

SPECIAL REPORT / CLIMATE CHANGE

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15°C

of the

Califo

It may happen in our lifetime. Shanta Barley investigates what life will be like

BY 2055, climate change is likely to have warmed the world by a dangerous 4°C unless we stop pumping greenhouse gases into the atmosphere the way we do now. This is the startling conclusion of a study by the UK Met Office, unveiled at a conference in Oxford this week.

Why so soon? Because temperature rises caused by greenhouse gas emissions are expected to trigger dangerous feedback loops, which will release ever increasing amounts of greenhouse gases. The nature and scale of these feedback loops is a subject of vigorous debate among climate scientists, but warmer oceans, for instance, may liberate more

The Amazon - gone

PRIZE FIGHT

Time to revamp

the Nobels

In a 4°C world, climate change, deforestation and

fires spreading from degraded land into pristine

forest will conspire to destroy over 83 per cent

of the Amazon rainforest by 2100, according to climatologist Wolfgang Cramer at the Potsdam

Institute for Climate Impact Research in Germany.

in a warmer climate. The Met Office ran 17 different models with these feedbacks. All concluded a 4°C world by 2055 was likely if emissions continue to rise. Even if we are lucky, we are still likely to hit 4°C by 2070. colleague Jochen Hinke

Germany, Even the less pessimistic estimate of a 0.65-metre rise by 2100 would put at least 190 million people a year at risk from floods, says Rahmstorf's



Then in 2009, TWO DIFFERENT **CLIMATE GROUPS:**

SAME PREDICTION

The Nation

Washington Post, 9/25/09, p. A4

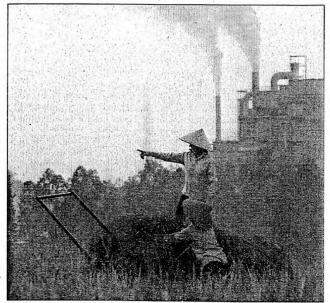
New Analysis Brings Dire Forecast Of 6.3-Degree Temperature Increase

BY JULIET EILPERIN Washington Post Staff Writer

Climate researchers now predict the planet will warm by 6.3 degrees Fahrenheit by the end of the century even if the world's leaders fulfill their most ambitious climate pledges, a much faster and broader scale of change than forecast just two years ago, according to a report released Thursday by the United Nations Environment Program.

The new overview of global warming research, aimed at marshaling political support for a new international climate pact by the end of the year, highlights the extent to which recent scientific assessments have outstripped the predictions issued by the Nobel Prize-winning U.N. Intergovernmental Panel on Climate Change in

Robert Corell, who chairs the Climate Action Initiative and reviewed the UNEP report's scientific findings, said the significant global temperature rise is likely to occur even if industrialized and de-

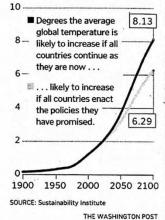


Farmers are overshadowed by a smoke-belching cement factory outside Hanoi. Even with sharp emissions curbs, temperatures may rise disastrously.

Warming Trend

Researchers say global temperatures as likely to rise more than six degrees by the end of the century even if every country enacts all climate legislation it has promised to enact to date.

Temperature increases. in degrees Fahrenheit



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WEEKLY October 3-9, 2009 **Future Earth**

New Scientist, 10/3/09



1999 Conference on Future Energy



CONFERENCE ON FUTURE ENERGY

29 Apr

COFE



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nealth.

Science and farch), Arpad

that genetical-

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tai was for-

US State Department gets cold feet about cold fusion

the centre of WASHINGTON | A meeting that was to have cally modified bout publicly rch which, he ed genetically ouse of Com-

been held at the US State Department next month to highlight research on unconventional energy sources seems likely to be scaled down or cancelled because of doubts about the credibility of the research. The First International Conference on Free Energy was to have taken place on 29 and 30 April at the State Department audito-

rium. The conference is sponsored by the Integrity Research Institute (IRI), a Wash-

ington-based group that pror energy concepts ranging fro power' to 'assisted nuclear react

and others on Monday (8 March), the department remained undecided as to whether it will cancel or curtail its involvement in the conference. One source said the organizers were considering moving it to a hotel.

Valone, who is also a patent examiner with the US Patent and Trademark Office, found himself in hot water with his own agency last year when he sent out an Internet notice to "all able-bodied infinite energy





The First International

Conference On **Future Energy**

Integrity Research Institute

WORKSHOPS

Holiday Inn Bethesda Bethesda, Maryland

Saturday, May 1, 1999

Science & Government Report

SHUNNED BY AGENCIES, 'FREE ENERGY

SILLNED BY AGENCIES, "PERF ENERGY"
CONTENSES FUNDALS FROM A HOME
If we halled as a conference on for energy, but in seguines, who'd thought they had drive energy last line age from of a conference on for energy, but in seguines, who'd thought they had drive energy last line age from the government, ended up having up gaines, who are provided to the standard pathering's offloat matter, engainers them treat to more two the Comments grown, was registed off its intensity and which they are the standard and the standard and the provides sufficient notice. Ash, the same person when the standard on fine standard to great engainers from the standard and the standard from the standard and the standard from the sta

and mining beforem-1 frees the motion for clean values in the No-manile bookshore dispatived works ranging from electrogravitics, the "anti-gravity" technology that some claim helps to power the B-2 sealth bomber, to biographies and the complete patent collections of Nikola Tesla, the Serbian immigrant who invented the alternating current mo-Sprism remigrate has invented the alternating current no-tion and helped Westinghouse been as Themens fidion to read the 15th Westinghouse been as Themens fidion to read the 15th Westinghouse the season of the season of sufficienced and attention that the season of the season of his distribution of the season of the season of the with other three carry systems. Now, the trains of in-dustry could see no way to profit on such a schemen, and palled their support for Tosla's work.

