

THE NEW WANDERINGS

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<http://citizenscientistsleague.com/>

Feature:

Sensors

This site describes a wide selection of sensors that measure every conceivable phenomenon.

Piezo Sensors

These unique devices have many possible applications.

Piezo Film Blood Pressure Monitor Project

The purpose of this project is to design and build a reliable, low power, low cost blood flow sensor.

The Data Acquisition Handbook

How to collect, process and use sensor data

The Digital Modeling of a Simple RC Low Pass Filter

Most sensor output must be filtered or smoothed before it can be used. If the data is in an analog format a simple RC Filter may be used. But with digital data software techniques must be used.

<http://wanderings.ca/Index.htm>

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Wanderings:

Time & Frequency

Brooke Clarke's fascination with Time and Frequency started in childhood.

Experimental Rocketry Web Site

Richard Nakka --- Aerostructures Engineer by day --- Experimental Rocketeer by night.

Sugar Shot to Space

The goal of this project is to loft a rocket, using a classic low-tech sugar based propellant, into space (100 km altitude).

Pulse Jet Engines

This site is run by a collection of like-minded hobby geeks & and back yard scientists who wish to share some of the knowledge that they have acquired.

Hack a Week

Join Dino Segovis as he presents a new DIY project each week.

DIY With Kipkay

Kip Kederasha (a.k.a Kipkay) is best known for his projects that appear in *Make Magazine* and on *YouTube*.

Evil Mad Scientist Laboratories

"Making the World a Better Place, One Evil Mad Scientist at a time"

Electrostatic Machines

Dr. Antonio Carlos M. de Queiroz has assembled a vast resource for experimenters who may be interested in Electrostatic Machines.

The Tricorder Project

The Tricorder Project is an open source effort to develop handheld devices that can sense a diverse array of phenomena that we can't normally see.

The Meteoritical Society

The Meteoritical Society is an organization that was founded to promote the study of extraterrestrial materials, including meteorites and space mission returned samples.

[SEED: Seeking Dialogue Between Art and Science](#)

SEED is a Dublin-based group devoted to developing creative projects connecting art and science, including informal salons, exhibitions, workshops and performances.

[The Believers](#)

Cold Fusion --- The "Holy Grail" or junk science?

[Edmund Storms: Taking the Chill Out of Cold Fusion.](#)

"This site is designed to keep you informed about the latest research done on Cold Fusion (CANR) by Dr. Edmund Storms."

[DIY Cold Fusion](#)

JLN Labs shows how you can experiment with Cold Fusion.

[Phylo](#)

Phylo is a human-based computing framework that applies "crowd sourcing" techniques to solve the Multiple Sequence Alignment (MSA) problem.

[e-Book Browser](#)

The e-Book Browser allows you to search the Internet for e-books by subject or by title.

[The Most Embarrassing Moments in the History of Science](#)

Take the quiz and see how you make out.

[How Can Parts of Canada be 'Missing' Gravity?](#)

The gravity in the Hudson Bay area and surrounding regions is lower than it is in other parts of the world.

[North American Crayfish Are an Invasive Species in Scottish Waters](#)

Investigation work is planned following reports of a potentially devastating invasive species being discovered for the first time in the River Nith, Scotland.

[Cheap Colour Test Picks Up HIV](#)

UK researchers have developed an inexpensive test that may be able to detect the HIV virus.

[Language Lessons Told Through Twitter](#)

Some linguists are using Twitter to chart the evolution of language through the spread of slang expressions.

[Climate Change is Contributing to Hybridization in Polar Species](#)

Researchers are trying to determine how much damage the Arctic hybridizations will cause.

[Climate Change and Invasive Species](#)

Climate change is rendering some parts of Canada, such as the Arctic, more vulnerable to invasive plant and animal species.

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From Instructables, YouTube & Make:

[Instructables: Blue LED Transilluminator](#)

This Instructable describes how to make a blue LED transilluminator for DNA imaging using SYBR safe dyes. Also, see the [IO Rodeo Web Site](#).

