Matt's Mad Science and Inventions

In the last half year I have invented, built and published quite a few inventions, and "mad science art projects". Many are innovations that have never before been produced or documented. Here is a short list of some of the most interesting projects.

TIP-TYPE

Utility : Keyboardless Typing, 8bit chorded input, touching fingers to thumbs
Published May 2013
Youtube Videos : http://youtu.be/WwFxz2X4BAU , http://youtu.be/ZRyKF5w8F8g ,
http://youtu.be/zXXu4NDabGE
Web Articles : http://www.dscript.org/tip-type-new-alternative-keyboardless-typing
http://www.dscript.org/diy-keyboardless-typing
http://www.dscript.org/tip-type-2nd-prototype-diy-keyboardless-typing-air
http://www.dscript.org/tip-type-typing-jewlery-1st-attemp-fail

Tip type is an new way of typing by touching the fingers to the thumbs. It could be made USB, or bluetooth. I think the coolest application would be in conjunction with Google Glasses, one could walk down the street while typing in air. It also allows full relaxation of the wrists offering potential therapeutic benefits.

AWE sensor system

Utility : Capturing water waves as electrical signals
Published May 2013
Youtube Videos : http://youtu.be/yw--Kp7YWAA , http://youtu.be/bh9Do2dlK0s ,
Web Articles : http://www.dscript.org/aqua-wave-effect-awe-lights
http://www.dscript.org/electric-music-lights-show-awe-sensor-vj-lights

The AWE sensors work by sensing water waves with electrodes hanging just above the water level. This allows water waves to be captured electrically, meaning multiple wave inputs can be used and even allow the water to be used as a physical computation device.

Wave beat pattern signal generation

Utility : Generate beats and patterns via water wave propagation and resonance
Published September 2013
Youtube Videos : http://youtu.be/KRy3kP4QYa4
Web Articles : http://www.dscript.org/wave-pond-water-beat-box

Wave sensors trigger signals fed into computers. The wave environment is physically designed to produce the desired beats and patterns. This Human physical interface is used by "drawing in the water" to produce beats/patterns sent to a computer or electronic device.

Magnetite Saltwater Blocking Relay

Utility : Blocking control of electrical signals with magnetite crystals in salt water
Published May 2013
Youtube Videos : http://youtu.be/3mMECBNyNMg
Web Articles : http://dscript.org/diy-magnetic-water-analogue-switching

Magnetic crystals suspended in agitated salt water can be pulled via magnets to block anodes and cathodes, resulting in the ability to block electrical signals through water via magnetic fields. When the power to the magnet is removed the magnetic particles disperses and the current flows freely again.

Water Oscillator

Youtube Videos : http://youtu.be/KVb_mEVzEks
Web Articles : http://dscript.org/diy-oscillator-making-water-sing

By rapidly opening and closing a gap beneath water, an electrical signal passing through will produce oscillations. Frequency can easily be produced within the human audible spectrum. Could be used for computing, electronics, or even more appropriately perhaps, for music and audio generation.

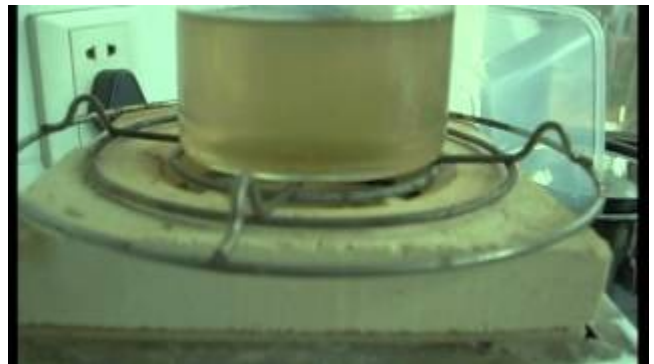# Saltwater Magnetite Crystal Production

Youtube Videos : http://youtu.be/wlcP1GhVvjM
Web Articles : http://dscript.org/homegrown-ironii-oxide

By allowing iron to oxidize in heavily salted water, the lower levels of dissolved gas prevent it from fully oxidizing to iron(iii)oxide, yielding magnetite crystals.