But the highlight of the conference was an applicance by Survey M. Clemen de former emergency, room physician.



oard of a small company, which he won't identify, that is

the speed of fight could make the world's found-test based concention shoulder countings, says Gener. The claims the networking that allows UFO's to dirty gravity as well-known the military-should complex, but is large ander smpal to other since observables of the second confers to the confers of the second confers to the confers of the second confer

NO RECORDS SET AS NINE WOMEN ARE ELECTED MEMBERS OF ACADEMY

EART, 1EAT THE THE MERCY OF A CARDON Y
No glant step toward gender equality was set last month
when the National Academy of Sciences elected nine women
to membership. The figure is shy of the record of 11 who
were let in during 1996, but is one higher than last year's

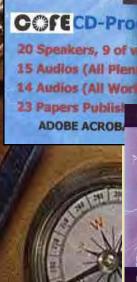
crop.

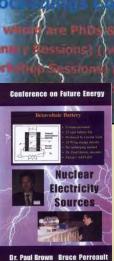
The academy admisted a total of 60 new members this year during in annual meeting last moeth. The number of women who hold membership in the august body now statish at 114, four higher than last year, or just over 6% of a total active membership of 1823.

Two womens were among the 15 non-voting footign as-

active membership of 1825.

Two women were among the 15 non-voting foreign as-sociates admined to the academy. Despite their addition, the number of female foreign members actually declined by one during the year, to 14, even as total membership in the car-room one there to 132.











Future Energy Surge of 2009



- World Future Energy Summit,
 Abu Dhabi, Jan. 19-21, 2009
- SPESIF Future Energy Source Workshop, **Huntsville AL**, Feb. 24-26, 2009
- Future Energy Forum, Bilboa,
 Spain, June 9-11, 2009
- Conference on Future Energy, Washington DC, Oct. 9-11, 2009 (COFE3 was third in a series, tenth anniversary)
 IntegrityResearchInstitute.org



Future Energy Goals

Why "future energy" rather than just more renewables?



No Carbon Emissions

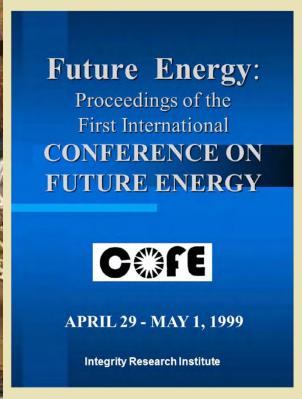
- Expand new energy discoveries including wireless energy
- Develop the newly discovered modes of propulsion
- Create optimum health with electromedicine

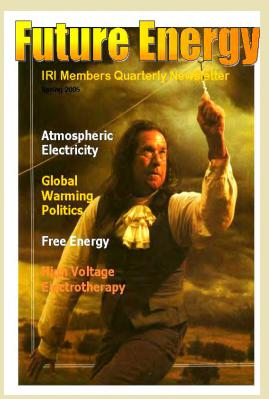
Integrity Research Institute (IRI)

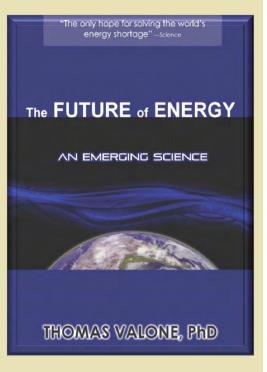
Integrity Research Institute

IntegrityResearchInstitute.org

- ENERGY RESEARCH AND EDUCATION WITH SCIENTIFIC INTEGRITY
- Conferences, Books, Reports, Products & <u>Future Energy eNews</u>







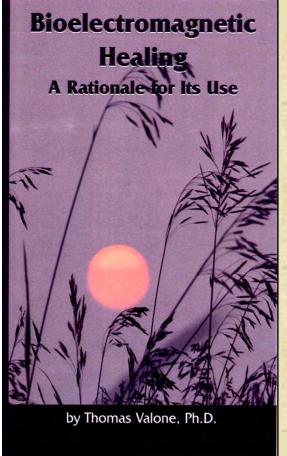
- ◆ ADVOCACY FOR THE COMMON GOOD without favoritism
 - nonprofit 501(c)3 organization that accepts tax-deductible donations

Programs Fulfilling IRI's Non-Profit Mission





BIOENERGETICS PROGRAM Energy Medicine Projects

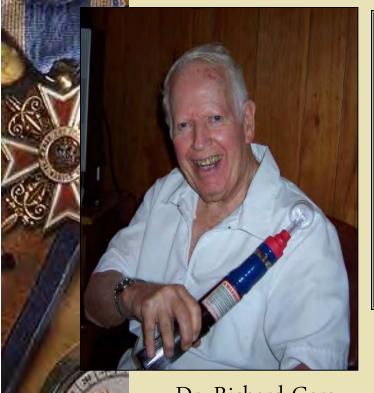


- Electric Clothes, OsteoPad, PREMIER
- HF EMF can be "pulsed" called PEMFs
- Low transmembrane potential TMP = disease =
- = low Na-K pump & ATP impairment
- External high voltage PEMFs increase TMP
- Boosting TMP while creating electron transfer to fight free radicals helps the immune system and gives the body MORE ENERGY
- Electric gradients vs. chemical gradients

Electrons are antioxidants and high voltage EMFs strengthens immune response." – Dr. T.

