

THE NEW WANDERINGS

No. 19

01 October 2012

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<http://citizenscientistsleague.com/>

Wanderings:

[Science Starter](#)

“This is the place to find out about, take part in, and contribute to science through recreational activities and research projects.”

[Do It Yourself and Save](#)

An article in [Science Daily](#) reports how 3D printers and micro controllers are driving down the cost of doing science.

[Amateur Science](#)

Here is an Amateur Science Blog from “Down Under” in New Zealand. It is well worth a read.

[Hardware Hacking](#)

Have a look at Robert Hart’s various projects.

[Halbach Array Motor/Generator](#)

This is the description of a novel generalized electric machine.

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

[A DIY Amateur Torsion Magnetometer](#)

Last month I had a reference to Tom Field's [PC Based Spectroscope](#). Tom has also developed software that uses a webcam to record the output from a Torsion Magnetometer.

[DIY Glove Box](#)

[The Public Laboratory](#) shows how to build a crude glove box. While there, have a look at [their other tools](#).

Note: This site does not like MS Internet Explorer.

[Practical Spectral Photography](#)

The authors introduce a low-cost and compact spectral imaging camera design based on unmodified consumer cameras and a custom camera objective.

[Sam's Laser FAQ](#)

"A Practical Guide to Lasers for Experimenters and Hobbyists"

[A Short History of the Inyo Force-Balance Vertical Seismometer](#)

This paper describes the activities of a group who collaborated in the design and construction of a force-balance vertical seismometer. The following two directories contain many interesting documents and diagrams relating to the design of the force-balance vertical seismometer:

[FBV](#)
[Seismo](#)

[Earthquakes](#)

[John C. Lahr](#) included many earthquake and seismology links on his [Fun With Science](#) Web Site.

[How to Build a Slinky Seismometer](#)

Slinky seismometers are very sensitive to the p-, s- waves that are produced by earthquakes.

[Introduction to Earth Tides](#)

This Power Point presentation was prepared by Michel Van Camp at the Royal Observatory of Belgium.

[Conservation Drones](#)

The purpose of the Conservation Drones' website is to share their knowledge of building low-cost drones that could be used by conservation workers and researchers to do their jobs a lot more effectively.

[Canada's State of the Oceans Report, 2012](#)

Canada's State of the Oceans Report 2012 presents highlights from regional reports on the five Large Ocean Management Areas that were established under the **[Health of the Oceans Initiative](#)**.

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From Instructables, YouTube & Make:

[Instructables: Make this Electrostatic Motor From Scrap](#)

This motor can be built using stuff that you should have around the house. But you may have to rob the kids' toy box for the plastic horse shoes ☺.

[Instructables: Vortex-Drive Micro ROV](#)

A pager motor is at the heart of this micro-ROV.

[Instructables: DIY Testing for HCN from ABS and Nylon 3D Print Material](#)

“The intent of this DIY is to explain how to build a test apparatus to determine the safety of the material you are using to print your parts.”

[YouTube: Travel INSIDE a Black Hole](#)

This is a simulation of what it would be like to travel close to and inside a black hole.

[YouTube: Infinity Is Bigger Than You Think](#)

Dr James Grime explains that sometimes infinity is even bigger than you think.

[YouTube: The Numberphile Videos](#)

Here is a collection of other **[Numberphile](#)** videos on YouTube.

[Make: How Tracking Down a Stolen Computer Triggered a Drug Bust](#)

This is a story about how someone tracked down their stolen computer.

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The Kids Room:

[15 Year-Old is Developing a Test for Pancreatic Cancer](#)

15-Year-Old, Jack Andraka, is developing a test for pancreatic cancer that may be better than what is currently being used.

[QuarkNet: The science connection you've been waiting for!](#)

QuarkNet enables “high school students, teachers and physicists working together on physics research projects exploring the hidden nature of matter, energy, space and time.”

[The Edible/Inedible Experiments Archive](#)

These experiments are from the Mad Science Archive. Try your hand at experimental science! Some experiments may be eaten before, during or after the experiment, and some should not be eaten at all!”

[Rate Your Professor](#)

Find your Professor / College and see how they rate.

[Hila Projects](#)

These projects have been developed and tested at Hila Science Camp. They have also produced a collection of [YouTube Videos](#).

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Random Samples:

[Circular Saw Cutting Guide](#)

I could not make a nice straight free hand cut, with a skill saw, if my life depended on it. If any of you have a similar problem, than this guide is just what you need.

[The Coffee Mug Knife Sharpener](#)

Michael Cantrell shows us how to use the unglazed bottom of a mug to sharpen a blade.

[Block Posters](#)

This free service allows you to create any size wall posters from any size image.

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Suppliers and Stuff:

[DHT11 Temperature and Humidity Sensor](#)

The DHT11 is an Arduino compatible digital sensor with a 0-50 ± 2°C temperature range and a 20-90% ± 5% RH humidity range.

Photomultiplier Tube

There is a wide selection of Photomultiplier Tubes available on EBay.

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