further, “nosey” is commonly used to describe a person who pries into other people’s affairs (this makes NOESY a particularly good acronym for an investigative technique).

Some acronyms are in fact well-known words as the acronym FISH (Fluorescent In-Situ Hybridization) which is the cytogenetic technique that can be used to detect and localize the presence or absence of specific DNA sequences in chromosomes.

Although probably the largest number of new method acronyms can be found for resonance techniques, in other fields of science this kind of play is also used. In mass spectroscopy, one of the examples is the method whose acronym is MALDI (Matrix Assisted Laser Desorption/Ionization) which is read as [moldi]. Mold is a type of earth that is friable and suitable for plant growth. Therefore, the meaning of the acronym MALDI can be interpreted as earthy. In the domain of instrumental analytical methods, specifically infra-red spectroscopy, there is a method SNIFTIRS (Subtractively Normalized Interfacial FT-IR Spectroscopy). A sniffer is the name of a glass used to drink spirits such as brandy designed to allow the drinker a good sniff of the drink. Often a method has its acronym formed according to a personal name. An example in astronomy is LISA (Laser Interferometer Space Antenna) or in immunoanalytical methods ELISA (Enzyme-Linked ImmunoSorbent Assay). Sometimes an acronym gives a method a powerful name, like BLAST (Basic Local Alignment Search Tool) which is an algorithm used in bioinformatics for comparing primary biological sequence information, such as the amino-acid sequences of different proteins or the nucleotides of DNA sequences.

This paper summarizes some of the funniest and most interesting acronyms used in different fields of science. The purpose of the paper is to extract the acronyms of scientific methods that were the most impressive, and to inspire and encourage readers to exercise playfulness and imagination when creating their own acronyms.

Acronyms

The most interesting acronyms, which are accidentally or purposely funny, come from the youngest techniques. These are usually methods of the nuclear magnetic resonance, computational chemistry and different methods and techniques used in astronomy and similar sciences.

Acronyms of nuclear magnetic resonance methods

Beside the already mentioned, other amusing acronyms used in techniques of nuclear magnetic resonance are:

- BIRD (BiLinear Rotation Decoupling)
- BURP (Bnad-selective, Uniform-Response, pure-phase Pulses)
- **CAMELSPIN** (Cross-relaxation Appropriate for Minimolecules Emulated by Locked SPINS). This acronym can be divided into two words: camel and spin. Camel is an animal and spin is rotation. So, this acronym could have a meaning of a camel that is rotating (spinning).

- **CHESS** (CHEmical Shift selective Suppression). Chess is a board game.

- **CIDNP** (Chemically Induced Dynamic Nuclear Polarization). CIDNP is phonetically equivalent to the English word “kidnap” which has a meaning of seizing and carrying away by unlawful force.

- **CRAMPS** (Combined Rotation And Multiple Pulse Spectroscopy). Cramps are sharp abdominal pains.

- **CYCLOPS** (CYClically Ordered Phase Sequence phase cycle). Cyclops are one-eyed creatures or giants from Greek mythology.

- **DANTE** (Delays Alternating with Nutations for Tailored Excitation). Dante is the name of the Italian poet from Florence in the 13th and 14th century (Dante Alighieri is the author of The Divine Comedy).

- **DISCO** (Differences and Sums within COSY). Disco is a night club for dancing to live or recorded music.

- **DOUBTFUL** (DOUBLE: Quantum Transitions for Finding Unresolved Lines). Doubtful has a meaning of lacking of definite opinion, conviction or determination.

- **DRYCLEAN** (Diffusion-Reduced Water Signals in Spectroscopy of Molecules Moving sLow Er than water). To dry clean has a meaning of cleaning with chemicals other than water.

- **DRYSTEAM** (DRY STimulated Echo Acquisition Mode). DRYSTEAM refers to something generally incompetent.

- **ENDOR** (Electron-Nuclear DOuble Resonance). Endor is the name of the planet in the Star Wars movie serial. It is inhabited with Ewoks.

- **FLOPSY** (FLip-FLOP Spectroscopy). In English language “to flop” means to fall down suddenly, especially with noise.

- **FUCOUP** (FULLY COUPled C,H Correlation). This acronym can be phonetically pronounced as [fak ap], which in a slightly vulgar way has the meaning of ruining or spoiling especially through stupidity or carelessness.

- **GRASP** (GRAdient-Accelerated SPectroscopy). GRASP means to grasp something means to take or seize it eagerly.

- **GROPE** (Generalized compensation for Resonance Offset and Pulse Length Errors). “To grope” to search for something blindly or uncertainly.

- **HEHAHA** (HEteronuclear HArmann HAhn spectroscopy). This acronym imitates human laughter.

- **HOHAHA** (HOMononuclear HArmann HAhn spectroscopy). Same as the previous.

- **INADEQUATE** (Incredible Natural Abundance Double QUAntum Transfer Experiment). Inadequate means not adequate.