Valone

Photonic Rejuvenation Energizing Machine & Immunizing Electrification Radiator (PREMIER)



Dr. Richard Gerow with Model 200



PREMIER Junior Model 100

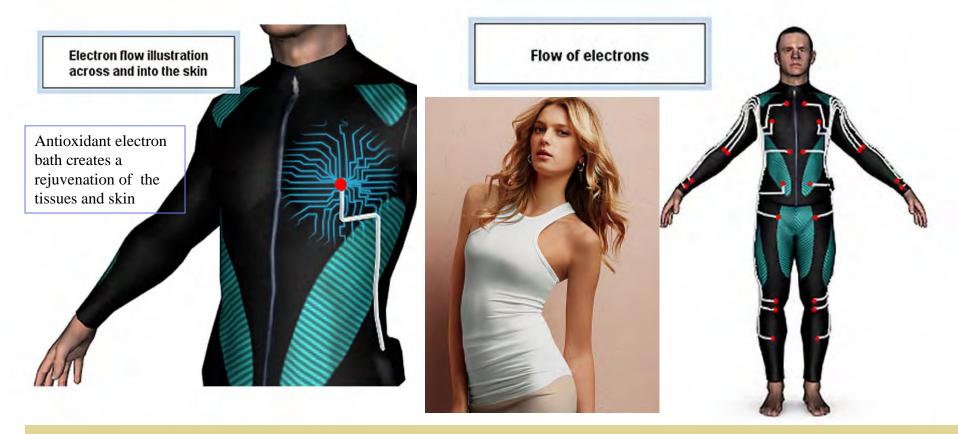


Dr. Jacqueline Panting using Model 2500



Electric Antioxidant Clothing

Patent pending – Dr. Jacqueline Panting, N.D.



Supplying *antioxidant microcurrent electrons* to skin-tight clothing boosts energy and performance by quenching free radicals directly



Bone Knitting OsteoPadTM

- 1 out of 2 people will develop osteoporosis*
- OsteoPadTM provides a patented EM signal proven to stimulate calcium transport across bone cell membrane, just like weight bearing exercise creates piezoelectric signals
- **◆ Heals bone fractures in ½ of the time**
- Strengthens bones of elderly while they sleep, reversing osteopenia and osteoporosis
- In development by IRI in cooperation with Dr. Manning who patented an early version