"Mad Science" and inventions by Matthew DeBlock
All invented and published while in Shanghai between May and Jan 2013
More projects, inventions and art on youtube Chanel and website
http://dscript.org   http://www.youtube.com/user/freedscript

Copper(1)Chloride High Purity Production

Utility : Easily produce high purity copper(1)chloride
Published December 2013
Youtube Videos : http://youtu.be/SnndW_seKRM
Web Articles : http://dscript.org/diy-copperichloride-make-your-own-cuprous-chloride

High surface area copper, submerged in brine, in an airtight plastic container in sunlight yields slow growing high purity copper(1)chloride. Also documented is an experiment to electrolyze it producing porous copper oxide.

Multi-Intensity Surface Tension Laser Effect

Utility : Generate visual laser shows with oil and water from music
Published November 2013
Youtube Videos : http://youtu.be/RIk0zgRSgdY
Web Articles : http://dscript.org/fire-fountain-diy-music-laser-show-wateroilpump

Using a music signal to relay control a water pump which pumps water into water/oil, with droplet catchers hung in the path of the escape stream and a laser directed though the droplets and stream, then off the liquid surface and onto a wall/screen to produce analogue musical visualization without digital electronics.

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http://dscript.org   http://www.youtube.com/user/freedscript

Dual Layer Water Spray Laser Effect

Utility : Generate visual laser shows with water from electrical or audio signal
Published September 2013
Youtube Videos : http://youtu.be/oF8re1BTst8
Web Articles : http://www.dscript.org/rainy-day-diy-music-laser

Water is sprayed via a nozzle which is agitated by an electrical/audio signal. The spray first hits a vertically slanted mirror before falling down onto a horizontally slanted mirror. A laser is then shot through the active regions of both producing a visual laser effect that is almost organic in appearance. The laser can also be vibrated via the signal to produce a raster scan effect.

Electrolysis Laser Microscope Visualization

Utility : Generate visual laser shows with water from electrical or audio signal
Published June 2013
Youtube Videos : http://youtu.be/LBORVP9SY4Q , http://youtu.be/bgIwAk1T-2I , http://youtu.be/uaecWnlJwmg , http://youtu.be/aozhVXdM7RY
Web Articles : http://dscript.org/electro-bubble-laser-light

An electrical or audio signal is used to electrolyze ion saturated water solutions, a laser is then shot through the active region, enlarged with a lens, and projected onto a wall, screen or any other surface producing a beautiful laser show with currents and particles reacting to the music or signal.

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http://dscript.org   http://www.youtube.com/user/freedscript

Magnetic Particle Water Laser Show

Youtube Videos : http://youtu.be/q8Oi7w57gncg
Web Articles : http://dscript.org/diy-water-magnetic-laser-show

An electrical or audio signal is used to power an electromagnet in a water solution with magnetic particles such as magnetite crystals, the particles react to the magnetic fields and move within the water according to the signal. A laser is shot through the active region, magnified and projected onto a wall or screen producing a visual effect of particles reacting to the signal.

www.Dscript.org

I have also invented some artistic writing systems. The most notable 2 are:

Dscript 2D writing system -
Introduction PDF (http://dscript.org/dscript.pdf)
and

WireScript 2D/3D writing system
Introduction PDF (http://dscript.org/wirescript.pdf)

I have plenty other inventions and art, and I'm always coming up with more, it is an endless passion. I can be reached easily via any one of the following

LinkedIn   -- http://cn.linkedin.com/in/deblock/
Facebook   – http://www.facebook.com/Dscripting
Youtube   – http://www.youtube.com/user/freedscript
Email   – vasten@dscript.org

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Dscript writing system projects have spanned over a decade and several locations