[Instructables: Asymmetrical Capacitor Thruster](#)

This Instructable shows you how to build a Biefeld-Brown thruster but is not a debate on Brown's electrogravitic theories.

[Instructable: A Simple DIY Spectrophotometer](#)

This Instructable will explain how to build a fairly basic but working spectrophotometer out of easily sourced parts.

[Instructables: Connect a GPS Receiver to Google Earth](#)

Track a GPS receiver's position in Google earth.

YouTube: Novel Gear Drives

[A System Changes Direction](#)

[A System That Changes Speed](#)

[YouTube: The Galaxy](#)

A quick look at the Galaxy!

[YouTube: Ultra-high Definition View of the 2012 Venus Transit](#)

On 5 June, NASA's Solar Dynamics Observatory collected these images as Venus the transits across the face of the sun.

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The Kids Room:

The Global Cardboard Challenge

In TNW #18, we were introduced to 9 year old [Caine Monroy](#) and his DIY Arcade. Now, Caine's creativity spawned *The Global Cardboard Challenge* that introduces children to cooperation, science, math and engineering activities.

Think for Yourself

The Musings of an Irish Physics Teacher

Science Fair Project Idea

Do you have access to some pond scum? If not, you can grow your own and experiment with biodiesel production.

Does the future of Algae for Biodiesel look good?

Here are some opinions on the subject.

Instructables: A DIY Algae Bioreactor

You can build an Algae Bioreactor from recycled plastic bottles.

Vampire Physics

The Vampire Physics game is similar to [Crayon Physics](#). Caution! Both games are highly addictive ☺

Draw a Snowflake

The Evil Mad Scientist reviews a free downloadable Vector Snowflake Application.

How Things Are Made

How Products Are Made gives a short explanation of the manufacturing process of a wide variety of products.

Storm the Castle

This collection of projects should keep you busy on many rainy weekends.

Museum Institute for Teaching Science

"Promoting inquiry-based, hands-on science education"

Students On Ice

This award-winning organization offers unique educational expeditions to the Arctic and Antarctic for students, educators and scientists from around the world.

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Women in Science:

[GoldieBlox: Engineering Toys for Girls](#)

Debbie Sterling has developed engineering toys especially for girls.

[Messages from GoldieBlox Backers](#)

A group of experts comment on the GoldieBlox System.

[Brittany Wenger Recently Won This Year's Google Science Fair](#)

Teen girl wins [Google Science Fair](#) for the design of a breast cancer computer program.

[A Low Cost Drinking Water Purification System](#)

16 year old [Sabera Talukder](#) developed an inexpensive water treatment system for use in developing countries.

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Random Samples:

[Little Dresses for Africa](#)

Little Dresses for Africa is a non-profit organization that distributes simple dresses that are made out of pillowcases, to the children of Africa.

[Web of Stories](#)

"Web of Stories began as an archive of life stories told by some of the great scientists of our time."

[Drill Bit Size Chart](#)

This chart will enable you to pick the correct drill size, whether it is Fraction, Letter, Number or Metric, for the hole size that you wish to drill.

[How to Drill a Hole in a Round Object](#)

With this little jig you can easily drill holes in round stock.

[World Time Zones Map](#)

This map shows the World's time zones in 24 hour format.

[Could You Pass a US Citizenship Test?](#)

Take the test and see how you measure up.

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Suppliers and Stuff:

[DATAQ Instruments Analog to Digital Converters](#)

DATAQ offers a wide selection of low cost ADC starter kits

[The Adafruit Ultimate GPS Module](#)

This Arduino compatible GPS module comes fully loaded and is easy to use. The built in data logger could be one of the module's best features. There is enough internal memory to log the date, time, latitude, longitude, and altitude at 15 sec intervals for 16 hours.

[Adafruit Data Logger for the Arduino](#)

This shield allows your Arduino to log data to a SD card.

[Photosounder](#)

The Photosounder program allows you to transform any sound to an image and to create sounds from an image.

[Educational Innovations,](#)

Here is a site that offers many science related products.

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