*Time, October 25, 2004, p. 101

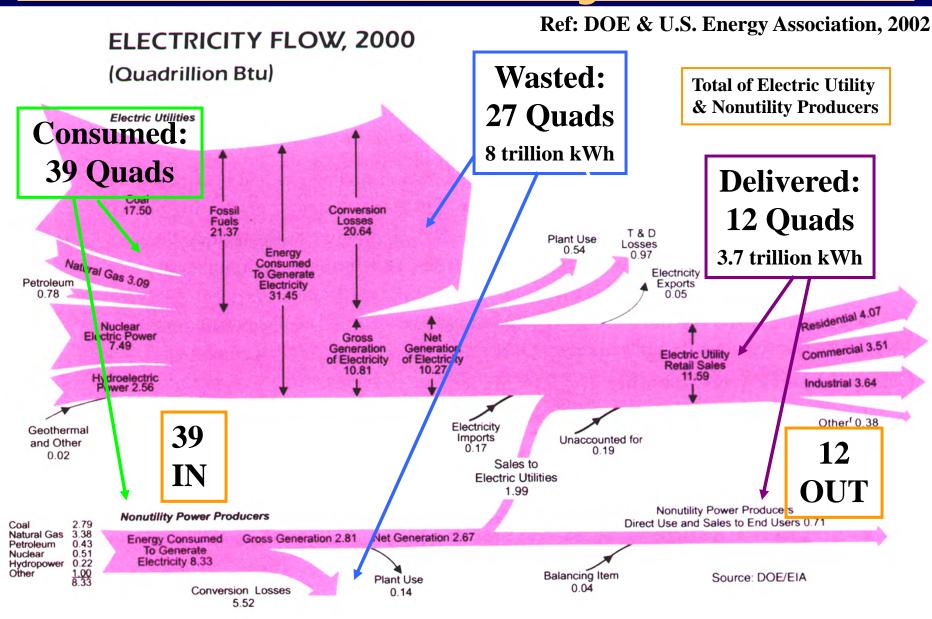




ENERGY PROGRAM

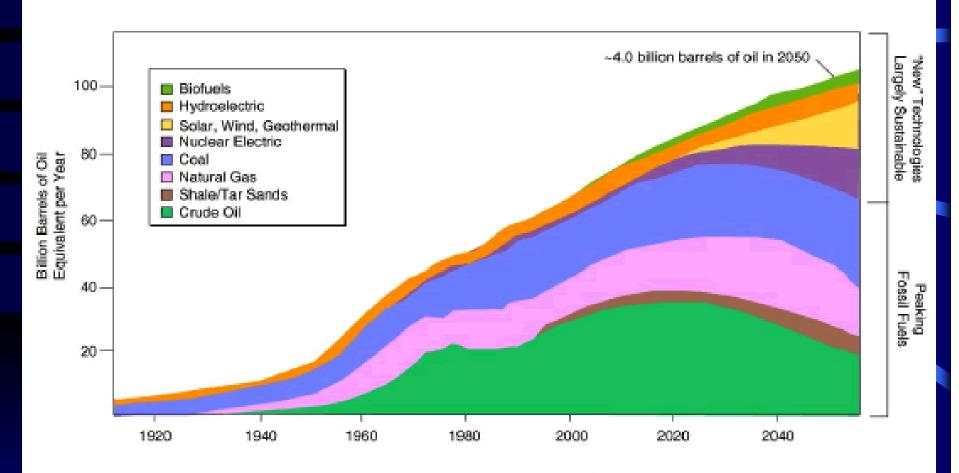


2/3 of US Electricity is Wasted

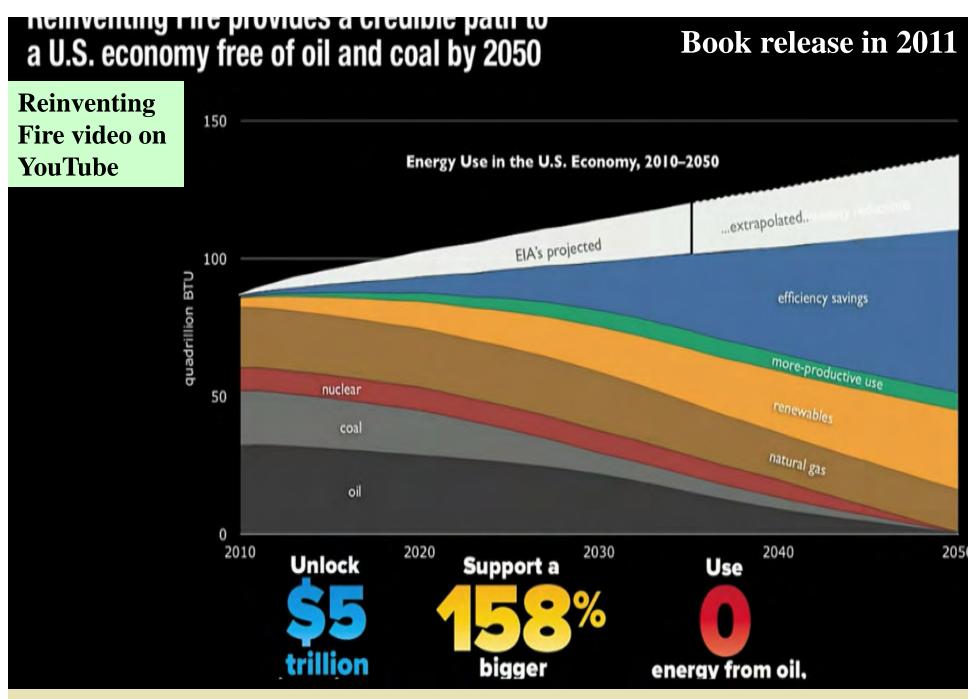


Projected World Energy Demand

World Energy Demand—Long-Term Energy Sources



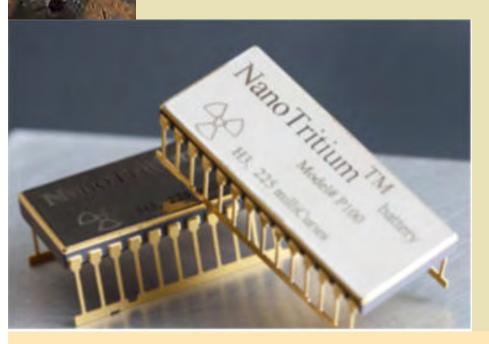
Sources: Lynn Orr, Changing the World's Energy Systems, Stanford University Global Climate & Energy Project (after John Edwards, American Association of Petroleum Geologists); SRI Consulting.



Rocky Mountain Institute, RMI.org, founded by Dr. Amory Lovins



Tritium Betavoltaic Battery



CityLabs.net Model P100

BetaBatt Inc. - SBIR grant from NSF

U of Wisconsin solved degradation with liquid electrodes

- ECN magazine 7/2012
- Nanowatt power AFRL
- ◆ 20 40 year lifespan
- IRI advocacy for 10 yrs.
- Paul Brown, COFE 1999,Patent # 4,835,433

IEEE Spectrum, 2004 "Daintiest Dynamos"

Ray Kurzweil "Ten
 Coolest Technologies PC magazine, 7/12/06



Polymer Generates Energy from a Wet Surface

http://bcove.me/31d18111

- MIT reports a polymer with a piezoelectric layer generates electricity only from a moisture gradient without any pressure!
- 30 second video shows movement as polymer dries and then flattens out to get wet again

NewScientist

Moisture turns film into artificial muscle

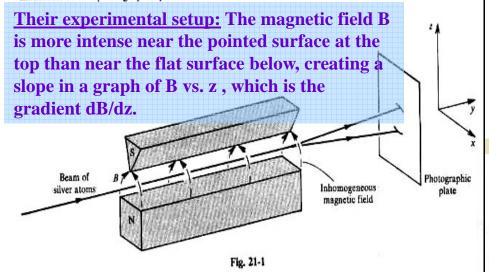
10 January 2013 by <u>Jacob Aron</u>- New Scientist

Magnetic Field Gradients

The Stern-Gerlach Experiment and Electron Spin

Modern Physics, Schaumm's Outline Series, Gautreau, McGraw Hill, 1978

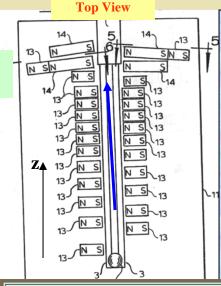
In the Stern-Gerlach experiment, performed in 1921, a beam of silver atoms having zero total orbital angular momentum passes through an inhomogeneous magnetic field and strikes a photographic plate, as shown in Fig. 21-1. Any deflection of the beam when the magnetic field is turned on is measured on the photographic plate.



The purpose of the *inhomogeneous* magnetic field is to produce a deflecting force on any magnetic moments that are present in the beam. If a homogeneous magnetic field were used, each magnetic moment would experience only a torque and no deflecting force. In an inhomogeneous magnetic field, however, a net deflecting force will be exerted on each magnetic moment μ_s . For the situation of Fig. 21-1,

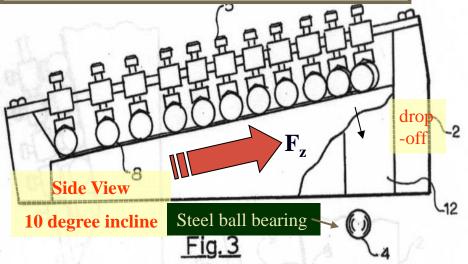
$$F_z = \mu_y \cos \theta \, \frac{dB}{dz} \tag{21.1}$$

where θ is the angle between μ , and B, and dB/dz is the gradient of the inhomogeneous field



The net Force
created on the ball
bearing = the
magnetic field
gradient multiplied
by the induced
magnetic moment,
as with the SternGerlach Experiment

Hartman Patent #4,215,330



Spiral Permanent Magnet Motor

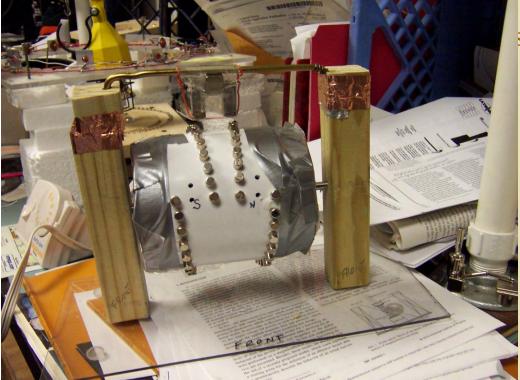
Presented to the Space, Propulsion & Energy Sciences International Forum (SPESIF), February 23-26, 2010, Applied Physics Laboratory – Johns Hopkins University, sponsored by the American Institute of Physics