- **INDER** (Indemnuclear DOuble Resonance). This refers to something that is inside, indoor.

- **INEPT** (Insensitive Nucleus Enhancement by Polarization Transfer). The word inept has its origin in Latin inepus. It refers to something generally incompetent.

- **JUMPRET** (JUMP-and-RETurn Water Suppression). This acronym is made up of two words: jump and ret. Ret can be pronounced like the word rat, therefore this acronym has the meaning of a jumping rat.

- **PASADENA** (Parahydrogen And Synthesis Allow Dramatically Enhanced Nuclear Alignment). Pasadena is a city in California, USA.

- **POMMIE** (Phase Oscillations to MaxiMize Editing). In Australia and New Zealand pommie is a derogatory term for a British person, especially a recent immigrant.

- **SEDUCE** (SEQUence for selective composite pulse Decoupling Using shaped pulses). Seduce means to lead astray, as from duty, rectitude. The most common meaning of the word “seduce” in English is to tempt one into sexual contact. This is an example when all the letters in the acronym of the method are not present in the description of that method.

- **SECSY** (Spin-Echo Correlation Spectroscopy). This acronym is read like the word sexy.

- **SIMPLTN** (SIMulation of Pulse and Two-dimensional NMR). Phonetically, this acronym is read like the word simplton, meaning a person lacking common sense.

- **STEAM** (STimulated Echo Acquisition Mode). Steam is a vapor rising from the heated substance (liquid).

- **TANGO** (Testing for Adjacent Nuclei with a Gyration Operator). Tango is a Latin-American dance.

- **TOE** (Truncated driven nOE). Toe is one of the digits of the human foot.

- **WALTZ** (Wideband Alternating-Phase Low-power Technique for Zero residual splitting). Waltz (or in German Waltzer) is a ballroom dance.

- **WATERGATE** (WATER suppression by GrAdient Tailored Excitation). Watergate is the well-known political scandal that happened in the USA in 1972 and 1973. Water gate is a regulator or gate that controls the rate of water flow through a sluice.

- **WURST** (Wideband, Uniform Rate, and Smooth Truncation). Wurst is the German word for sausage.

One interesting acronym that occurs in other spectroscopic methods is STICS (Space-Time Image Correlation Spectroscopy), which is read like the English word sticks.

### Acronyms of computational chemistry methods

Numerous software, methods and algorithms used in computational chemistry, a young and developing field of science, are named with interesting acronyms. A good example is CHARMM (Chemistry at HARvard Macromolecular Mechanics) — a widely used molecular simulation program with broad application in many-particle systems — which is read as charm (chärm).
– BOSS (Biochemical and Organic Simulation System).46 Boss is a person who makes decisions, exercises authority, dominates.11
– COMBINE (COMparative BINding Energy).47 Combine means to bring into or join in a close union or whole.
– COMPASS (Condensed-phase Optimized Molecular Potentials for Atomistic Simulation Studies).48 Compass is an instrument for determining directions, as by means of a freely rotating magnetized needle that indicates magnetic north.11
– CORINA (COnRolINAtes).49 Corina is a personal name.
– FADE (The Fast Atomic Density Evaluator).50 Fade means to lose brightness or vividness of color.11
– FANTOM (FAlt Newton-Raphson TOrientation Angle MInimizer).51 Fantom is an appearance or an illusion without material substance, as a dream image, mirage, or optical illusion.11 The term “phantom” (pronounced identically) is also often used to refer to ghosts.
– GAMESSS (The General Atomic and Molecular Electronic Structure System).52 This acronym is read like the plural of the word game.
– GRAMM (The Global RANGE Molecular Matching).53 This acronym is read like a metric unit of molecular; one thousandth of a kilogram.
– MICE (Molecular InteractivE).54 The word “mice” is plural of the word mouse.
– PADRE (Pairwise Atomic Density Reverse Engineering).55 Padre is the Spanish, Italian and Portuguese word for father.

Acronyms of other scientific methods

As previously mentioned, the most funny and interesting acronyms are found in the younger fields of science. Astronomy is an ancient science that flourished and grew with the development and use of spectroscopic methods. In astronomy there are many acronyms that represent personal names like
– AMANDA (Antarctic Muon And Neutrino Detector Array).59
– ARIES (ARizona Infrared Imager and Echelle Spectrograph).60 Aries is the first sign of the Zodiac in astrology pictured as a ram.
– DEBRA (Diffuse Extragalactic Background Radiation).61
– MICHELLE (Mid-Infrared eCHELLE spectrograph).62

There are also acronyms of the systems and procedures in studies of different effects and occurrences:

– 2D-FRUTTI (2-D Photon Counting System).63 This is an example when the acronym is not present according to the rule of using the letters of the full name (the letter F in this acronym is not present in the full name of the system). This acronym resembles the Italian term tutti frutti (all fruits). In addition, tutti frutti refers to the ice-cream that contains bits of candied fruits.