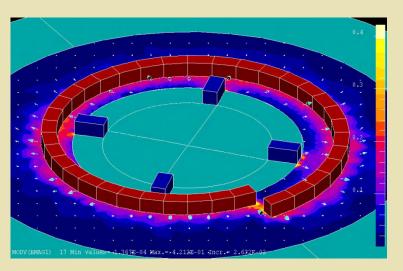
Proposed Permanent Magnet Spiral Motor for Magnetic Gradient Energy Utilization

Thomas F. Valone

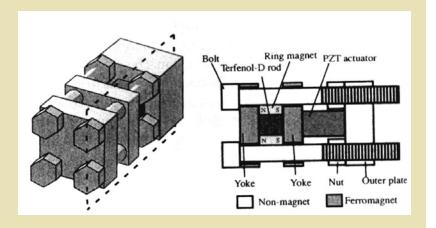
Integrity Research Institute
5020 Sunnyside Avenue, Suite 209, Beltsville MD 20705, 301-220-0440, IRI@starpower.net

Abstract. The Spiral Magnetic Motor, which can accelerate a magnetized rotor through 90% of its cycle with only permanent magnets, was an energy milestone for the 20th century patents by Kure Tekkosho in the 1970's. However, the Japanese company used old ferrite magnets which are relatively weak and an electrically-powered coil to jump start every cycle, which defeated the primary benefit of the permanent magnet motor design. The principle of applying an inhomogeneous, anisotropic magnetic field gradient force $F_z = \mu \cos \varphi$ dB/dz, with permanent magnets is well-known in physics, e.g., Stern-Gerlach experiment, which exploits the interaction of a magnetic moment with the aligned electron spins of magnetic domains. In this case, it is applied to dB/d0 in polar coordinates, where the force F_z depends





Spiral Wankel Motor design with a Weigand-GMM-PZT switch and no external electricity



Science Times

The New York Times

Jan 21, 1997

TUESDAY, JANUARY 21, 1997

Physicists Confirm Power of Nothing, Measuring Force of Quantum 'Foam'

Fluctuations in the vacuum are the universal pulse of existence.

By MALCOLM W. BROWNE

OR a half century, physicists have known that there is no such thing as absolute nothingness, and that the vacuum of empty space, devoid of even a single atom of matter, seethes with subtle activity. Now, with the help of a pair of metal plates and a fine wire, a scientist has directly measured the force exerted by fleeting fluctuations in the vacuum that pace the universal pulse of existence.

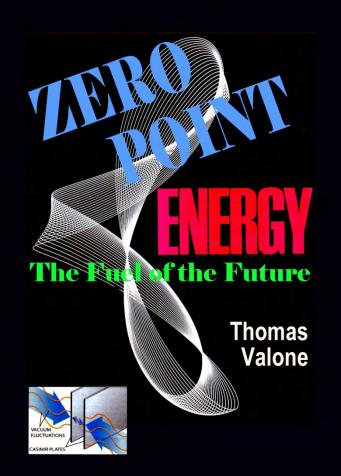
The sensitive experiment performed at the University of Washington in Seattle by Dr. Steve K. Lamoreaux, an atomic physicist who is now at Los Alamos National

Laboratory, was described in a recent issue of the journa Physical Review Letters. Dr. Lamoreaux's results almos perfectly matched theoretical predictions based on quantum electrodynamics, a theory that touches on many of the riddles of existence and on the origin and fate of the universe.

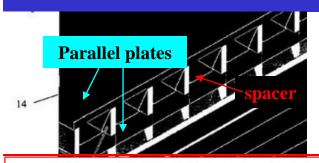
The theory has been wonderfully accurate in predict ing the results of subatomic particle experiments, and i has also been the basis of speculations verging on science fiction. One of the wilder ones is the possibility that the universal vacuum — the ubiquitous empty space of the universe — might actually be a false vacuum.

If that were so, something might cause the presentday universal vacuum to collapse to a different vacuum of a lower energy. The effect, propagating at the speed of light, would be the annihilation of all matter in the universe. There would be no warning for humankind; the earth and its inhabitants would simply cease to exist at

Continued on Page C6



Quantum Energy Extraction



Haisch-Moddel patent 7,379,286

It is reasonable to expect that a 0.1 microns Casimir cavity would result in a release of 1 to 10 eV for each injection of a He, Ne, Ar, Kr or Xe atom into such a cavity.



Test of zero-point energy emission from gases flowing through Casimir cavities

Pumping Gas Through Casimir Cavities

nited States Patent
aisch et al.

UANTUM VACUUM ENERGY
XTRACTION
ventors: Bernard Haisch, Redwood City, CA
(US): Garret Moddel, Boulder, CO

Casimir
cavity

pump

Space, Propulsion & Energy Sciences Internation

1 March 2012

Olga Dmitriyeva & Garret Moddel*

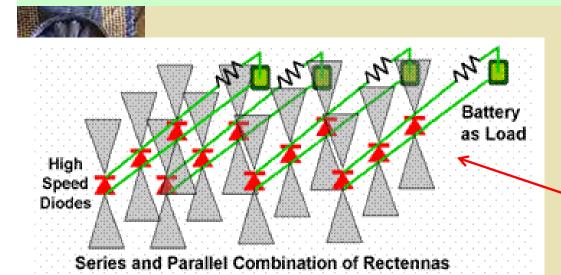
Department of Electrical, Computer, and Energy Engineering

University of Colorado

*Presenter (also with Jovion Corporation)

This discovery has fueled interest in another noble gas device: The **Papp Engine**, explosive but completely enclosed. See *Valone Papp Engine* video from COFE6 on futurenergy.org

Rectifying Ambient Thermal and Nonthermal Electric Noise

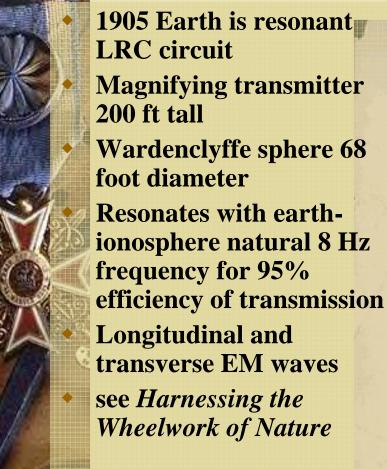




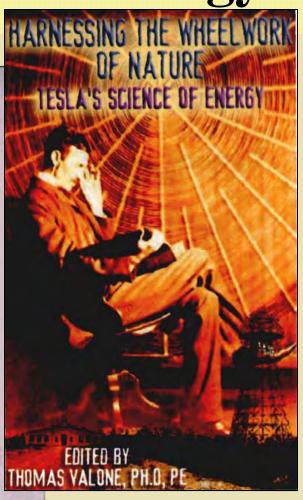
- Prof. Dagenais
 amplifies ambient
 thermal energy
 harvested with
 nanoantennas at UMD
- Zero-bias diodes that need no minimum energy to conduct
- Backward tunnel diodes
- Example of a Diode Array