– BOOMERanG (Balloon Observations Of Millimetric Extragalactic Radiation and Geophysics).64 A boomerang is a bent or twisted throwing club that is characteristic to Australian Aborigines.

– CANGAROO (Collaboration between Australian and Nippon for a Gamma Ray Observatory in the Outback).65 Cangaroo can be read as the word kangaroo which is any of various herbivorous leaping marsupial mammals (family Macropodidae) of Australia, New Guinea, and adjacent islands.

– CHIPS (Cosmic Hot Interstellar Plasma Spectrometer).66 Chips usually refer to thin pieces of food (e.g. potato chips). In this case they can mean the plural of a piece of an electronic circuit, a chip.

– COBRAS/SAMBA (COnmic Background Radiation Anisotropy Satellite/SAtellite to Measure Background Anisotropies).57 Cobra is a well-known venomous family of snakes. Samba is one of the most popular forms of dance in Brazil. Therefore, this acronym can have a meaning of samba dance of cobras.

– DEIMOS (Deep Extragalactic Imaging Multi Object Spectrograph).68 According to Greek mythology Phobos and Deimos (Dread) accompanied Ares, god of war, into battle. Deimos is also a satellite of the planet Mars (in Greek mythology Mars is Ares).

– EROS (Expérience de Recherche d’Objects Sombres).69 Eros in Greek mythology is the god of love.

– FIFI (Far Infrared Fabry-perot Interferometer).70 Fifi is short for the name Josephine. It is often used stereotypically (or insultingly) as a name for a small, cute, harmless dog.

– HAWAII (HgCdTe Astronomical Wide Area Infrared Imager).71 Hawaii is a chain of hundreds of volcanic islands in the Pacific Ocean.

– MACHO (MASSive Compact Halo Objects).72 A halo is a visible glowing ring that encompasses a celestial object (e.g. Sun, Moon, etc). In this case, Halo refers to the outermost portion of our galaxy, a spherical region that extends beyond the galactic disk, and whose composition is unknown. Macho means someone being aggressively virile.

– WIMP (Weakly Interacting Massive Particles).73 WIMPS are hypothetical objects that might make up the halo. A wimp is a weak and/or cowardly person.

Sometimes methods are named after cities. The MONTE CARLO method enables approximate solutions for a wide range of mathematical problems with the aid of computers. It is widely implemented in biophysics and modelling of macromolecules. Similar examples can be found in different fields of sciences, other than chemistry and physics. CREMONA transformations in mathematics are well known. They are named after Italian mathematician Luigi Cremona. In architecture, Cremona’s method for graphical calculus of forces in equilibrium shortened CREMONA. In psychology there is a scale WAIS (The Wechsler Adult Intelligence Scale)74 that is frequently used for assessment of general or global intelligence. This acronym can be read as the word ways (plural of way). In archeology there is a simple acronym CLIMAP (paleoCLImatic MAP)77 that defines
a project aimed at making paleoclimatic maps showing temperatures on sea surfaces in different locations in different periods. CLIMAP has a similar pronunciation as climb map (to climb on the map). It is evident that playing with acronyms is not specific to natural sciences although it is most abundant in them.

Conclusion

The featured acronyms are just a small sample, but we chose them because they were the most impressive, whether they are unusual or humorous. Acronyms can be formed simply from the initial letters of a method’s description or by combining the letters from the description. Most often, a depiction is made deliberately to obtain a funny acronym. Almost all the presented examples show science in its true light – as a playful and luxuriant human activity. Every scientist finds satisfaction in his own field and only a scratch is seen in mentioned acronyms. Humor is a characteristic of the human race as is inexhaustible thirst for knowledge. Finally, we hope that our summation of funny acronyms will be a motivation and inspiration to scientists around the world to continue coming up with witty, unusual and imaginative acronyms that will brighten the often tedious scientific work.

References:

Ime metode i akronimi – duhovita strana znanosti

D. Sočić\textsuperscript{a} i B. Bertoša\textsuperscript{b}

Ime metode najčešće sadrži opis njenih osnovnih načela. Kako bi se pojavnostavio naziv metode, a samim time i olakšalo pamćenje naziva, redovito se upotrebljavaju akronimi. Međutim, često se događa da su ime metode i njezin akronim osmišljeni tako da dobiveni naziv ima potpuno drugačije značenje, često i humorističnu konotaciju. Izdvojeni su akronimi znanstvenih metoda koji imaju neobičajena i često humoristična značenja. Pregled ovih akronima je zbir reprezentativnih metoda koje prikazuju znanost u njezinom pravom svjetlu kao zahtjevnu, zanimljivu i znamenjuju se povijesnim i humorističnim poticajima.

\textsuperscript{a} Prehrambeno-biotehnološki fakultet, Pierottijeva 6, 10000 Zagreb, Hrvatska
\textsuperscript{b} Institut Ruđer Bošković, Bijenička 54, 10 001 Zagreb, Hrvatska

Prihvaćeno 18. svibnja 2009.