24-hour electrical energy source

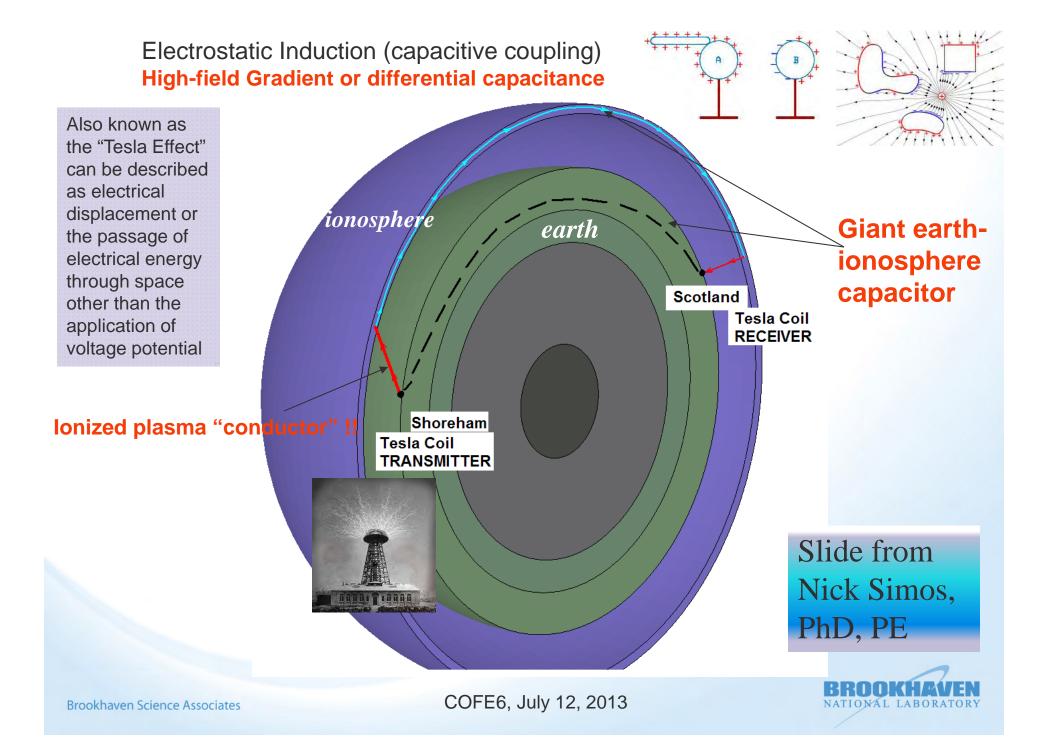
Tesla's Design for Wireless Energy

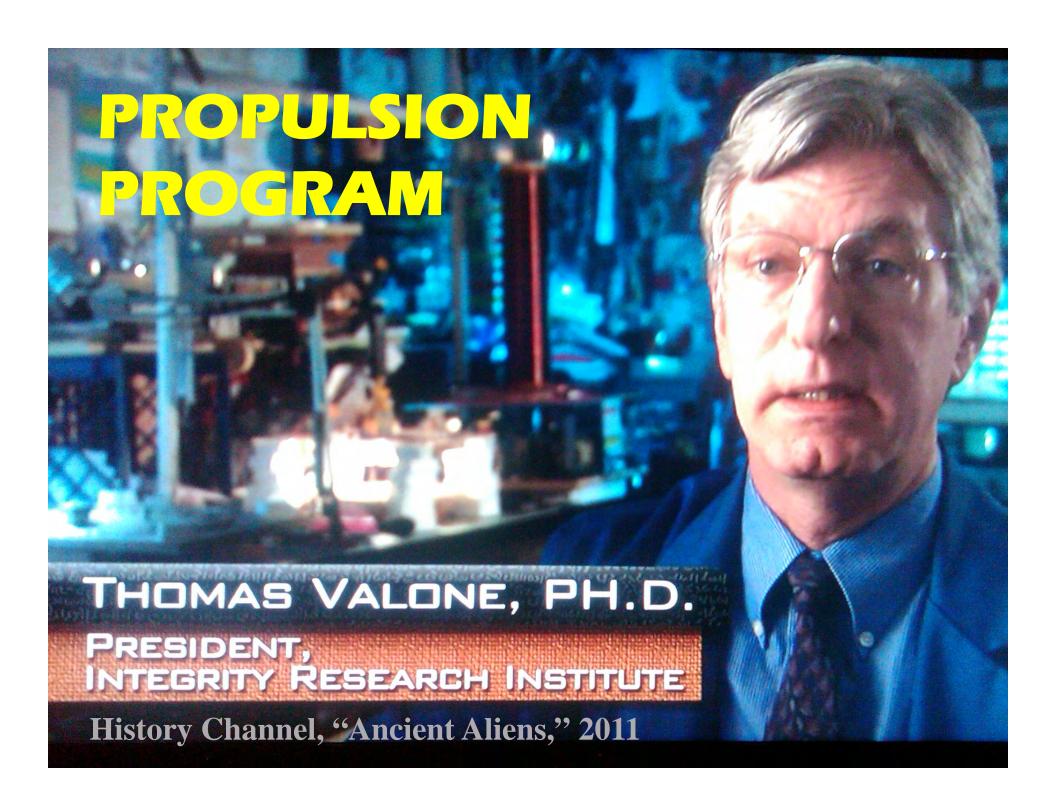




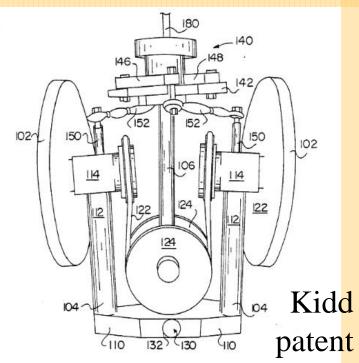


IRI celebrated the Wardenclyffe Tower Centennial in 2003 with a Tesla Conference and Expo as well as book release





IRI Inertial Propulsion Research

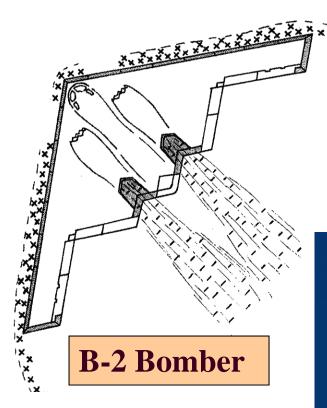


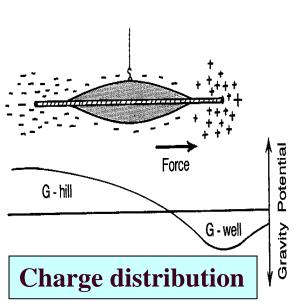
Engineer Mike Gamble discloses that Boeing has been using inertial propulsion (scissoring gyros) on its satellites "for years" at

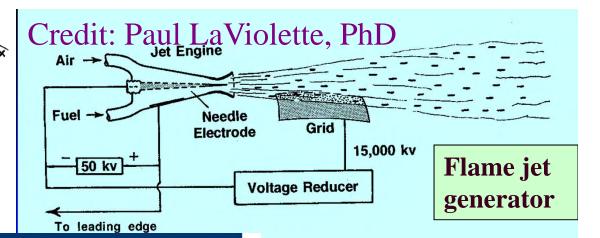
COFE5 sponsored by **IRI**

A purely mechanical process of using rotating masses, such as "scissoring gyroscopes" to cancel or rectify centrifugal force and produce thrust in ONE DIRECTION, e.g., Kidd #5,024,112





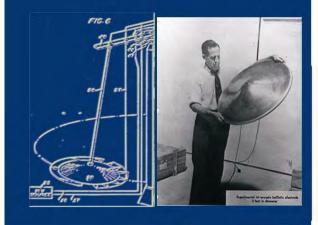


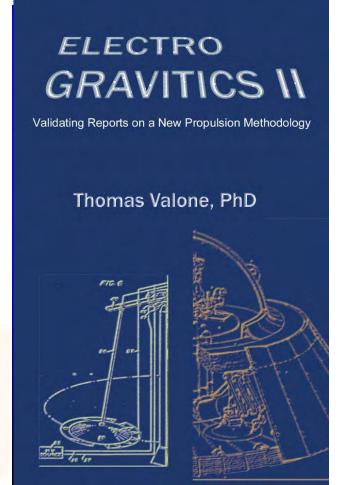


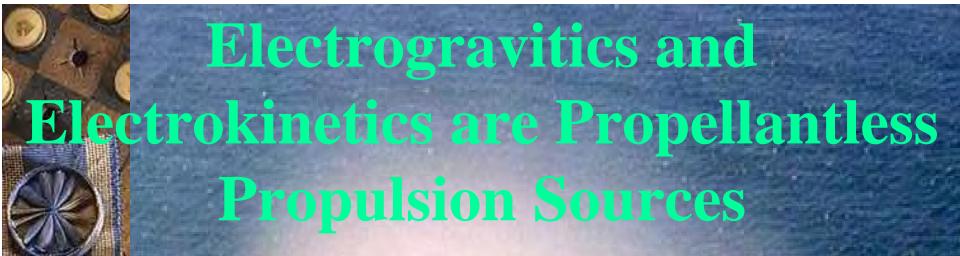
ELECTRO GRAVITICS SYSTEMS

Volume I

Thomas Valone, PhD







By Thomas Valone, PhD, PE

Published with two conferences

Physics Procedia 00 (2012) 000-000

Albuquerque, NM

Space, Propulsion & Energy Sciences International Forum WWW.UNM.edu/~isnps/staif/2006

Electrokinetics as a Propellantless Propulsion Source February 16, 2006

Thomas Valone, PhD, PEa*

"Integrity Research Institute 5020 Sunryside Ave. Suite 209 Beltsville MD 20705

AIAA, Joint Propulsion Conference,

Progress in Electrogravitics and Electrokinetics for Aviation and Space Travel

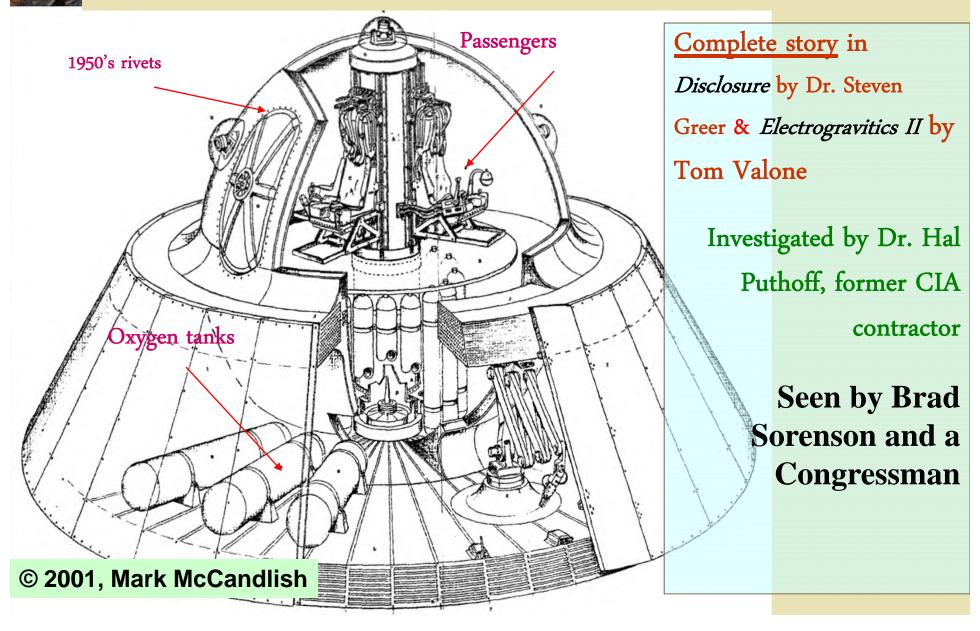
Thomas F Valone

Integrity Research Institute, Washington DC 20005 202-452-7674, iri@erols.com Hartford CT
July 23, 2008

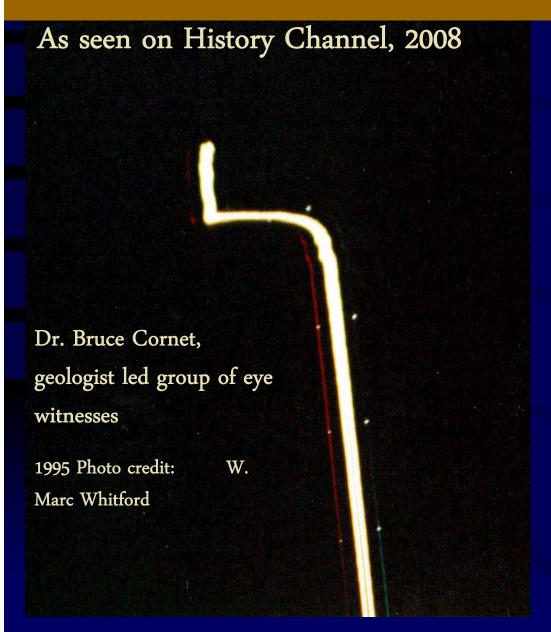




Electrogravitics HoverCraft Demo Norton Air Force Base 1988



Black Projects Have Inertial Shielding



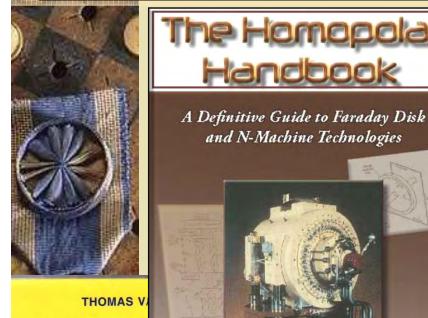
enables fast acceleration

- Pine Bush near Stewart AFB
- Delta-shaped aircraft



- Two mobile white headlights
- Steady red, green lights and blinking yellow lights on tips of craft
- No visible contrail
- Abrupt change of direction
- Ability to hover motionless
- Inverse Doppler effect
- Audible but low engine noise

Homopolar Generators are "a subject worthy of further research"



Thomas F. Valone, PhD

Based on <u>Sunburst: Return of the</u> <u>Ancients</u> book by Norman Paulsen:





A ship over Giant Rock,

And the deputy sheriff who took the picture.

Giant Rock,
Calif. saucer,
photo & deputy
sheriff who took
the photo



German edition

DAS UNIPOLAR

EIN GRUNDLAGENWERK DER FREIEN ENERGIE: FARADAY-SCHEIBE UND N-TECHNOLOGIEN "Magnets around the edge of a rotating disk"

"generator would be self-perpetuating"

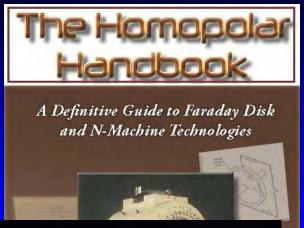
ELECTRO GRAVITICS \\

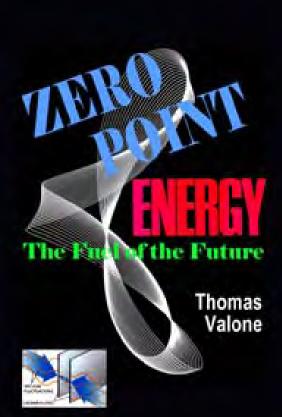
Validating Reports on a New Propulsion Methodology

Thomas Valone, PhD

Bioelectromagnetic Healing A Rationale for Its Use

by Thomas Valone, Ph.D.





Books that Contain Most of this Slideshow

"We have to move beyond fossil fuels anyhow. Why not now?" – Jim Hansen, NASA climatologist

IRI Future Energy Projects

- Electric Antioxidant Clothes
- PREMIER High Voltage Electrotherapy
- Pulsed Electromagnetics (EM Pulser)
- OsteoPad Electric Bone Hardener
- Tunneling Diode Array Energy Generator
- Spiral Permanent Magnet Motor
- Inertial Shield and Electrogravitics
- Public Education (books, conferences, Future Energy eNews, videos, audios)

